ABOUT

Gayland Ward Seed is proud to be a family owned and operated seed production and research company. Since 1986, we have focused our efforts on sorghum grower profitability, research, quality and customer service. We offer customized private packaging for seed companies and distributors. We have a national varietal testing program to ensure we are producing & developing the best hybrid for the area the hybrids are to be grown.

PURITY

We value your time and resources. Accordingly, every bag of seed produced by Gayland Ward has undergone intense scrutiny to ensure the finest quality and purest product. Our commitment to purity means knowing our seed will produce the product you expect. Our quality control includes routine testing of genetic purity, germination, and uniformity.

RESEARCH

Each year Gayland Ward commits thousands of man-hours developing elite genetics through cutting edge plant-breeding techniques. Every product in the portfolio has been scientifically developed, adapted, and tested for premium performance against disease, drought, and pests. Our commitment to research means cultivating and testing products where they will be grown and how they will be grown.

PERFORMANCE

Our products have been developed to decrease input while maximizing profit. For every dollar you invest, every inch of water, and every man-hour, you will receive maximum value from our products. Our commitment to performance means delivering seed that provides the highest value for our customers.

Visit our field days at Hereford, TX in July, August, or September to see our hybrids and facility.

We appreciate our loyal customers and friends.

For more info, contact Carson Ward at Gayland Ward Seed

Office Phone: 800-299-9273 or 806-258-7394

Email: carson@gaylandwardseed.com

Online: www.gaylandwardseed.com
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<th>Harvest Height</th>
<th>Growth Stage for Harvest</th>
<th>Leaf Disease Resistance*</th>
<th>Grain to Stover Ratio*</th>
<th>Stalk Moisture Type</th>
<th>Seeds per Pound (1,000s)</th>
<th>Irrigated (Precision Planter)</th>
<th>Dryland (Precision Planter)</th>
<th>Irrigated (Broadcast/Drilled)</th>
<th>Dryland (Broadcast/Drilled)</th>
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</thead>
<tbody>
<tr>
<td>Nutri-King BMR-6</td>
<td>50-55</td>
<td>40&quot;-50&quot;</td>
<td>Boot 8</td>
<td>N/A</td>
<td>Juicy Stalk 15-18</td>
<td>N/A</td>
<td>N/A</td>
<td>50-65</td>
<td>25-40</td>
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<td></td>
</tr>
<tr>
<td>Sweet-Six BMR</td>
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<td>40&quot;-50&quot;</td>
<td>Boot 10</td>
<td>N/A</td>
<td>Dry Stalk 15-18</td>
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<td>N/A</td>
<td>50-65</td>
<td>25-40</td>
<td></td>
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</tr>
<tr>
<td>Super Sugar</td>
<td>50-55</td>
<td>40&quot;-50&quot;</td>
<td>Boot 9</td>
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<td>Juicy Stalk 19-21</td>
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<td>N/A</td>
<td>65-80</td>
<td>30-45</td>
<td></td>
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</tr>
<tr>
<td>Super Sugar (Delayed-Maturity)</td>
<td>55-85</td>
<td>50&quot;-80&quot;</td>
<td>5-7' 10</td>
<td>N/A</td>
<td>Juicy Stalk 19-21</td>
<td>N/A</td>
<td>N/A</td>
<td>65-80</td>
<td>30-45</td>
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</tr>
<tr>
<td>Sweet Forever BMR (PPS)</td>
<td>50-85</td>
<td>50&quot;-80&quot;</td>
<td>6-8' 9</td>
<td>N/A</td>
<td>Juicy Stalk 15-17</td>
<td>N/A</td>
<td>N/A</td>
<td>50-65</td>
<td>25-40</td>
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<tr>
<td>BMR Grazing Blend</td>
<td>80-100</td>
<td>40-50&quot;</td>
<td>4-5' 9</td>
<td>N/A</td>
<td>Juicy Stalk 15-17</td>
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<td>50-65</td>
<td>25-40</td>
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<tr>
<td>Tifleaf III Hybrid Pearl Millet</td>
<td>40-50</td>
<td>3-4'</td>
<td>Boot 10</td>
<td>N/A</td>
<td>Juicy Stalk 60</td>
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<td>N/A</td>
<td>12-14</td>
<td>10-12</td>
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</table>

### SEEDING RATES

<table>
<thead>
<tr>
<th>Variety</th>
<th>Irrigated (Precision Planter)</th>
<th>Dryland (Precision Planter)</th>
<th>Irrigated (Broadcast/Drilled)</th>
<th>Dryland (Broadcast/Drilled)</th>
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</thead>
<tbody>
<tr>
<td>Nutri-King BMR-6</td>
<td>50-65</td>
<td>25-40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweet-Six BMR</td>
<td>50-65</td>
<td>25-40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super Sugar</td>
<td>65-80</td>
<td>30-45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super Sugar (Delayed-Maturity)</td>
<td>65-80</td>
<td>30-45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweet Forever BMR (PPS)</td>
<td>50-65</td>
<td>25-40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMR Grazing Blend</td>
<td>50-65</td>
<td>25-40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tifleaf III Hybrid Pearl Millet</td>
<td>12-14</td>
<td>10-12</td>
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</table>

### IDEAL USE CASE

<table>
<thead>
<tr>
<th>Variety</th>
<th>Baleage</th>
<th>Hay</th>
<th>Silage</th>
<th>Grazing</th>
<th>Cover Crop</th>
<th>Dry Matter tons/acre</th>
<th>Lb gain/acre</th>
<th>Milk/acre</th>
<th>Cost/acre (incl. harvest)</th>
<th>Protein Potential</th>
<th>Digestibility</th>
<th>Sugar Content</th>
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</thead>
<tbody>
<tr>
<td>Nutri-King BMR-6</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td>10</td>
<td>5-8</td>
<td>10</td>
<td>10</td>
<td>$</td>
<td>12-14%</td>
<td>10</td>
<td>12-16%</td>
</tr>
<tr>
<td>Sweet-Six BMR</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td>5-8</td>
<td>9</td>
<td>10</td>
<td>$</td>
<td>12-14%</td>
<td>10</td>
<td>10-14%</td>
</tr>
<tr>
<td>Super Sugar</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>5-8</td>
<td>8</td>
<td>6</td>
<td>$</td>
<td>12-14%</td>
<td>7</td>
<td>12-16%</td>
</tr>
<tr>
<td>Super Sugar (Delayed-Maturity)</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>8</td>
<td>10</td>
<td>7-10</td>
<td>9</td>
<td>8</td>
<td>$</td>
<td>14-16%</td>
<td>7</td>
<td>12-16%</td>
</tr>
<tr>
<td>Sweet Forever BMR (PPS)</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7-10</td>
<td>10</td>
<td>9</td>
<td>$</td>
<td>12-14%</td>
<td>9</td>
<td>12-16%</td>
</tr>
<tr>
<td>BMR Grazing Blend</td>
<td>9</td>
<td>8</td>
<td>8</td>
<td>10</td>
<td>8</td>
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<td>$</td>
<td>14-16%</td>
<td>10</td>
<td>12-16%</td>
</tr>
<tr>
<td>Tifleaf III Hybrid Pearl Millet</td>
<td>8</td>
<td>9</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>4-6</td>
<td>8</td>
<td>6</td>
<td>$</td>
<td>16-20%</td>
<td>9</td>
<td>6-8%</td>
</tr>
</tbody>
</table>

### NUTRITIONAL

*Scale of 1-10; 1 is poor and 10 is exceptional.

Note: ratings based on the average performance of a hybrid grown over a wide range of growing regions and soil types within its adapted maturity under typical growing conditions.

For more detailed varietal information such as yield and nutritional analysis reports visit our website at www.GaylandWardSeed.com or call Carson Ward 806-258-7394.
## Forage Sorghum

### Agronomic Traits

<table>
<thead>
<tr>
<th>Forage Sorghum</th>
<th>Days to Harvest</th>
<th>Harvest Height</th>
<th>Growth Stage for Harvest</th>
<th>Leaf Disease Resistance</th>
<th>Grain to Stover Ratio</th>
<th>Stalk Moisture Type</th>
<th>Seeds per Pound (1,000s)</th>
<th>Irrigated (Precision Planter)</th>
<th>Dryland (Precision Planter)</th>
<th>Irrigated (Broadcast/Drilled)</th>
<th>Dryland (Broadcast/Drilled)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GW-600 BMR</td>
<td>90-95</td>
<td>7-8'</td>
<td>Dough or Boot</td>
<td>9</td>
<td>10</td>
<td>Dry Stalk</td>
<td>14-16</td>
<td>5-6</td>
<td>4-5</td>
<td>6-7</td>
<td>5-6</td>
</tr>
<tr>
<td>Silo-Pro BMR (Brachytic-Dwarf)</td>
<td>100-115</td>
<td>6-7'</td>
<td>Soft Dough or Boot</td>
<td>10</td>
<td>10</td>
<td>Juicy Stalk</td>
<td>13-15</td>
<td>5-7</td>
<td>3-5</td>
<td>6-8</td>
<td>4-6</td>
</tr>
<tr>
<td>Forage Master</td>
<td>95-100</td>
<td>9-10'</td>
<td>Soft Dough or Boot</td>
<td>8</td>
<td>9.5</td>
<td>Juicy Stalk</td>
<td>19-20</td>
<td>6-8</td>
<td>4-6</td>
<td>8-10</td>
<td>6-8</td>
</tr>
<tr>
<td>GW-400 BMR MS</td>
<td>80-85</td>
<td>7-8'</td>
<td>Heading or Boot</td>
<td>9</td>
<td>Sterile</td>
<td>Juicy Stalk</td>
<td>14-16</td>
<td>6-8</td>
<td>4-6</td>
<td>18-20</td>
<td>10-12</td>
</tr>
<tr>
<td>GW-475 BMR MS</td>
<td>70-75</td>
<td>7-8'</td>
<td>Heading or Boot</td>
<td>9</td>
<td>Sterile</td>
<td>Dry Stalk</td>
<td>14-16</td>
<td>6-8</td>
<td>4-6</td>
<td>18-20</td>
<td>10-12</td>
</tr>
<tr>
<td>GW-2120 MS</td>
<td>85-90</td>
<td>8-9'</td>
<td>Heading or Boot</td>
<td>10</td>
<td>Sterile</td>
<td>Juicy Stalk</td>
<td>18-20</td>
<td>6-8</td>
<td>4-6</td>
<td>18-20</td>
<td>10-12</td>
</tr>
</tbody>
</table>

### Seeding Rates

| Forage Sorghum | Baleage Hay Silage Grazing Cover Crop Dry Matter tons/acre Lb gain/acre Milk/acre Cost Per Acre (incl. harvest) Protein Potential Digestibility Sugar Content |
|----------------|-----------------------------------------------|---------------------------------|-------------------------|----------------------------|----------------|----------------|--------------------|--------------------------------|----------------|--------------------------------|----------------|--------------------------------|
| GW-600 BMR     | 10                                           | 9                              | 10                      | 7                        | 8              | 10-12          | 10                 | 10                          | $               | 8-11%                        | 10             | 10-14%                        |
| Silo-Pro BMR (Brachytic-Dwarf) | 10                                           | 7                              | 10                      | 8                        | 8              | 10-12          | 10                 | 10                          | $$$             | 8-11%                        | 10             | 10-14%                        |
| Forage Master  | 8                                            | 9                              | 8                       | 7                        | 9              | 10-12          | 8                  | 7              | $               | 8-11%                        | 8              | 10-14%                        |
| GW-400 BMR MS  | 10                                           | 10                             | 10                      | 9                        | 10             | 7-10           | 10                 | 10                          | $$$             | 8-11%                        | 10             | 18-22%                        |
| GW-475 BMR MS  | 10                                           | 10                             | 10                      | 8                        | 9              | 7-10           | 10                 | 10                          | $$$             | 8-11%                        | 10             | 10-14%                        |
| GW-2120 MS     | 8                                            | 9                              | 8                       | 9                        | 9              | 7-10           | 8                  | 7              | $               | 7-10%                        | 8              | 14-18%                        |

*Scale of 1-10, 1 is poor and 10 is exceptional.
Note: ratings based on the average performance of a hybrid grown over a wide range of growing regions and soil types within its adapted maturity under typical growing conditions. Extreme conditions may adversely affect performance. Contact your local Gayland Ward Seed specialist for additional information.
For more detailed varietal information such as yield and nutritional analysis reports visit our website at www.GaylandWardSeed.com or call Carson Ward 806-258-7394.
Nutri-King
BMR 6

SORGO SORGHUM X SUDANGRASS

Nutri King BMR produces a high leaf to stem ratio with sweet juicy stems. It is one of the best for hay, grazing, baleage, or silage. Cattle prefer this hybrid over non bmr hybrids. Nutri King BMR 6 has reduced lignin which improves the fiber digestibility and palatability. With the increase in efficiency and utilization Nutri King BMR will give you better gain per acre. We have seen yields of 5-8 DM tons/acre. It has an extensive deep root system allowing it to do well under dry conditions.

Disease / Insect Ratings

<table>
<thead>
<tr>
<th>Disease / Insect Rating</th>
<th>Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downy Mildew</td>
<td>Resistant</td>
</tr>
<tr>
<td>Anthracnose</td>
<td>Moderately Resistant</td>
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</table>

Agronomic Traits

<table>
<thead>
<tr>
<th>Agronomic Trait</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Season Vigor</td>
<td>Excellent</td>
</tr>
<tr>
<td>Height</td>
<td>40” - 50”</td>
</tr>
<tr>
<td>Maturity</td>
<td>50 - 55 Days to Boot</td>
</tr>
<tr>
<td>Regrowth</td>
<td>Excellent</td>
</tr>
<tr>
<td>Midrib Type</td>
<td>BMR 6</td>
</tr>
<tr>
<td>Plant Type</td>
<td>Juicy Sweet</td>
</tr>
<tr>
<td>Photoperiod Sensitive</td>
<td>No</td>
</tr>
<tr>
<td>Life Cycle</td>
<td>Annual</td>
</tr>
<tr>
<td>Ease of Establishment</td>
<td>Good</td>
</tr>
<tr>
<td>Double Cropping</td>
<td>Excellent</td>
</tr>
<tr>
<td>Dryland / Irrigated</td>
<td>Both</td>
</tr>
<tr>
<td>Min. / Max. pH</td>
<td>6.0 - 7.5</td>
</tr>
<tr>
<td>Hay / Baleage Yield Potential</td>
<td>5 - 8 DM Ton / Acre</td>
</tr>
<tr>
<td>Silage</td>
<td>Excellent</td>
</tr>
<tr>
<td>Rotational Grazing</td>
<td>Excellent</td>
</tr>
<tr>
<td>Continuous Grazing</td>
<td>Excellent</td>
</tr>
<tr>
<td>Cover Crop</td>
<td>Good</td>
</tr>
<tr>
<td>Digestibility</td>
<td>Good IVTD, TDN, NDFD %</td>
</tr>
<tr>
<td>Palatability</td>
<td>Sweet &amp; Soft</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>1-1 ¼ Lbs N per growing day / Acre</td>
</tr>
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</table>

Crop Use Information

<table>
<thead>
<tr>
<th>Crop Use Information</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvest</td>
<td></td>
</tr>
<tr>
<td>First Cutting</td>
<td>50 - 55 days</td>
</tr>
<tr>
<td>Second Cutting</td>
<td>25 - 30 days</td>
</tr>
<tr>
<td>Third Cutting</td>
<td>25 - 30 days</td>
</tr>
</tbody>
</table>

- Nutri King BMR is harvested between 40-50 inches or in the boot stage. It is quick to grow to maturity
- Cut 6-8 inches above ground level for best regrowth
- Cutting in the boot or pre-boot stage ensures a higher quality of feed and better regrowth
- Following a freeze, extreme drought, or fertilizer application followed by stress. See our guide for how to manage Prussic Acid and Nitrates.
Sweet Six BMR Dry Stalk

**Disease / Insect Ratings**
- Downy Mildew: Resistant
- Anthracnose: Resistant

**Agronomic Traits**
- Early Season Vigor: Excellent
- Height: 40” - 50”
- Maturity: 40 - 50 Days to Boot
- Regrowth: Excellent
- Midrib Type: BMR 6
- Plant Type: Dry Stalk
- Photoperiod Sensitive: No

**Crop Use Information**
- Life Cycle: Annual
- Ease of Establishment: Excellent
- Double Cropping: Excellent
- Dryland / Irrigated: Both
- Min. / Max. pH: 6.0 - 7.5
- Hay / Baleage Yield Potential: 5 - 8 DM Ton / Acre
- Silage: Excellent
- Rotational Grazing: Excellent
- Continuous Grazing: Excellent
- Cover Crop: Good
- Digestibility: Good IVTD, TDN, NDFD %
- Palatability: Sweet & Soft
- Fertilizer: 1-1 ¼ Lbs N per growing day / acre

**Harvest**
- First Cutting: 40 - 50 days
- Second Cutting: 25 - 30 days
- Third Cutting: 25 - 30 days

- Sweet Six BMR Dry Stalk is harvested between 40-50 inches or in the boot stage. It is quick to grow to maturity
- Cut 6-8 inches above ground level for best regrowth
- Cutting in the boot or pre-boot stage ensures a higher quality of feed and better regrowth
- Following a freeze, extreme drought, or fertilizer application followed by stress. See our guide for how to manage Prussic Acid and Nitrates.

**Seeding Rates**
- Seeds Per Pound: 15,000 - 18,000
- Soil Temperature: 62°F

<table>
<thead>
<tr>
<th>Seeding Method</th>
<th>Harvest Stage</th>
<th>Dryland Lbs / Acre</th>
<th>Irrigated Lbs / Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilled</td>
<td>Boot</td>
<td>20 - 35</td>
<td>45 - 60</td>
</tr>
<tr>
<td>Broadcast</td>
<td>Boot</td>
<td>25 - 40</td>
<td>50 - 65</td>
</tr>
</tbody>
</table>

Sweet six has a dry stalk trait which improves dry down time after cuttings. This improves harvestability and quality due to delays. You can expect 3-5% lower moisture in the boot stage. This hybrid is economical to plant, produces excellent leading tonnage, and the overall forage quality is great. The digestibility is 20% greater than conventional. This increases animal intake and daily gains substantially. Sweet Six tillers more than most hybrids producing fine sweet soft stems.
Super Sugar

SORGO SORGHUM X SUDANGRASS

- Small seeded and thin stem type
- Dark green color
- Anthracnose and Downy Mildew resistant

Super Sugar is an excellent summer annual forage grass. It is a quick growing standard hybrid with a high leaf to stem ratio. Quick growth makes it suitable for a quick first cutting at 40 days. To increase yield and protein, grow our Super Sugar DM. To increase forage quality and produce similar or better tonnage, plant one of our BMR hybrids.

**Disease / Insect Ratings**

- Downy Mildew: Resistant
- Anthracnose: Resistant

**Agronomic Traits**

- Early Season Vigor: Excellent
- Height: 40” - 50”
- Maturity: 50 - 55 Days to Boot
- Regrowth: Excellent
- Midrib Type: Conventional
- Plant Type: Juicy Sweet
- Photoperiod Sensitive: No

**Crop Use Information**

- Life Cycle: Annual
- Ease of Establishment: Good
- Double Cropping: Excellent
- Dryland / Irrigated: Both
- Min. / Max. pH: 6.0 - 7.5
- Hay / Baleage Yield Potential: 5 - 8 DM Ton / Acre
- Silage: Good
- Rotational Grazing: Good
- Continuous Grazing: Good
- Cover Crop: Excellent
- Digestibility: Not as good as BMR
- Palatability: Sweet
- Fertilizer: 1-1 ¼ Lbs N per growing day / acre

**Seeding Rates**

- Seeds Per Pound: 19,000 - 21,000
- Soil Temperature: 62°F

<table>
<thead>
<tr>
<th>Seeding Method</th>
<th>Harvest Stage</th>
<th>Dryland Lbs / Acre</th>
<th>Irrigated Lbs / Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilled</td>
<td>Boot</td>
<td>25 - 40</td>
<td>60 - 75</td>
</tr>
<tr>
<td>Broadcast</td>
<td>Boot</td>
<td>30 - 45</td>
<td>65 - 80</td>
</tr>
</tbody>
</table>

**Harvest**

- First Cutting: 50 - 55 days
- Second Cutting: 25 - 30 days
- Third Cutting: 25 - 30 days

- Super Sugar is harvested between 40-50 inches or in the boot stage. It is quick to grow to maturity
- Cut 6-8 inches above ground level for best regrowth
- Cutting in the boot or pre-boot stage ensures a higher quality of feed and better regrowth
- Following a freeze, extreme drought, or fertilizer application followed by stress. See our guide for how to manage Prussic Acid and Nitrates.
Super Sugar
DELAYED MATURITY

Super Sugar Delayed Maturity is a higher yielding, increased protein, sweet summer annual forage grass for hay, grazing, baleage, greenchop, or cover-crop. The delayed maturity trait allows this hybrid 25-30 additional growing days to the boot stage. Yield tests and grower comparisons have shown an increase of yield by 50%. When other hybrids would head out and lose up to 50% of the protein and regrowth potential. It has a higher leaf to stem ratio with sweet fine stems making it highly palatable.

Disease / Insect Ratings

Downy Mildew: Resistant
Anthracnose: Resistant
Sugar Cane Aphid: Tolerant

Agronomic Traits

Early Season Vigor: Excellent
Height: 60” - 80”
Maturity: 80 - 85 Days to Boot
Regrowth: Excellent
Midrib Type: Conventional
Plant Type: Juicy Sweet
Photoperiod Sensitive: No

Seeding Rates

Seeds Per Pound: 19,000 - 21,000
Soil Temperature: 62°F

<table>
<thead>
<tr>
<th>Seeding Method</th>
<th>Harvest Stage</th>
<th>Dryland Lbs / Acre</th>
<th>Irrigated Lbs / Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilled</td>
<td>Boot</td>
<td>25 - 40</td>
<td>60 - 75</td>
</tr>
<tr>
<td>Broadcast</td>
<td>Boot</td>
<td>30 - 45</td>
<td>65 - 80</td>
</tr>
</tbody>
</table>

Crop Use Information

Life Cycle: Annual
Ease of Establishment: Good
Double Cropping: Excellent
Dryland / Irrigated: Both
Min. / Max. pH: 6.0 - 7.5
Hay/Baleage Yield Potential: 8 - 11 DM Ton / Acre
Silage Yield Potential: 25 - 30 Ton / Acre
Rotational Grazing: Good
Continuous Grazing: Good
Cover Crop: Excellent
Digestibility: Not as good as BMR
Palatability: Sweet
Fertilizer: 1-1 ¼ Lbs N per growing day / acre

Harvest

First Cutting: 65 - 85 days
Second Cutting: 35 - 40 days
Third Cutting: 25 - 30 days

- Super Sugar Delayed Maturity is harvested between 65-85 inches. Later than most hybrids which adds yield to each cutting
- Cut 6-8 inches above ground level for best regrowth
- Cutting in the boot or pre-boot stage ensures a higher quality of feed and better regrowth
- Following a freeze, extreme drought, or fertilizer application followed by stress. See our guide for how to manage Prussic Acid and Nitrates.
Sweet Forever BMR is a photoperiod sensitive summer annual forage grass. With the ability to produce more tonnage by growing it an additional 25-30 days. Silage yields of 25-35 tons/acre are not unusual. Yields on hay have been from 7 – 10 tons/acre dry matter. It has excellent drought & heat tolerance when compared to other hybrids. With this hybrid growers can increase profitability due to making higher yields per cutting and less frequently. Sweet Forever BMR has lower lignin which increases the digestibility and daily gains of livestock.

### Disease / Insect Ratings

- **Downy Mildew:** Resistant
- **Anthracnose:** Resistant
- **Sugar Cane Aphid:** Tolerant

### Agronomic Traits

- **Early Season Vigor:** Excellent
- **Height:** 60” - 80”
- **Maturity:** 80 - 85 Days to Boot
- **Regrowth:** Excellent
- **Midrib Type:** BMR
- **Plant Type:** Juicy Sweet
- **Photoperiod Sensitive:** Yes

### Seeding Rates

- **Seeds Per Pound:** 15,000 - 17,000
- **Soil Temperature:** 62°F

<table>
<thead>
<tr>
<th>Seeding Method</th>
<th>Harvest Stage</th>
<th>Dryland Lbs / Acre</th>
<th>Irrigated Lbs / Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilled</td>
<td>65” - 85”</td>
<td>20 - 35</td>
<td>40 - 75</td>
</tr>
<tr>
<td>Broadcast</td>
<td>65” - 85”</td>
<td>25 - 40</td>
<td>45 - 80</td>
</tr>
</tbody>
</table>

### Crop Use Information

- **Life Cycle:** Annual
- **Ease of Establishment:** Good
- **Double Cropping:** Excellent
- **Dryland / Irrigated:** Excellent on both
- **Min. / Max. pH:** 6.0 - 7.5
- **Hay / Baleage Yield Potential:** 8 - 11 DM Ton / Acre
- **Silage Yield Potential:** 25 - 30 Ton / Acre
- **Rotational Grazing:** Good
- **Continuous Grazing:** Excellent
- **Cover Crop:** Excellent
- **Digestibility:** Good IVTD, NDFD, TDN %
- **Palatability:** Sweet & leafy
- **Fertilizer:** 1-1 ¼ Lbs N per growing day / acre

### Harvest

- **First Cutting:** 65 - 85 days
- **Second Cutting:** 35 - 40 days
- **Third Cutting:** 25 - 30 days

- Sweet Forever BMR is harvested between 65-85 inches. Later than most hybrids which adds yield to each cutting.
- Cut 6-8 inches above ground level for best regrowth.
- Cutting in the boot or pre-boot stage ensures a higher quality of feed and better regrowth.
- Following a freeze, extreme drought, or fertilizer application followed by stress. See our guide for how to manage Prussic Acid and Nitrates.
BMR Grazing Blend

- Improved digestibility and palatability, high stem sugar
- Small stem type; best for grazing
- Excellent recovery after grazing or cutting
- Prolonged grazing

The BMR grazing blend produces excellent grazing. With the different growth pattern of this blend you can count on grazing more days than a typical hybrid. The BMR trait in the hybrids ensures excellent palatability and digestibility. The hybrids all have a high level of sugar contributing to increase intake and energy. Begin grazing at 18 -24”. Use rotational grazing and stocking rates of 2-3 head per acre under dryland or irrigated conditions.

Disease / Insect Ratings

- Downy Mildew: Resistant
- Anthracnose: Resistant

Agronomic Traits

- Early Season Vigor: Excellent
- Height: 5 - 6 Feet
- Maturity: Varies
- Regrowth: Excellent
- Midrib Type: BMR
- Plant Type: Juicy Sweet
- Photoperiod Sensitive: No

Seeding Rates

- Seeds Per Pound: 15,000 - 17,000
- Soil Temperature: 62°F

<table>
<thead>
<tr>
<th>Seeding Method</th>
<th>Harvest Stage</th>
<th>Dryland Lbs / Acre</th>
<th>Irrigated Lbs / Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilled</td>
<td>Boot</td>
<td>20 - 35</td>
<td>40 - 75</td>
</tr>
<tr>
<td>Broadcast</td>
<td>Boot</td>
<td>25 - 40</td>
<td>45 - 80</td>
</tr>
</tbody>
</table>

Crop Use Information

- Life Cycle: Annual
- Ease of Establishment: Good
- Dryland / Irrigated: Excellent on Both
- Double Cropping: Excellent
- Min / Max pH: 6.0 - 7.5
- Hay / Baleage: Excellent
- Silage / Greencrop: Will need to cure for silage moisture
- Rotational Grazing: Good
- Continuous Grazing: Excellent
- Cover Crop: Excellent
- Digestibility: Good IVTD, NDFD, TDN %
- Palatability: Sweet & Leafy
- Fertilizer: 1 - 1¼ units N per growing day

Harvest

- BMR Grazing Blend can be harvested but should not be allowed to grow tall. Cut between 50-55 days or 5-6 feet
- When harvested cut it in the boot stage and 6-8 inches above ground level for best regrowth
- Can be windrowed for grazing, hay or silage.
- Following a freeze, extreme drought, or fertilizer application followed by stress remove the cattle from the field. See our guide for how to manage Prussic Acid and Nitrates.
GW-600 BMR

FORAGE SORGHUM

- Quick growing & high yielding Dry Stalk BMR silage hybrid
- Improved digestibility and tonnage equals production of corn
- Requires less inputs and water than corn for same production

GW-600 BMR is a medium maturity soft dough silage hybrid. Lignin has been reduced to improve the digestibility and palatability significantly. This hybrid has the dry stalk trait. This trait is beneficial to achieving 65-70% moisture in the soft dough stage. Yields are consistently good.

Disease / Insect Ratings

<table>
<thead>
<tr>
<th>Disease / Insect</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downy Mildew</td>
<td>Resistant</td>
</tr>
<tr>
<td>Anthracnose</td>
<td>Moderately Resistant</td>
</tr>
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</table>

Agronomic Traits

<table>
<thead>
<tr>
<th>Agronomic Trait</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Season Vigor:</td>
<td>Excellent</td>
</tr>
<tr>
<td>Fertility:</td>
<td>Fertile with Grain</td>
</tr>
<tr>
<td>Height:</td>
<td>7 - 8 Feet</td>
</tr>
<tr>
<td>Soft Dough Maturity:</td>
<td>95 - 100 Days</td>
</tr>
<tr>
<td>Boot Maturity:</td>
<td>70 - 75 Days</td>
</tr>
<tr>
<td>Canopy:</td>
<td>25 - 30 Days</td>
</tr>
<tr>
<td>Midrib Type:</td>
<td>BMR 6</td>
</tr>
<tr>
<td>Plant Type:</td>
<td>Dry Stalk</td>
</tr>
<tr>
<td>Standability:</td>
<td>Good</td>
</tr>
</tbody>
</table>

Seeding Rates

<table>
<thead>
<tr>
<th>Seeding Rates</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeds Per Pound:</td>
<td>14,000 - 16,000</td>
</tr>
<tr>
<td>Soil Temperature:</td>
<td>62°F</td>
</tr>
<tr>
<td>Seeding Depth:</td>
<td>1” - 1.5”</td>
</tr>
</tbody>
</table>

Crop Use Information

<table>
<thead>
<tr>
<th>Crop Use Information</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Cycle:</td>
<td>Annual</td>
</tr>
<tr>
<td>Ease of Establishment:</td>
<td>Good</td>
</tr>
<tr>
<td>Dryland / Irrigated:</td>
<td>Irrigated</td>
</tr>
<tr>
<td>Double Cropping:</td>
<td>Excellent</td>
</tr>
<tr>
<td>Min. / Max. pH:</td>
<td>6.0 - 7.5</td>
</tr>
<tr>
<td>Silage Yield Potential:</td>
<td>25-30 Ton / Acre</td>
</tr>
<tr>
<td>Baleage:</td>
<td>Excellent</td>
</tr>
<tr>
<td>Recovery after boot stage cutting:</td>
<td>Good</td>
</tr>
<tr>
<td>Rotational Grazing:</td>
<td>Good</td>
</tr>
<tr>
<td>Continuous Grazing:</td>
<td>Good</td>
</tr>
<tr>
<td>Cover Crop:</td>
<td>Good</td>
</tr>
<tr>
<td>Digestibility:</td>
<td>Excellent IVTD, TDN, NDFD%</td>
</tr>
<tr>
<td>Palatability:</td>
<td>Excellent</td>
</tr>
<tr>
<td>Fertilizer:</td>
<td>1-1 ¼ Lbs N per growing day / acre</td>
</tr>
</tbody>
</table>

Harvest

- Harvest in the soft dough stage at 95-100 Days. At 65-70% moisture.
- This hybrid has a dry stalk which helps with harvest during the soft dough stage.
- Harvest in the boot stage 70-75 Days is good but might need to be cured for 65-70% moisture.
FORAGE SORGHUM

Forage Sorghum

Silo Pro dwarf BMR 6 forage sorghum produces good quality and yields. This hybrid gets 6-7ft with a thick stalk which stands well. Reaching the soft dough stage at 110-115 days. Yields from 25-35 tons of silage have been produced with Silo Pro. It can be grown for multiple harvests by cutting and drying in the boot stage. Testing indicates a very good NDFD and IVTD. The leaves this hybrid produces are dense creating a good canopy. Later planting dates produce desirable yields and quality. Plan to cut it for drying in the boot stage.

Disease / Insect Ratings

Downy Mildew: Resistant
Anthracnose: Resistant

Agronomic Traits

- Early Season Vigor: Good
- Fertility: Fertile with Grain
- Height: 6 - 7 Feet
- Soft Dough Maturity: 110 - 115 Days
- Boot Maturity: 80 - 85 Days
- Canopy: 30 - 35 Days
- Midrib Type: BMR 6
- Plant Type: Juicy Stalk
- Standability: Excellent

Seeding Rates

- Seeds Per Pound: 13,000 - 15,000
- Soil Temperature: 62ºF
- Seeding Depth: 1” - 1.5”

<table>
<thead>
<tr>
<th>Seeding Method</th>
<th>Harvest Stage</th>
<th>Dryland Lbs / Acre</th>
<th>Irrigated Lbs / Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planter</td>
<td>Soft Dough</td>
<td>3 - 5</td>
<td>5 - 7</td>
</tr>
<tr>
<td>Drill</td>
<td>Boot</td>
<td>10 - 12</td>
<td>18 - 20</td>
</tr>
</tbody>
</table>

Crop Use Information

- Life Cycle: Annual
- Ease of Establishment: Good
- Dryland / Irrigated: Both
- Double Cropping: Good Boot Stage Harvest
- Min. / Max. pH: 6.0 - 7.5
- Silage Yield Potential: 25 - 30 Ton / Acre
- Baleage: Excellent
- Recovery after boot stage cutting: Good
- Rotational Grazing: Excellent pre-boot
- Continuous Grazing: Summer or Winter
- Cover Crop: Excellent
- Digestibility: Good IVTD, TDN, NDFD %
- Palatability: Soft easy to chew
- Fertilizer: 1-1 ¼ Lbs N per growing day / acre

Harvest

- Silage in the soft dough stage at 110-115 Days. At 65-70% moisture.
- Cut once or twice in the boot stage 70-75 Days for silage or baleage, will need to cure for 65-70% moisture.
Forage Master is a conventional hybrid forage sorghum with high yield potential. This hybrid produces a large grain head and dense lush leaves, setting the standard for forage sorghums. Forage Master is an excellent choice for silage or hay production. For a soft dough stage harvest for silage, it will be ready to chop in 95-100 days. For hay it should be drilled and swathed in the boot stage at 75-80 days.

Disease / Insect Ratings

- Downy Mildew: Resistant
- Anthracnose: Resistant

Agronomic Traits

- Early Season Vigor: Excellent
- Fertility: Fertile
- Height: 8 - 9 Feet
- Soft Dough Maturity: 95 - 100 Days
- Boot Maturity: 70 - 75 Days
- Canopy: 25 - 30 Days
- Midrib Type: Conventional
- Plant Type: Juicy Stalk
- Standability: Good

Seeding Rates

- Seeds Per Pound: 14,000 - 16,000
- Soil Temperature: 62ºF
- Seeding Depth: 1” - 1.5”

<table>
<thead>
<tr>
<th>Seeding Method</th>
<th>Harvest Stage</th>
<th>Dryland Lbs / Acre</th>
<th>Irrigated Lbs / Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planter</td>
<td>Soft Dough</td>
<td>4 - 5</td>
<td>5 - 6</td>
</tr>
<tr>
<td>Drill</td>
<td>Boot</td>
<td>10 - 12</td>
<td>18 - 20</td>
</tr>
</tbody>
</table>

Crop Use Information

- Life Cycle: Annual
- Ease of Establishment: Excellent
- Dryland / Irrigated: Dryland
- Double Cropping: Excellent
- Min. / Max. ph: 6.0 - 7.5
- Silage Yield Potential: 25 - 30 Ton / Acre
- Hay: Good
- Recovery after boot stage cutting: Excellent
- Rotational Grazing: Good pre-boot
- Continuous Grazing: Good during fall or winter
- Cover Crop: Excellent
- Digestibility: BMR is better
- Palatability: Good
- Fertilizer: 1-1¼ Lbs N per growing day / acre

Harvest

- Cut in the soft dough stage at 95-100 Days for silage. At 65-70% moisture.
- Cut in the boot stage at 70-75 Days for hay.
- Has thicker stalks only works for hay in lower humidity areas.
GW 400 BMR is a high yielding sweet sterile forage sorghum with the BMR 6 trait. It is harvested for hay or silage at the heading stage or (80-85 days). Does very well under dryland conditions. With a sterile hybrid you can expect a much higher sugar content because the sugar remains in the stalk. Daily weight gains are improved because of the reduction of indigestible fiber. 400 BMR has a soft sweet stalk which can produce up to 21% sugar content. This hybrid is a significant improvement over red top cane (early sumac). We recommend that you cut it promptly after heading to avoid volunteer regrowth.

- High yields and improved digestibility equals increased feeding efficiency
- High sugar content 18-21% when grown to maturity
- Requires less inputs and water than corn for same production
- Excellent dyland hybrid

GW 400 BMR is a high yielding sweet sterile forage sorghum with the BMR 6 trait. It is harvested for hay or silage at the heading stage or (80-85 days). Does very well under dryland conditions. With a sterile hybrid you can expect a much higher sugar content because the sugar remains in the stalk. Daily weight gains are improved because of the reduction of indigestible fiber. 400 BMR has a soft sweet stalk which can produce up to 21% sugar content. This hybrid is a significant improvement over red top cane (early sumac). We recommend that you cut it promptly after heading to avoid volunteer regrowth.

- Harvest in the heading stage at 80-85 Days for highest sugar content.
- Harvest in the boot stage at 70-75 Days.
- Will need to cure for a 65-70% moisture.
- Has thicker stalks only works for hay in lower humidity areas.
GW-475 BMR is an early male sterile forage sorghum with the Dry Stalk trait. This hybrid is for silage, baleage, or hay. Cutting at the early heading stage or (70-75 days). With a dry stalk forage sorghum you can expect a good level of both soluble and non-soluble sugar content. As well as improved dry down timing. We recommend that you cut it promptly after heading to avoid volunteer regrowth.

- High yields and improved digestibility equals increased feeding efficiency
- Excellent double cropping or short season hybrid with the ability to direct chop once
- Requires less inputs and water than corn for same production

GW-475 BMR is an early male sterile forage sorghum with the Dry Stalk trait. This hybrid is for silage, baleage, or hay. Cutting at the early heading stage or (70-75 days). With a dry stalk forage sorghum you can expect a good level of both soluble and non-soluble sugar content. As well as improved dry down timing. We recommend that you cut it promptly after heading to avoid volunteer regrowth.

### Crop Use Information

- **Life Cycle:** Annual
- **Ease of Establishment:** Excellent
- **Dryland / Irrigated:** Both
- **Double Cropping:** Excellent
- **Min. / Max. pH:** 6.0 - 7.5
- **Silage Yield Potential:** 20 - 25 Ton / Acre
- **Baleage:** Excellent
- **Recovery after boot stage cutting:** Excellent
- **Rotational Grazing:** Good pre-boot
- **Continuous Grazing:** Good
- **Cover Crop:** Excellent
- **Digestibility:** Excellent IVTD, NDFD, TDN %
- **Palatability:** Leafy & Soft
- **Fertilizer:** 1-1 ¼ Lbs N per growing day / acre

### Disease / Insect Ratings

- **Downy Mildew:** Resistant
- **Anthracnose:** Resistant

### Agronomic Traits

- **Early Season Vigor:** Excellent
- **Fertility:** Sterile
- **Height:** 7 - 8 Feet
- **Maturity:** 70 - 75 Days
- **Boot Maturity:** 60 - 65 Days
- **Canopy:** 25 - 30 Days
- **Midrib Type:** BMR 6
- **Plant Type:** Dry Stalk
- **Standability:** Good

### Seeding Rates

- **Seeds Per Pound:** 14,000 - 16,000
- **Soil Temperature:** 62ºF
- **Seeding Depth:** 1” - 1.5”

<table>
<thead>
<tr>
<th>Seeding Method</th>
<th>Harvest Stage</th>
<th>Dryland Lbs / Acre</th>
<th>Irrigated Lbs / Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planter</td>
<td>Headed</td>
<td>4 - 6</td>
<td>6 - 8</td>
</tr>
<tr>
<td>Drill</td>
<td>Boot</td>
<td>10 - 12</td>
<td>18 - 20</td>
</tr>
</tbody>
</table>

### Harvest

- Harvest in the heading stage at 70-75 Days for highest sugar content.
- Has the dry stalk so harvestability is improved greatly. For direct chop cut after its headed out.
- Harvest in the boot stage at 60-65 Days.
GW-2120 is a medium maturity male sterile forage sorghum for one cutting. It has sweet stalks and lots of leaves making it highly palatable with lots of energy. GW-2120 grows quickly making it an excellent choice for early planting or later planting for double cropping systems. Harvesting in the heading stage will ensure the best sugar content and tonnage. We recommend that you cut it promptly after heading to avoid volunteer regrowth. This hybrid produces better tonnage and growth than red top cane (early sumac).

### Disease / Insect Ratings

<table>
<thead>
<tr>
<th>Disease / Insect</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downy Mildew</td>
<td>Resistant</td>
</tr>
<tr>
<td>Anthracnose</td>
<td>Resistant</td>
</tr>
</tbody>
</table>

### Agronomic Traits

- **Early Season Vigor:** Excellent
- **Fertility:** Sterile
- **Height:** 7 - 8 Feet
- **Maturity:** 85 - 90 Days
- **Boot Maturity:** 75 - 80 Days
- **Canopy:** Conventional
- **Midrib Type:** Juicy Stalk
- **Plant Type:** Excellent
- **Standability:** Excellent
- **Height:** 7 - 8 Feet
- **Maturity:** 85 - 90 Days
- **Boot Maturity:** 75 - 80 Days
- **Canopy:** Conventional
- **Midrib Type:** Juicy Stalk
- **Plant Type:** Excellent
- **Standability:** Excellent

### Seeding Rates

<table>
<thead>
<tr>
<th>Seed Per Pound</th>
<th>19,000 - 20,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil Temperature</td>
<td>62°F</td>
</tr>
<tr>
<td>Seeding Depth</td>
<td>1” - 1.5”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Seeding Method</th>
<th>Harvest Stage</th>
<th>Dryland Lbs / Acre</th>
<th>Irrigated Lbs / Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planter</td>
<td>Headed</td>
<td>4 - 6</td>
<td>6 - 8</td>
</tr>
<tr>
<td>Drill</td>
<td>Boot</td>
<td>10 - 12</td>
<td>18 - 20</td>
</tr>
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### Crop Use Information

<table>
<thead>
<tr>
<th>Life Cycle</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of Establishment</td>
<td>Excellent</td>
</tr>
<tr>
<td>Dryland/Irrigated</td>
<td>Dryland</td>
</tr>
<tr>
<td>Double Cropping</td>
<td>Excellent</td>
</tr>
<tr>
<td>Min. / Max. pH</td>
<td>6.0 - 7.5</td>
</tr>
<tr>
<td>Silage Yield Potential</td>
<td>25 - 30 Ton / Acre</td>
</tr>
<tr>
<td>Baleage</td>
<td>Good</td>
</tr>
<tr>
<td>Recovery after boot stage cutting</td>
<td>Good</td>
</tr>
<tr>
<td>Rotational Grazing</td>
<td>Good pre-boot</td>
</tr>
<tr>
<td>Continuous Grazing</td>
<td>Once before or after frost</td>
</tr>
<tr>
<td>Cover Crop</td>
<td>Excellent</td>
</tr>
<tr>
<td>Digestibility</td>
<td>BMR is better</td>
</tr>
<tr>
<td>Palatability</td>
<td>Sweet 16% - 17% sugar</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>1-1 ¼ Lbs N per growing day / acre</td>
</tr>
</tbody>
</table>

### Harvest

- Harvest in the heading stage at 85-90 Days for highest sugar content.
- Harvest in the boot stage at 75-80 Days.
- Will need to cure for a 65-70% moisture.
- Has thicker stalks only works for hay in lower humidity areas.
GW-1160 Hybrid Grain Sorghum is a medium early bronze seeded dryland hybrid. This hybrid adapts well to various soil types and conditions. GW-1160 can produce dependable yields under stressful dryland conditions. It is charcoal rot resistant and staygreen.

**Disease / Insect Ratings**

- Anthracnose: 2
- Charcoal Rot: 1
- Downy Mildew: 1
- Fusarium: 2
- Head Smut: 2
- Maize Dwarf Mosaic Virus: 2
- Greenbug Biotypes: C&E

**Agronomic Traits**

- Yield Potential: 1
- Emergence: 2
- Early Vigor: 2
- Stress Tolerance: 1
- Standability: 1
- Drought Tolerance: 1

**Planting Rates**

We strongly recommend you follow the accepted agronomic and cultural practices for grain sorghum production in your growing region. The planting rates vary from a dryland rate of 35,000-65,000 seed/acre to 65,000-85,000 seed/acre on rain fed or irrigated.

- Average Seeds per Pound: 13,500-14,500
- Grain Sorghum Bag Weight: 50lb
- Ratings: 1= Best 5= Least

**Adaptation Ratings**

- Relative Maturity: Medium-Early
- Days to Midbloom: 58-62 Days
- Dryland or Irrigated: Dryland or Semi-Irrigated

**Plant Profile**

- Grain Color: Bronze
- Test Weight: Very Good
- Threshability: Excellent
- Plant Height: 38-42"
- Stalk Quality: Very Good
- Root Strength: Very Good
- Head Type: Semi-Open
- Head Exertion: Very Good

GW-1160 is an outstanding yield performer with large area adaptability and an overall good agronomic package for dryland production.
GW-9417 is a medium-late hybrid grain for top end production. This hybrid has dark red grain, quick emergence in cooler soils, good grain quality, and strong healthy plants, making this hybrid an excellent choice. GW-9417 gives you the maximum yield possible under rainfed, semi irrigated or irrigated conditions.

**Adaptation Ratings**
- Relative Maturity: Medium-Late
- Days to Midbloom: 70-74 days
- Rainfed or Irrigated: Both

**Plant Profile**
- Grain Color: Red
- Test Weight: Excellent
- Threshability: Excellent
- Plant Height: 48-52"
- Stalk Quality: Very Good
- Root Strength: Very Good
- Head Type: Semi-Compact
- Head Exertion: Very Good

**Disease / Insect Ratings**
- Anthracnose: 2
- Downy Mildew: 1
- Fusarium: 2
- Head Smut: 1
- Maize Dwarf Mosaic Virus: 1
- Greenbug Biotypes Tolerant: C & E

**Agronomic Traits**
- Yield Potential: 1
- Emergence: 1
- Early Vigor: 1
- Stress Tolerance: 2
- Standability: 2

**Planting Rates**
We strongly recommend you follow the accepted agronomic and cultural practices for grain sorghum production in your growing region. The planting rates can vary from 65,000-95,000 seed/acre on rainfed, irrigated or semi irrigated.

- Average Seeds per Pound: 12,500-13,500
- Grain Sorghum Bag Weight: 50lb

**Ratings:**
1 = Best  5 = Least
GW-9320 Hybrid Grain Sorghum is a high yielding irrigated or rainfed hybrid. GW-9320 adapts well to various soil types of the medium-late maturity irrigated or rainfed conditions. GW-9320 has red seed for excellent grain quality and superior weatherability. High emergence scores and early season vigor get this hybrid off to a good start.

**Disease / Insect Ratings**

<table>
<thead>
<tr>
<th>Disease/Insect</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthracnose</td>
<td>2</td>
</tr>
<tr>
<td>Downy Mildew</td>
<td>1</td>
</tr>
<tr>
<td>Fusarium</td>
<td>2</td>
</tr>
<tr>
<td>Head Smut</td>
<td>1</td>
</tr>
<tr>
<td>Maise Dwarf Mosaic Virus</td>
<td>2</td>
</tr>
<tr>
<td>Greenbug Biotypes Tolerant</td>
<td>C &amp; E</td>
</tr>
</tbody>
</table>

**Agronomic Traits**

<table>
<thead>
<tr>
<th>Trait</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield Potential</td>
<td>1</td>
</tr>
<tr>
<td>Emergence</td>
<td>2</td>
</tr>
<tr>
<td>Early Vigor</td>
<td>1</td>
</tr>
<tr>
<td>Stress Tolerance</td>
<td>3</td>
</tr>
<tr>
<td>Standability</td>
<td>2</td>
</tr>
</tbody>
</table>

**Planting Rates**

We strongly recommend you follow the accepted agronomic and cultural practices for grain sorghum production in your growing region. The planting rates vary from 65,000-95,000 seed/acre on rainfed, irrigated or semi irrigated.

- **Average Seeds per Pound:** 13,000-15,000
- **Grain Sorghum Bag Weight:** 50lb

**Adaptation Ratings**

<table>
<thead>
<tr>
<th>Trait</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative Maturity</td>
<td>Medium-Late</td>
</tr>
<tr>
<td>Days to Midbloom</td>
<td>68-72 Days</td>
</tr>
<tr>
<td>Rainfed or Irrigated</td>
<td>Both</td>
</tr>
</tbody>
</table>

**Grain Profile**

- **Grain Color:** Red
- **Test Weight:** Very Good
- **Threshability:** Excellent
- **Plant Height:** 44-48”
- **Stalk Quality:** Very Good
- **Root Strength:** Very Good
- **Head Type:** Semi-Compact
- **Head Exertion:** Very Good
Tifleaf III

HYBRID
PEARL MILLET

**Dwarf type hybrid with yield potential of 3-6 DM tons**
**Widely adapted to many diverse geographic regions**
**No prussic acid concerns**

Tifleaf III is a shorter height compact hybrid which can produce 3-6 ton/acre dm yields. This hybrid is great for grazing and forage. It only requires 60 days to the boot stage. When grazing leave 6-8” of growth. Keep it grazed low enough so you don’t see any heads and it can produce all summer long. Tifleaf III has good tolerance to many pathogens and high humidity. Tifleaf III, with its short plant stature, means that the forage produced is virtually all leaves. This high leaf mass assures Tifleaf III will have good protein and high TDN values. While Hybrid Pearl Millet is a great forage and grazing product. Sorghum Sudan grass hybrids tend to yield better and have more sugar.

**Crop Use Information**

- **Life Cycle:** Annual
- **Ease of Establishment:** Good
- **Double Cropping:** Excellent
- **Dryland / Irrigated:** Excellent on both
- **Min. / Max. pH:** 6.0 - 7.5
- **Hay / Baleage Yield Potential:** 3 - 6 DM Ton / Acre
- **Silage:** Good
- **Rotational Grazing:** Start at 15” - 18”; Leave 6” - 9” stubble.
- **Continuous Grazing:** Excellent
- **Cover Crop:** Excellent
- **Digestibility:** Good TDN %
- **Palatability:** Sweet & leafy
- **Fertilizer:** 1-1 ¼ Lbs N per growing day / acre

**Harvest**

- **First Cutting:** 40 - 50 Days
- **Second Cutting:** 20 - 25 Days
- **Third Cutting:** 15 - 20 Days
- **Tifleaf III is harvested between 40-45 inches**
- **Cut 6-8 inches above ground level for best regrowth**
- **Cutting in the boot or pre-boot stage ensures a higher quality of feed and better regrowth**
- **Following a freeze, extreme drought, or fertilizer application followed by stress. See our guide for how to manage Nitrates.**

**Disease / Insect Ratings**

- **Downy Mildew:** Resistant
- **Anthracnose:** Resistant
- **Leaf Spot:** Resistant
- **Leaf Rust:** Resistant
- **Sugar Cane Aphid:** Tolerant

**Agronomic Traits**

- **Early Season Vigor:** Excellent
- **Height:** 40” - 45”
- **Maturity:** 55 - 60 Days to Boot
- **Regrowth:** Excellent
- **Plant Type:** Juicy Sweet
- **Photoperiod Sensitive:** No

**Seeding Rates**

- **Seeds Per Pound:** 48,000 - 50,000
- **Soil Temperature:** 65°F

<table>
<thead>
<tr>
<th>Seeding Method</th>
<th>Harvest Stage</th>
<th>Dryland Lbs / Acre</th>
<th>Irrigated Lbs / Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilled</td>
<td>Boot</td>
<td>10 - 15</td>
<td>15 - 25</td>
</tr>
<tr>
<td>Broadcast</td>
<td>Boot</td>
<td>15 - 20</td>
<td>20 - 30</td>
</tr>
</tbody>
</table>

**Life Cycle:** Annual
**Ease of Establishment:** Good
**Double Cropping:** Excellent
**Dryland / Irrigated:** Excellent on both
**Min. / Max. pH:** 6.0 - 7.5
**Hay / Baleage Yield Potential:** 3 - 6 DM Ton / Acre
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- **Cut 6-8 inches above ground level for best regrowth**
- **Cutting in the boot or pre-boot stage ensures a higher quality of feed and better regrowth**
- **Following a freeze, extreme drought, or fertilizer application followed by stress. See our guide for how to manage Nitrates.**
Wilder Game Food

WGF, Wilder Game Food Grain Sorghum was selected to accommodate the needs of upland birds (Quail, Turkey, Pheasant, and Prairie Chicken) and migratory birds (Ducks, Geese, and Dove). It produces a fall and winter food source that lasts. The red seed serves as a mold and rotting repellant during exposure to weather. Crop residue provides excellent low height ground cover. Wilder Game Food is a medium maturity heavy grain producer. Which was selected for its high grain quality and eye appeal to upland and migratory birds.

**Disease / Insect Ratings**

- **Downy Mildew:** Resistant
- **Anthracnose:** Moderately Resistant

**Agronomic Traits**

- **Height:** 3 - 4 Feet
- **Maturity:** 95 - 100 Days
- **Canopy:** 25 - 30 Days
- **Regrowth:** Good, cut at boot stage or prior to
- **Plant Type:** Conventional
- **Standability:** Excellent in fall and winter

**Seeding Rates**

- **Seeds Per Pound:** 14,000 - 16,000
- **Soil Temperature:** 62°F

**Seeding:**

- WGF is normally planted between March and June
- Plant in strips, along a fence line or field edge

**Crop Use Information**

- **Life Cycle:** Annual
- **Ease of Establishment:** Excellent
- **Dryland / Irrigated:** Both
- **Double Cropping:** Yes
- **Min. / Max. pH:** 6.0 - 7.5
- **Grazing:** 7 Days After Freeze
- **Cover Crop:** Good lasting wildlife cover
- **Palatability:** Good

<table>
<thead>
<tr>
<th>Seeding Method</th>
<th>Harvest Stage</th>
<th>Dryland Lbs / Acre</th>
<th>Irrigated Lbs / Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planter</td>
<td>N/A</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Drill</td>
<td>N/A</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Broadcast</td>
<td>N/A</td>
<td>10</td>
<td>12</td>
</tr>
</tbody>
</table>
Game Fence Grower

Game Fence Grower is a tall white seeded wildlife sorghum. Birds like the white seed. Deer like the height of it and tend to hang out in and around it. It can be planted in strips or along a fence line border that provides wildlife cover and a food source. In the winter it will catch snow and continue to be a food source and cover. This is a replacement for Egyptian Wheat. White seed contains less tannin which in turn is more palatable for wildlife.

**Disease / Insect Ratings**

- **Downy Mildew:** Resistant
- **Anthracnose:** Moderately Resistant

**Agronomic Traits**

- **Height:** 8 - 10 Feet
- **Maturity:** 90 - 100 Days
- **Canopy:** 25 - 30 Days
- **Regrowth:** Good, cut at boot stage or prior to
- **Plant Type:** Conventional
- **Standability:** Excellent in fall and winter

**Seeding Rates**

- **Seeds Per Pound:** 14,000 - 16,000
- **Soil Temperature:** 62°F

<table>
<thead>
<tr>
<th>Seeding Method</th>
<th>Harvest Stage</th>
<th>Dryland Lbs / Acre</th>
<th>Irrigated Lbs / Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planting</td>
<td>N/A</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Drill</td>
<td>N/A</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Broadcast</td>
<td>N/A</td>
<td>10</td>
<td>12</td>
</tr>
</tbody>
</table>

**Crop Use Information**

- **Life Cycle:** Annual
- **Ease of Establishment:** Excellent
- **Dryland / Irrigated:** Both
- **Double Cropping:** Yes
- **Min. / Max. pH:** 6.0 - 7.5
- **Grazing:** 7 Days After Freeze
- **Cover Crop:** Good lasting wildlife cover
- **Palatability:** Good white seed
### Seed Treatments

**Concep® III**

**Safener**

Concep® III seed safener protects sorghum from herbicide injury and allows pre-emergence applications of herbicides containing S-metolachlor for ultimate grass and broad leaf weed control. Concep® III controls the phytotoxic effects of S-metolachlor herbicide for long-lasting weed control to maximize yield.

**Product Highlights**

- Allows effective broad leaf and grass control
- Seed treatment used to protect grain or forage sorghum to allow use of Dual Gold or Bicep II Magnum brand herbicides
- Offers extended use and can be carried over for up to a third growing season

**NipsIT Inside®**

**Insecticide**

NipsIT Inside® Insecticide helps sorghum growers maximize stand, yield and plant health leading edge management tool for unmatched protection against key insects from contact and super-systemic activity. Lock Tight™ Technology delivers ease of use, outstanding retention on seed, and unmatched protection of the grower’s single most important input - the seed.

**Protects Sorghum Seed from**

- Black Granulate Cutworms
- Greenbug
- English Grain Aphid
- Chinch Bug
- Wireworms
- Corn Leaf Aphid
- Seed Corn Maggots
- White Grub
- Yellow Sugarcane Aphid

**Diacon® IGR Plus**

**Insecticide**

Application of Diacon® IGR Plus is ideal for use on stored grain and for storage treatment in empty bins. Provides excellent control of Lesser Grain Borers, Indian Meal Moths, Saw-Tooth Beetles, and many other store product insects.

**Product Highlights**

- Long - residual control
- Emulsifiable concentrate
- Active ingredients (S)-Methoprene and Deltamethrin

### Standard Treatments

**Sebring™ 318 FS**

**Fungicide**

Sebring™ 318 FS is a seed-applied fungicide containing metalaxyl. Sebring™ 318 FS works systemically so the active ingredient is trans-located to all parts of the plant during germination, protecting the seed, roots, and emerging plants against systemic downy mildew Pythium spp. and Phytophthora spp. Plus, Sebring™ 318 FS can be applied as a stand-alone seed protectant or in combination with other seed treatments and products.

**Key Performance Benefits**

- Proven seed protection with excellent control of yield-robbing diseases
- Systemic protection for early planted crops
- Flexible tank-mix options

**Signet® 480 FS**

**Fungicide**

Count of Signet® 480 FS seed treatment for seed decay, damping-off and seedling blights caused by many seed-borne and soil borne organisms. Signet® 480 FS helps get your crop off to its best start by reducing devastating loss from early season diseases to help improve your return on investment (Plus, Signet® 480 FS offers the quality you’ve come to expect from Nufarm).

**Product Highlights**

- Preventive and curative activity against seed and soil borne organisms
- High-quality formulation for convenient application
- Excellent seed safety

**Diacon® IGR Plus**

**Insecticide**

Application of Diacon® IGR Plus provides effective knockdown and control of adult insects and their larvae and prevents buildup of pests with long-residual control of the IGR.
Management Tips

NITRATES & PRUSSIC ACID

Some of the best methods for reducing nitrate poisoning are as follows:

1. Avoid excessive applications of Nitrogen.
2. Nitrates accumulate in the plant during periods of stress or slow growth. Several days should be allowed under good growing conditions before plant nitrates are metabolized to lower levels. Nitrates generally fall 3-5 days after sufficient rainfall.
3. Adjust height of cutting bar 6-12" inches when harvesting to reduce concentrations of nitrates. Samples forage before feeding.
4. Ensile forage is expected to have high levels of Nitrates. Dry baling can concentrate Nitrate levels, however grinding and mixing with Nitrate-Rice Bales is suggested.
5. Livestock that are hungry, pregnant, or are lactating have lower tolerances for Nitrates. Avoid feeding hay that may contain higher concentrations of Nitrates.
6. Nitrates are typically higher in early growth and concentrate in the bottom third of the stalk. Avoid grazing early during this period of growth.

Some of the best methods for reducing prussic acid poisoning are as follows:

1. Remove cattle from sorghum pastures prior to freezing weather to avoid prussic acid toxicity. Allow up to 10 days for levels to reduce after freezing weather.
2. Allow sorghum sudangrass to reach 18-24" tall before grazing to minimize prussic acid levels.
3. Curing hay can reduce prussic acid.
4. High levels of Nitrogen will increase prussic acid. Avoid applying excessive amounts of Nitrogen.
5. Do not release hungry cattle into pastures, feed hay before turning out late in the afternoon.

If you have concerns regarding nitrate levels and/or prussic acid levels in your fields, collect samples and have them analyzed before feeding.
Management Tips

SUGAR CANE APHID

Best management practices include removal of volunteer sorghum plants, the use of tolerant sorghum hybrids, high quality seed treatments, good grass weed management, scouting, and the use of insecticides if needed. Here is a brief checklist:

1. Plant early.
2. Control volunteer sorghum to remove source of early infestation.
3. Scout fields during the boot stage to maturity.
4. Use an effective insecticide chemical for treatment.
5. Use of beneficial insects.
6. Texas A&M University entomologists recommend threshold has been reached when 25 percent of the plants are infested with 50 aphids per leaf. Once threshold level is reached, insecticide application should be made immediately.
7. Good spray coverage is essential for control of SCA.
8. Avoid the use of pyrethroid insecticides whenever possible. These insecticides greatly lower the population of beneficial insects which are critical in keeping SCA populations in check.

Recommendations for chemical application

There are two recommended insecticides available that can control SCA when applied as labeled. Sivanto 200 SL (Bayer Crop Science), and Transform WG (Dow Agro Sciences). Please Read labeled information before using.

Sivanto 200 SL - Recommended rate of 4-7 Oz. per acre, 7 days between applications. 10 GPA by ground or 2 GPA by air (Minimum application volume). Maximum rates per year are 28 Oz. per acre. Restricted field entry is 4 hours. Pre-harvest interval is 21 days for grain, straw, and stover, and 7 days for grazing, forage, fodder, or hay.

Transform WG - Recommended rate of 0.75-1.5 Oz. per acre, 14 days between applications. Complete plant coverage by ground, 5 GPA by air. Maximum rate per year, 3 Oz. per acre, 2 applications. Field re-entry 24 hours. Pre-harvest interval is 14 days for grain or straw, and 7 days for grazing, forage, fodder, or hay.

Always read and follow labeled information.

Source: Texas A&M AgriLife Extension, Brent Bean, United Sorghum Checkoff
Make plans to attend our field days in August or September