

SORGHUM FOR SILAGE

Tifton, Georgia:

Evaluation of Sorghum Hybrids for Silage, 2011, Irrigated

| Company or Brand Name | Hybrid Name or Number | Forage Yields | | Plant Height in | Dry Matter % | 2-Yr. Avg Dry Yield tons/acre | Disease ¹ rating |
|--------------------------------|--------------------------|--------------------------|-------------------|-----------------------|--------------------|-------------------------------------|--------------------------------|
| | | Dry --- tons/acre --- | Green --- | | | | |
| Moss | 4Ever Green | 13.0 | 47.4 | 146 | 28 | 11.4 | 1.4 |
| Moss | Millennium BMR | 12.7 | 33.1 | 118 | 38 | 10.7 | 1.1 |
| Grabow | 86S | 12.4 | 35.9 | 128 | 35 | . | 1.0 |
| Alta Seeds | AF7401 | 10.1 | 30.7 | 76 | 33 | 8.6 | 1.3 |
| Coffey | Exp100BMR | 10.1 | 29.0 | 93 | 35 | 9.0 | 1.5 |
| SS | SS2010BDF | 10.1 | 35.3 | 84 | 29 | . | 1.3 |
| Moss | 4Ever Green BMR | 10.0 | 42.1 | 128 | 24 | 9.2 | 1.3 |
| Southern States | SS1515F | 9.9 | 26.9 | 79 | 38 | 9.4 | 1.1 |
| Coffey | Exp816BMR | 9.7 | 25.4 | 106 | 39 | 8.8 | 1.5 |
| Grabow | 81F | 9.5 | 29.9 | 82 | 32 | . | 1.3 |
| Moss | Desparado BMR | 8.7 | 29.6 | 85 | 30 | . | 1.3 |
| Alta Seeds | AF7301 | 8.2 | 23.3 | 96 | 36 | 7.4 | 1.4 |
| Grabow | 80F BMR6 | 8.2 | 30.9 | 80 | 26 | . | 1.0 |
| Advanta | AF7201 | 8.0 | 21.7 | 95 | 37 | . | 1.5 |
| Grabow | X8208 BMR | 7.4 | 20.9 | 109 | 35 | . | 1.5 |
| Average | | 9.8 ² | 30.8 ³ | 100 | 33 | 9.3 | 1.3 |
| LSD at 10% Level | | 1.8 | 4.6 | 8 | 5 | 1.0 | N.S. ⁴ |
| Std. Err. of Entry Mean | | 1.9 | 1.9 | 3 | 2 | 0.4 | 0.2 |
| <u>Ratoon or Regrowth Crop</u> | | | | | | | |
| Moss | 4Ever Green | 12.3 | 37.1 | 137 | 34 | 12.6 | 1.3 |
| Grabow | 86S | 7.8 | 23.4 | 129 | 33 | . | 2.8 |
| Grabow | 81F | 7.5 | 19.0 | 90 | 40 | . | 2.8 |
| Moss | Millennium BMR | 7.4 | 21.0 | 124 | 35 | 7.8 | 2.8 |
| Moss | 4Ever Green BMR | 7.4 | 23.3 | 130 | 32 | 6.4 | 1.8 |
| SS | SS2010BDF | 6.9 | 20.3 | 85 | 34 | . | 2.5 |
| Grabow | 80F BMR6 | 6.4 | 18.1 | 82 | 35 | . | 2.5 |
| Alta Seeds | AF7401 | 6.3 | 17.1 | 79 | 37 | 6.5 | 2.3 |
| Advanta | AF7201 | 6.2 | 15.8 | 100 | 40 | . | 3.5 |
| Southern States | SS1515F | 6.1 | 16.5 | 83 | 36 | 6.7 | 2.3 |
| Moss | Desparado BMR | 5.9 | 16.8 | 84 | 35 | . | 2.8 |
| Coffey | Exp100BMR | 5.6 | 16.9 | 104 | 33 | 5.7 | 2.8 |
| Grabow | X8208 BMR | 5.5 | 15.4 | 110 | 36 | . | 3.3 |
| Alta Seeds | AF7301 | 5.5 | 15.2 | 94 | 36 | 5.0 | 3.6 |
| Coffey | Exp816BMR | 5.4 | 15.9 | 99 | 35 | 5.0 | 3.0 |
| Average | | 6.8 ⁵ | 19.4 ⁶ | 102 | 35 | 7.0 | 2.6 |
| LSD at 10% Level | | 1.3 | 3.7 | 8 | 3 | 0.9 | 0.8 |
| Std. Err. of Entry Mean | | 0.6 | 1.6 | 4 | 1 | 0.4 | 0.3 |

Tifton, Georgia:
Evaluation of Sorghum Hybrids for Silage, 2011, Irrigated
(Continued)

1. Rated 1 = resistant to 5 = susceptible to foliar diseases.
2. CV = 14.9% and df for EMS = 42
3. CV = 12.6% and df for EMS = 42.
4. The F-test indicates no statistical differences at the alpha = .10 probability level; therefore, a LSD value was not calculated.
5. CV = 16.5% and df for EMS = 42.
6. CV = 16.0% and df for EMS = 42.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD ($P = 0.10$).

Planted: April 18, 2011.

Harvested: July 28, 2011.

Ratoon: December 6, 2011.

Seeding Rate: 100,000 seed/acre in 30" rows.

Soil Type: Tifton loamy sand.

Soil Test: P = High, K = Medium, and pH = 6.1.

Fertilization: Preplant: 35 lb N, 70 lb P₂O₅, and 105 lb K₂O/acre. Sidedress: 112 lb N/acre.

Previous Crop: Soybeans.

Management: Disked, subsoiled and bedded; Atrazine 4L, Prowl and cultivated for weed control; Lorsban used for insect control; Telone II used for nematode control; irrigated 10 inches.

Test conducted by A. Coy, R. Brooke and D. Dunn.

Griffin, Georgia: Evaluation of Sorghum Hybrids for Silage, 2011

| Company or Brand Name | Hybrid Name or Number | Forage Yields | | Plant Height | Dry Matter | 2-Yr. Avg Dry Yield |
|--------------------------|--------------------------|-------------------|-------------------|-----------------|---------------|------------------------|
| | | Dry | Green | | | |
| | | --- tons/acre --- | | in | % | tons/acre |
| Grabow | 81F | 4.6 | 14.8 | 58 | 31 | . |
| Sorghum Partners | 1990 | 4.3 | 18.9 | 82 | 23 | . |
| Moss | 4Ever Green | 4.2 | 18.9 | 83 | 22 | 6.2 |
| Alta Seeds | AF7301 | 3.8 | 13.7 | 75 | 28 | 4.1 |
| Advanta | AF7201 | 3.8 | 8.6 | 74 | 45 | . |
| Moss | Millennium BMR | 3.8 | 12.7 | 74 | 29 | 3.4 |
| Grabow | 86S | 3.8 | 13.4 | 82 | 28 | . |
| Grabow | 80F BMR6 | 3.5 | 14.5 | 50 | 24 | . |
| Southern States | SS1515F | 3.5 | 11.6 | 56 | 30 | 4.8 |
| SS | SS2010BDF | 3.3 | 13.3 | 55 | 25 | . |
| Coffey | Exp100BMR | 3.1 | 12.5 | 58 | 25 | 4.4 |
| Grabow | X8208 BMR | 3.1 | 9.5 | 71 | 32 | . |
| Moss | Desparado BMR | 3.0 | 10.6 | 56 | 28 | . |
| Sorghum Partners | Headless Trudan | 3.0 | 12.6 | 80 | 24 | . |
| Alta Seeds | AF7401 | 3.0 | 12.3 | 60 | 24 | 4.0 |
| Coffey | Exp816BMR | 2.9 | 9.5 | 63 | 31 | 3.6 |
| Moss | 4Ever Green BMR | 2.4 | 10.6 | 73 | 22 | 4.3 |
| Average | | 3.5 ¹ | 12.8 ² | 68 | 28 | 4.4 |
| LSD at 10% Level | | 0.9 | 3.8 | 8 | 3 | N.S. ³ |
| Std. Err. of Entry Mean | | 0.4 | 1.6 | 3 | 1 | 0.5 |

1. CV = 22.6% and df for EMS = 48.

2. CV = 25.0% and df for EMS = 48.

3. The F-test indicates no statistical differences at the alpha = .10 probability level; therefore, a LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted: May 24, 2011.

Harvested: September 2011.

Seeding Rate: 150,000 seed/acre in 30" rows.

Soil Type: Pacolet coarse sandy loam.

Soil Test: P = Medium, K = High, and pH = 6.0.

Fertilization: Preplant: 50 lb N, 100 lb P₂O₅, and 150 lb K₂O/acre. Sidedress: 100 lb N/acre.

Previous Crop: Wheat.

Management: Moldboard plowed, disked and rototilled; Dual Magnum used for weed control.

Test conducted by J. Gasset and G. Ware.