# Jonathan Green

## FOR THE BEST LAWN IN TOWN

DORADO
TALL FESCUE
"THE GOLDEN DREAM REALIZED"

# DORADO
## Tall Fescue

| | |
|---|---|
| *Variety Name:* | **Dorado** |
| *Kind:* | **Tall Fescue** |
| *Genus:* | **Festuca** |
| *Species:* | **arundinacea** |
| *Experimental Designation:* | **GH-128** |

### BREEDING HISTORY:

Dorado Tall Fescue was developed using 4 cycles of phenotypic recurrent selection and multiple years of turf performance testing. The germplasm sources used to develop GH-128 was derived from undeveloped experimental germplasm sources collected from old turf plots near Lewisburg, Pennsylvania. (August, 2000) where they exhibited superior turf quality during the hot humid summer months when the heat stress, brown patch and pythium diseases were the most severe. The five undeveloped germplasm sources were evaluated over two seasons in new plots; then selections from each were planted in polycross nurseries. In each cycle, the primary selection criteria were for turf quality, dark green color, fine leaf texture and maximum turf density. Breeder seed of GH-128 (Dorado) was first produced in 2005.

Dorado was tested for turf performance under lawn conditions near Forest Grove, Oregon, Lewisburg, Pennsylvania and Haymarket, Virginia. The turf quality of Dorado was exceptional at these three locations, so was the genetic color (6.8 to 7.8 on a scale of 1-9; 9=darkest green) The turf density of Dorado was denser than all other tall fescues in the these turf plots.

### BREEDING CHRONOLOGY:

2001 – Selected plants from each source were crossed, sources were bulked and used to plant a spaced plant nursery with 300 grasses. A turf plot of each parent (year 1 of the turf evaluation) was also planted near Lewisburg, Pennsylvania.

2002 – Superior plants (based on color and seed production potential) were selected from the spaced planted nurseries. They were each crossed in an isolated crossing block and turf plots of each parent were planted. Superior plots that had tillered after the second year of evaluation for turf quality, color, texture and density were put in an isolated nursery.

2003 – The isolated nursery was rogued 75% before pollination. The seed produced was bulked and used to establish 300 spaced plants. Turf plots were evaluated and superior plots selected. 300 plants were established with tillers dug from the selected plots. Spaced plants from all sources were combined in another isolated nursery.

2004 – The nursery containing spaced plants from all 5 original sources was rogued before pollination (68%) removing plants that were susceptible to stem rust or did not have good seed yield potential. The remaining plants were harvested, the seed bulked and a spaced planted nursery of 2500 individual plants was established.

2005 – The nursery was rogued 35% for uniformity, seed yield potential, and superior stem rust resistance. The remaining plants were harvested as the first breeder seed of this variety. Production field and university observations of Dorado GH-128 indicate that the variety is uniform and very stable.

*Dorado is a truly exceptional Black Beauty Tall Fescue.*

↑ *DORADO Tall Fescue in turf plots, the darkest green, most uniform leaves.*

→ *Plant breeder points out DORADO Tall Fescue.*

BLACK BEAUTY™

**Dorado is a Black Beauty Tall Fescue variety.**


*DORADO Tall Fescue, Experimental No: GH-128, is very hard to tell apart from Kentucky Bluegrass.*

Turf trials were established August 21, 2006 at Forest Grove, OR, and September 4, 2006 at Lewisburg, PA. Experimental design was randomized complete block with three replications for both locations. Cutting height at both locations was 1.5 inches. Both trials received 6 pounds of actual Nitrogen from the fall of 2006 through the summer of 2007. Total entries at each trial location were the same at 38.

Ratings were made using a 1-9 scale for each trait as follows: Turfgrass quality where 9=ideal turf, Color where 9=darkest green, Density where 9=most dense and Leaf texture where 9=very fine.

| Variety | Turf Quality | | | Color | | | Density | | | Texture | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OR | PA | Ave. | OR | PA | Ave. | OR | PA | Ave. | OR | PA | Ave. |
| **GH-128 (DORADO)** | **7.7** | **7.1** | **7.4** | **7.8** | **6.8** | **7.3** | **7.2** | **6.5** | **6.8** | **7.2** | **6.5** | **6.9** |
| Justice | 7.0 | 6.5 | 6.8 | 7.2 | 6.2 | 6.7 | 7.8 | 5.5 | 6.6 | 7.9 | 5.8 | 6.7 |
| Inferno | 6.6 | 6.6 | 6.6 | 6.2 | 6.0 | 6.1 | 6.6 | 6.3 | 6.5 | 6.5 | 6.7 | 6.6 |
| Bonsai | 6.1 | 4.8 | 5.5 | 5.8 | 4.3 | 5.1 | 7.3 | 3.5 | 5.4 | 7.5 | 5.0 | 6.3 |
| Falcon 4 | 6.2 | 6.4 | 6.3 | 5.8 | 6.0 | 5.9 | 6.4 | 5.5 | 5.9 | 6.3 | 5.3 | 5.8 |
| Mini Mustang | 4.3 | 2.6 | 3.5 | 5.0 | 3.3 | 4.2 | 3.8 | 2.7 | 3.3 | 4.5 | 3.3 | 3.9 |
| Silverado | 4.8 | 3.8 | 4.3 | 4.5 | 2.7 | 3.6 | 4.8 | 2.7 | 3.8 | 4.3 | 2.8 | 3.6 |
| Rebel II | 4.0 | 3.8 | 3.9 | 3.3 | 3.7 | 3.5 | 3.8 | 3.5 | 3.6 | 3.3 | 3.7 | 3.5 |
| Bonanza | 3.4 | 3.3 | 3.4 | 2.0 | 2.7 | 2.3 | 3.7 | 3.0 | 3.3 | 3.5 | 2.3 | 2.9 |
| K-31 | 2.4 | 2.4 | 2.4 | 2.0 | 1.8 | 1.9 | 1.7 | 1.8 | 1.8 | 1.3 | 1.8 | 1.6 |
| Grand Mean | 5.3 | 4.7 | 5.0 | 5.0 | 4.4 | 4.7 | 5.3 | 4.1 | 4.7 | 5.2 | 4.3 | 4.8 |
| Highest Rated Entry | 7.7 | 7.2 | 7.4 | 8.2 | 7.3 | 7.3 | 7.8 | 6.8 | 7.3 | 7.9 | 6.7 | 7.1 |
| Lowest Rated Entry | 2.4 | 2.4 | 2.4 | 2.0 | 1.8 | 1.9 | 1.7 | 1.8 | 1.8 | 1.3 | 1.8 | 1.6 |
| SE | 0.4 | 0.4 | | 0.6 | 0.6 | | 0.6 | 0.7 | | 0.6 | 0.6 | |
| LSD @ 0.05 | 0.8 | 0.7 | | 1.3 | 1.1 | | 1.2 | 1.5 | | 1.3 | 1.2 | |

## 2007 TURF TRIALS AT VIRGINIA BEEF'S LATHAM FARM AT HAYMARKET, VIRGINIA

| VARIETY | EARLY GERM 10/8/07 | CUM GERM/ESTAB | EARLY SPRING COLOR 3/27/08 | WINTER COLOR 2/25/08 | CUM COLOR | TEXTURE/ UNIFORMITY 10/21/08 | CUM TURF QUALITY | CUM ALL RATINGS |
|---|---|---|---|---|---|---|---|---|
| **DORADO (GH-128)** | **2.33** | **3.56** | **7.33** | **7.00** | **6.71** | **5.00** | **4.94** | **5.50** |
| **MYSTIX** | **4.33** | **4.81** | **5.67** | **6.33** | **5.41** | **4.00** | **5.03** | **5.37** |
| **REBEL IV** | **3.33** | **3.53** | **6.0** | **6.33** | **5.76** | **4.00** | **4.68** | **5.22** |
| **SHELBY** | **3.67** | **4.39** | **5.67** | **5.67** | **5.10** | **4.67** | **5.05** | **5.09** |
| **LEXINGTON** | **4.00** | **4.56** | **5.33** | **5.33** | **5.07** | **4.00** | **4.36** | **4.88** |
| **FAWN** | **3.33** | **4.44** | **3.00** | **3.33** | **2.83** | **2.67** | **2.89** | **3.31** |