

1996 NTEP Tall Fescue Test - 2000 Results

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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 pest 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 1000/ft² 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 lbs P₂O₅, and 0.8 lbs K₂O/1000 ft². After establishment the turf was fertilized with 3.5 lbs N, 1 lb P₂O₅, and 2 lbs K₂O/1000 ft²/y using a 4:1:2 nutrient ratio fertilizer. Rates in lbs N/1000 ft² and dates of applications were 1.0 lb N late May, 1.0 lb N in mid Sep, and 1.5 lbs N in early Nov. Turf was mowed twice/week at 2.0 inches with clippings returned and irrigated to prevent any sign of drought stress. A preemergent 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, 1999, and 2000 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 four years of rating was 6.1. 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 this test had an average visual quality rating of 6.0 or higher.
- All varieties show a dramatic improvement over the older K31.

Table 1. Average yearly visual quality ratings of tall fescue varieties for 1997, 1998, 1999, 2000, and four year average visual quality ratings.

Variety	1997	1998	1999	2000	Four year average
Rembrandt (LTP-4026 E+)	6.4 ^a	6.5	6.9	7.0	6.7
Masterpiece (LTP-SD-TF)	6.3	6.7	6.8	7.0	6.7
Millennium (TMI-RBR)	6.5	6.4	6.8	6.9	6.7
Gazelle	6.0	6.7	6.9	6.9	6.6
Watchdog (Pick FA B-93)	6.3	6.5	6.9	6.8	6.6
Jaguar 3	6.0	6.3	6.8	6.8	6.5
Pick RT-95	6.0	6.5	6.6	6.8	6.5
Scorpio (ZPS-2PTF)	6.0	6.4	6.6	6.8	6.5
BAR FA 6D	6.1	6.5	6.7	6.7	6.5
ATF-188	6.0	6.6	6.7	6.7	6.5
Crossfire II	6.1	6.4	6.7	6.7	6.5
SR 8210	6.0	6.5	6.7	6.7	6.5
Barrington (BAR Fa6D USA)	5.9	6.5	6.7	6.8	6.4
Empress	5.8	6.3	6.8	6.7	6.4
OFI-931	5.8	6.4	6.7	6.7	6.4
Tracer (BAR Fa6 US1)	5.9	6.5	6.7	6.7	6.4
Coyote	5.7	6.4	6.6	6.7	6.4
Barrera (BAR Fa6 US3)	6.0	6.4	6.6	6.7	6.4
Arid 3 (J-98)	5.9	6.4	6.6	6.6	6.4
Plantation (Pennington-1901)	6.1	6.4	6.5	6.6	6.4
CU9502T	6.2	6.3	6.5	6.4	6.4
Shenandoah II (WRS2)	5.7	6.2	6.5	6.8	6.3
PST-5M5	5.9	6.3	6.3	6.8	6.3
Tulsa	5.9	5.9	6.5	6.7	6.3
BAR FA 6LV	5.5	6.4	6.5	6.7	6.3
Wolfpack (PST-R5TK)	5.9	6.1	6.5	6.7	6.3
OFI-FWY	5.9	6.3	6.4	6.7	6.3
SRX 8500	5.7	6.3	6.4	6.7	6.3
Aztec II (TMI-AZ)	5.9	6.0	6.6	6.6	6.3
PST-523	5.9	6.3	6.6	6.6	6.3
Mustang II	6.1	6.1	6.5	6.6	6.3
OFI-96-31	6.1	6.1	6.5	6.6	6.3
Red Coat (ATF-038)	5.6	6.2	6.7	6.5	6.3
Bonsai 2000 (Bullet)	6.0	6.1	6.5	6.5	6.3
Bravo (RG-93)	6.0	6.2	6.5	6.5	6.3
BAR Fa6 US2U	5.9	6.3	6.4	6.5	6.3
Bulldawg (Pick GA-96)	6.0	6.2	6.6	6.4	6.3
Pick FA 20-92	6.0	6.4	6.5	6.4	6.3
Pick FA N-93	5.8	6.5	6.6	6.3	6.3
Sunpro	6.2	6.3	6.3	6.3	6.3
Tarheel	5.8	5.9	6.4	6.8	6.2
OFI-951	5.4	6.4	6.5	6.7	6.2
MB 213	5.7	6.0	6.4	6.7	6.2
Arabia (J-5)	5.4	6.4	6.6	6.6	6.2

Table 1. Continued.

Variety	1997	1998	1999	2000	Four year average
Reserve (ATF-182)	5.8	6.0	6.5	6.6	6.2
Pick FA 6-91	5.5	6.0	6.5	6.6	6.2
Duster	5.9	6.0	6.5	6.6	6.2
ATF-196	5.7	6.1	6.5	6.5	6.2
Brandy (J-101)	5.7	6.1	6.5	6.5	6.2
MB 26	5.7	6.2	6.5	6.5	6.2
MB 212	5.8	6.0	6.5	6.5	6.2
Rebel Sentry (AA-A91)	5.8	6.2	6.4	6.5	6.2
CU9501T	5.9	6.0	6.4	6.5	6.2
Pixie E+	5.8	6.0	6.4	6.5	6.2
MB 29	5.9	6.2	6.3	6.5	6.2
R5AU	6.0	6.1	6.5	6.4	6.2
Regiment	5.8	6.1	6.4	6.4	6.2
Olympic Gold (PST-5E5)	6.0	6.1	6.4	6.4	6.2
Southern Choice	6.2	6.0	6.3	6.4	6.2
Genesis	6.2	6.0	6.3	6.4	6.2
DP 50-9011	6.0	6.0	6.5	6.3	6.2
Bandana (PST-R5AE)	5.5	5.9	6.4	6.5	6.1
Coronado Gold (PST-5RT)	5.6	6.0	6.4	6.5	6.1
Velocity (AA-983)	5.5	6.0	6.3	6.5	6.1
MB 210	5.7	5.9	6.3	6.5	6.1
Falcon II	5.8	5.8	6.3	6.5	6.1
TF 6 (BAR FA6 US6F)	5.6	6.0	6.3	6.5	6.1
ZPS-5LZ	5.3	6.2	6.3	6.5	6.1
Cochise II	5.5	6.1	6.4	6.4	6.1
PST-5TO	5.7	6.1	6.4	6.4	6.1
EC-101	6.0	5.8	6.3	6.4	6.1
MB 211	5.8	6.0	6.3	6.4	6.1
Chapel Hill (TA-7)	6.0	5.8	6.2	6.4	6.1
PRO 8430	5.8	6.0	6.4	6.3	6.1
Pick FA XK-95	5.3	6.5	6.4	6.3	6.1
Apache II	5.8	6.2	6.3	6.3	6.1
Pick FA 15-92	5.8	6.1	6.5	6.2	6.1
Shenandoah	6.0	5.9	6.2	6.2	6.1
Coronado	5.8	6.1	6.2	6.1	6.1
ATF-257	5.6	5.7	6.3	6.5	6.0
Arid 2 (J-3)	5.4	5.8	6.3	6.5	6.0
WX3-275	5.5	5.9	6.3	6.5	6.0
EA 41	5.2	6.0	6.3	6.5	6.0
ISI-TF10	5.6	5.9	6.2	6.5	6.0
Tomahawk-E	5.5	5.9	6.2	6.5	6.0
Safari	5.8	5.6	6.3	6.4	6.0
Pedestal (PC-AO)	5.7	5.9	6.1	6.4	6.0
Pick FA UT-93	5.3	6.3	6.4	6.3	6.0

Table 1. Continued.

Variety	1997	1998	1999	2000	Four year average
Alamo E+	5.3	6.0	6.3	6.3	6.0
ISI-TF11	5.5	5.8	6.3	6.3	6.0
Shortstop II	5.5	6.2	6.2	6.3	6.0
MB 214	5.7	5.8	6.2	6.3	6.0
MB 215	5.7	5.9	6.1	6.3	6.0
Renegade	5.8	5.8	6.0	6.3	6.0
Finelawn Petite	5.8	5.8	6.1	6.2	6.0
MB 28	6.0	5.8	6.0	6.2	6.0
Leprechaun	5.8	6.0	5.9	6.2	6.0
Rebel 2000 (AA-989)	5.7	5.9	6.3	6.1	6.0
ISI-TF9	5.7	5.9	6.3	6.1	6.0
WVPB-1B	6.1	5.8	6.2	6.1	6.0
Anthem (TMI-FMN)	5.4	5.8	6.3	6.3	5.9
MB 216	5.5	5.8	6.2	6.3	5.9
ATF-253	5.3	5.7	6.1	6.3	5.9
JTTFC-96	5.5	5.6	6.1	6.2	5.9
Comstock (SSDE31)	5.5	5.6	6.1	6.2	5.9
PSII-TF-9	5.8	5.8	6.0	6.2	5.9
Bonsai	5.7	5.8	6.2	6.1	5.9
JTTFA-96	5.5	5.7	6.3	6.0	5.9
Kitty Hawk S.S.T. (SS45DW)	5.7	5.8	6.2	6.0	5.9
Twilight II (TMI-TW)	5.1	5.7	6.1	6.3	5.8
ATF-020	5.5	5.5	6.0	6.3	5.8
SRX 8084	5.5	5.8	5.7	6.3	5.8
ATF-022	5.1	5.7	6.2	6.2	5.8
Lion	5.3	5.7	5.9	6.1	5.8
Titan 2	5.6	5.5	6.0	6.0	5.8
Marksman	5.8	5.7	5.9	6.0	5.8
Wpeze (WVPB-1C)	5.5	5.8	5.8	6.0	5.8
OFI-96-32	5.8	5.8	5.6	5.8	5.8
Equinox (TMI-N91)	5.4	5.5	5.8	6.0	5.7
JSC-1	5.6	5.5	5.8	6.0	5.7
WVPB-1D	5.5	5.7	5.8	6.0	5.7
PSII-TF-10	5.4	5.7	5.7	6.0	5.7
Good-En (Koos 96-14)	5.3	5.7	5.4	6.2	5.6
Axiom (ATF-192)	5.2	5.5	5.8	5.8	5.6
DP 7952	5.1	5.2	5.8	5.9	5.5
DLF-1	5.4	5.3	5.4	5.8	5.5
Arid	5.5	5.1	5.6	5.6	5.5

Table 1. Continued.

Variety	1997	1998	1999	2000	Four year average
AV-1	5.1	4.9	5.0	5.4	5.1
Kentucky-31 w/endo.	4.3	3.3	2.9	2.9	3.3
Variety Average ^b	5.7	6.0	6.3	6.4	6.1

^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 four year average.