



## **Turf-type Tall Fescue Variety Performance for Golf Roughs or Lawns**

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**Goal:** Evaluate tall fescue variety performance under conditions favorable for brown patch and other diseases.

**Location:** Lawn with southeast exposure and limited wind movement adjacent to Golf House building – Lemont, Illinois

**Background:** Tall fescue is extensively used in the transition zone of the United States. It is a cool-season turfgrass that is heat and drought tolerant. Tall fescue has good resistance to dollar spot (*Sclerotinia homoeocarpa*), but is known to be susceptible to brown patch (*Rhizoctonia solani*). Compared to Kentucky bluegrass, tall fescue is of greater ability to withstand drought or tree root competition in Chicago. As a group, fescues have excellent shade tolerance. These characteristics indicate it has desirable traits that may be utilized in golf roughs or lawns. Since the 1970s, plant breeders have improved turf-type tall fescues with color and texture now rivaling Kentucky bluegrass. In Chicago tall fescue use is limited, partly due to concerns regarding winter hardiness, potential for ice injury, and disease resistance.

**Brief Material and Methods:** A total of 58 varieties were seeded in 4 ft. x 4 ft. plots on 22 May, 2009. The study is a randomized complete block design with 3 replications. The trial's proximity near a building reduces air movement and was selected to favor disease development. Hand seeding took place at a rate of 8 lbs per 1000 ft<sup>2</sup>. Plots were managed at a height of 2.5 inches and irrigated as needed. Seedling vigor, percent establishment, visual quality, and percent disease data were obtained first season in 2009 with spring green-up in 2010.

### **Results: Seedling vigor, Percent cover, Visual color, 2010 Spring green-up**

- Best seedling vigor (7.3 to 8.0) on 23 June was associated with coarser varieties that included Kentucky-31, SouthEast, Bulldog 51, and Jaguar 3. (Table 1)
- Best percent cover (67-72%) on 18 July was associated coarser varieties and newer varieties including; Innovator, Coronado, Grande II & Quest. (Figs. 1 and 2)
- Best color (7.7 to 8.7) on 9 July occurred with experimental or newer varieties. (Table 1)
- Best green-up was associated with coarser varieties; Bulldog 51, K31, Jaguar3. (Fig. 1)

Table 1. Tall fescue variety performance at Sunshine Course, Lemont, IL in 2009.

Variety	Seedling vigor rating (0-9), 9 is most, June 23	Percent cover, June 18	Percent cover, July 9	Color rating (0-9), 9 darkest green, July 9
AST4	4.7 d-g	66.7 a-d	90.0 a-f	8.7 a
AST1	4.0 e-h	68.3 abc	90.7 a-e	8.3 ab
AST2	5.0 c-f	65.0 a-e	89.0 a-f	8.3 ab
AST3	3.3 gh	48.3 fgh	90.7 a-e	8.3 ab
Banshee	4.0 e-h	63.3 a-f	93.0 abc	8.3 ab
Darlington	3.7 fgh	58.3 a-g	84.0 def	8.3 ab
Fat Cat	4.3 d-g	60.0 a-f	94.0 ab	8.0 abc
AST7003	4.0 e-h	61.7 a-f	91.7 a-e	8.0 abc
Tulsa Time	4.0 e-h	55.0 b-h	86.7 b-f	8.0 abc
Wolfpack II	5.0 c-f	58.3 a-g	89.7 a-f	7.7 a-d
Inferno	4.0 e-h	60.0 a-f	89.0 a-f	7.7 a-d
Rocket	4.3 d-g	55.0 b-h	89.0 a-f	7.3 b-e
Blackwatch	4.0 e-h	56.7 a-g	86.7 b-f	7.3 b-e
Tahoe II	4.0 e-h	65.0 a-e	91.7 a-e	7.3 b-e
Shenandoah Elite	4.0 e-h	55.0 b-h	90.7 a-e	7.3 b-e
Talladega	3.7 fgh	48.3 fgh	81.7 f	7.3 b-e
SR 8550	3.7 fgh	43.3 gh	83.3 ef	7.3 b-e
Regiment II	5.7 cd	60.0 a-f	88.3 a-f	7.0 c-f
Grande II	5.7 cd	66.7 a-d	94.0 ab	7.0 c-f
Essential	5.3 cde	65.0 a-e	93.3 abc	7.0 c-f
Jamboree	5.0 c-f	58.3 a-g	93.3 abc	7.0 c-f
Dynamic II	4.7 d-g	61.7 a-f	89.7 a-f	7.0 c-f
Shenandoah III	4.7 d-g	56.7 a-g	90.0 a-f	7.0 c-f
Matador GT	4.3 d-g	60.0 a-f	91.7 a-e	7.0 c-f
3 <sup>rd</sup> Millennium	4.3 d-g	56.7 a-g	94.7 ab	7.0 c-f
AST7001	4.0 e-h	51.7 d-h	91.7 a-e	7.0 c-f
Jaguar 4G	4.0 e-h	53.3 c-h	86.7 b-f	7.0 c-f
Finelawn Express	4.0 e-h	58.3 a-g	94.7 ab	7.0 c-f
SR 8650	4.0 e-h	63.3 a-f	90.0 a-f	7.0 c-f
Aggressor	3.7 fgh	60.0 a-f	93.0 abc	7.0 c-f
Traverse SRP	3.3 gh	51.7 d-h	87.3 a-f	7.0 c-f
Sitka	5.7 cd	65.0 a-e	93.0 abc	6.7 def
Lexington	5.3 cde	58.3 a-g	94.0 ab	6.7 def
AST7002	5.0 c-f	61.7 a-f	90.0 a-f	6.7 def
Quest	5.0 c-f	66.7 a-d	96.0 a	6.7 def
Coronado	4.7 d-g	68.3 abc	94.0 ab	6.7 def
Falcon V	4.0 e-h	55.0 b-h	87.3 a-f	6.7 def
Toccoa	3.3 gh	51.7 d-h	85.0 c-f	6.7 def
Guardian 21	2.7 h	40.0 h	86.7 b-f	6.7 def
SR 8600	5.0 c-f	60.0 a-f	94.7 ab	6.3 ef
Gazelle II	4.3 d-g	55.0 b-h	93.0 abc	6.3 ef
Rambler SRP	4.3 d-g	53.3 c-h	90.0 a-f	6.3 ef
Arid3	4.0 e-h	55.0 b-h	91.7 a-e	6.3 ef
Firenza	4.0 e-h	61.7 a-f	88.3 a-f	6.3 ef
Innovator	5.0 c-f	71.7 a	93.0 abc	6.0 f
Speedway	4.7 d-g	53.3 c-h	93.0 abc	6.0 f
Falcon IV	4.3 d-g	58.3 a-g	90.0 a-f	6.0 f
Endeavor2	3.7 fgh	50.0 e-h	86.3 b-f	6.0 f
Jaguar 3	7.7 ab	60.0 a-f	94.0 ab	4.7 g
Tar Heel II	6.3 bc	65.0 a-e	94.7 ab	4.7 g
Bulldog 51	7.3 ab	60.0 a-f	91.7 a-e	3.3 h
SouthEast	8.0 a	65.0 a-e	93.7 abc	3.3 h
Kentucky – 31	8.0 a	70.0 ab	90.0 a-f	3.3 h

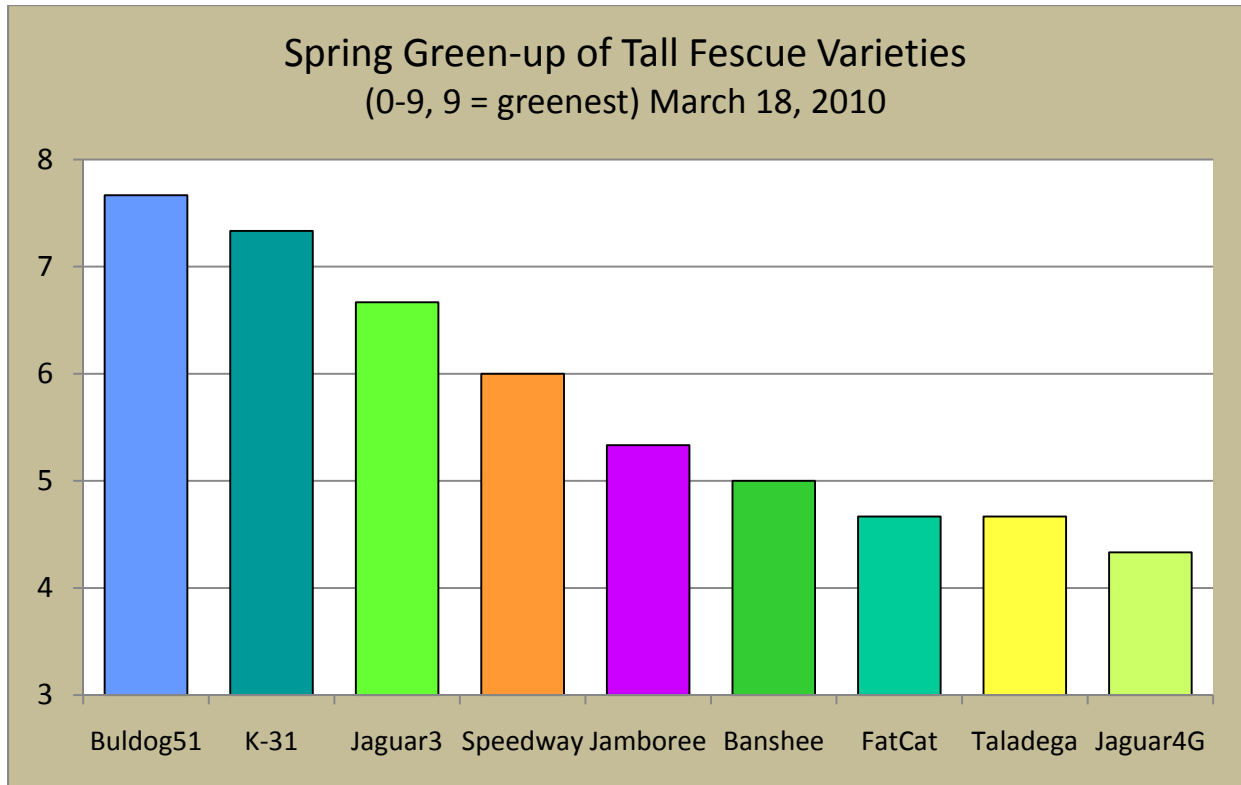


Figure 1. Spring green-up of turf type tall fescue varieties at Golf House, Lemont, IL in 2010.



Figure 2. Spring green-up differences in 2010. Coarser varieties outgrew dead leaves quicker (e.g., Bulldog 51, a salt-tolerant variety from University of Georgia). *K. Rincker 3-17-10*