

### Breeding Chronology

**2006** – In the spring, eighty-nine of the darkest green plants with fine leaf texture, abundant heading and resistance to stem rust were selected out of spaced plant nurseries. Selections trace back to the following varieties: Hudson (22 plants), AST5112 (20 plants), Integrity (16 plants), Sunset Gold (18 plants) and Corona (13 plants). These plants were transplanted to an isolated crossing block and allowed to inter-pollinate. Seed of each plant in the cross was harvested individually and used to establish turf plots in Verboort, Oregon and Pipersville, Pennsylvania. The plots were evaluated for two seasons and rated for turf quality, genetic color, density and texture.

**2009** – In August, seventeen of the 89 half-sib lines exhibited good turf quality, resistance to heat stress, brown patch, pythium and resistance to drought in the turf plots planted at Pipersville, Pennsylvania. Tillers were dug from the 17 superior turf plots planted at Pipersville and utilized to establish an isolated spaced plant nursery with 200 plants from each plot.

**2010** – Spaced plants were rogued for uniformity, color, resistance to rust, and abundance of seed heads before pollination removing 85% of the plants. Seed of the 17 half-sib rows were harvested individually and bulked supplying seed for the turf plots that were planted.

**2011 – 2012** – Turf plots were evaluated for 2 years for turf quality, color, density and texture. Tillers were dug from 6 of the 17 half-sib plots (200 plants each) which exhibited the best turf performance.

**2013** – Spaced plants were rogued for uniformity, dark green color, abundant heading and resistance to crown rust removing 20% of the population. The remaining plants were allowed to inter-pollinate and following seed ripening, were bulk harvested. This seed was the first breeder seed of the variety.

### SEEDING RATES:

#### Overseeding:

3 – 5 lbs. per 1,000 sq. ft.

#### Bare Soil:

5 – 7 lbs. per 1,000 sq. ft.



*Future Tall Fescue*

Variety	Plant Height (cm)			Flag Leaf Height (cm)			Flag Leaf Length (cm)			Flag Leaf Width (mm)			Panicle Length (cm)		
	2013	2014	AVG.	2013	2014	AVG.	2013	2014	AVG.	2013	2014	AVG.	2013	2014	AVG.
Bonanza	97.2	92.0	94.6	49.5	45.3	47.4	20.0	18.9	19.4	10.0	9.3	9.7	28.7	27.1	27.9
<b>Future</b>	<b>80.6</b>	<b>86.6</b>	<b>83.6</b>	<b>48.6</b>	<b>46.4</b>	<b>47.5</b>	<b>15.1</b>	<b>14.7</b>	<b>14.9</b>	<b>6.9</b>	<b>7.0</b>	<b>7.0</b>	<b>25.5</b>	<b>21.8</b>	<b>23.7</b>
Mustang 4	92.8	87.8	90.3	52.1	44.4	48.3	15.0	12.1	13.5	6.5	6.3	6.4	22.7	19.5	21.1
Rebel II	100.3	95.6	98.0	53.6	52.0	52.8	18.2	17.6	17.9	8.3	7.9	8.1	29.4	27.3	28.4
Silverado	76.4	71.2	73.8	30.6	31.9	31.3	13.9	11.4	12.6	7.3	7.2	7.3	22.1	18.8	20.4
LSD (.05)	7.9	5.9		3.5	6.0		2.6	1.9		1.2	1.2		3.5	2.3	

**Morphological Characteristics of Tall Fescue Varieties 2014 and 2015**

Variety	Turf Quality		Genetic Color		Leaf Density		Leaf Texture	
	OR	PA	OR	PA	OR	PA	OR	PA
<b>Future</b>	<b>7.3</b>	<b>6.8</b>	<b>7.5</b>	<b>7.0</b>	<b>7.2</b>	<b>7.2</b>	<b>7.5</b>	<b>7.0</b>
Rebel II	6.4	4.2	4.1	3.8	4.0	4.3	4.1	4.2
Crossfire 3	5.0	4.9	5.3	4.2	4.9	4.2	5.3	4.5
Silverado	4.9	4.1	4.1	3.6	3.8	3.7	4.1	4.0
Mustang 4	4.4	3.4	6.3	5.0	6.9	5.9	6.3	6.1
Bonanza	4.1	3.8	4.0	3.5	3.9	3.4	4.0	3.5

**Turf Trial 1- 2014**

Variety	Turf Quality		Genetic Color		Leaf Density		Leaf Texture	
	OR	PA	OR	PA	OR	PA	OR	PA
<b>Future</b>	<b>7.3</b>	<b>6.8</b>	<b>7.5</b>	<b>7.0</b>	<b>7.2</b>	<b>7.2</b>	<b>7.5</b>	<b>7.0</b>
Rebel II	6.4	4.2	4.1	3.8	4.0	4.3	4.1	4.2
Crossfire 3	5.0	4.9	5.3	4.2	4.9	4.2	5.3	4.5
Silverado	4.9	4.1	4.1	3.6	3.8	3.7	4.1	4.0
Mustang 4	4.4	3.8	6.3	5.0	6.9	5.9	6.3	6.1
Bonanza	4.1	3.8	4.0	3.5	3.9	3.4	4.0	3.5
LSD (.05)	0.8	0.7	1.1	1.0	1.0	1.2	1.1	1.0

**Turf Trial 2 - 2014**

**Scale:**

**1-9 with 9 ideal quality or darkest green or most dense or finest texture**

**Trial Locations:**

**Verboort, Oregon & Pipersville, Pennsylvania**

