2020 PRODUCT GUIDE

BUILT BY FAMILY. BACKED BY PERFORMANCE.
Whether it is selecting field crops or cover crops, we are constantly looking for the newest products in the marketplace that will allow customers the best chance for making a profit.

It isn’t only about the highest yield, but how much profit you make per acre. We want to make sure every customer has a good feeling about what they are doing with seed purchased here. We are here to serve and help answer your questions, regardless of how trivial they may be. Either email us or, for a more personal touch, give us a call. We would be glad to help you with your questions or problems.

Kauffman Seeds was started in 1965 by Edward Kauffman as an alfalfa seed cleaning business. In 1972, Jerry and Lois Wyse started taking over the business from Lois’s Dad. At that time, certified wheat was added to the business. The mid-80’s saw the introduction of soybeans both in production and processing. Seed wheat, alfalfa, and soybeans were the mainstay of the operation. In 1995, Midland Genetics was formed as several seed companies joined forces to launch a breeding program to get ready for the introduction of Roundup Ready® Soybeans. Corn, grain sorghum, and forages were added to the selling lines all under the Midland Genetics brand name. In 2005, Tom Clayman and Dustin Miller purchased Kauffman Seeds from Jerry and Lois Wyse. The current ownership has maintained the business as it was and has added cover crops to facilitate more of our customers’ needs.
## NUMBERING SYSTEM

### CORN: 726PR

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<td>Release Year</td>
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### SOYBEAN: 3875NRR

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<td>Release Year</td>
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### GRAIN SORGHUM: 4772

| 4 | 7 | 7 | 2 |
| Grain Sorghum | Maturity 0 - 9 | Sequence 0 - 9 | Release Year |

SCN Resistance N = Standard Resistance

## CORN TECHNOLOGIES

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### PR RIB

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### SS RIB

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## SOYBEAN TECHNOLOGIES

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### NXS

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### LGS+

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### 115 AVAILABLE AS: PR RIB
**100 DAYS**
- Short season stress hybrid
- Consistent yields in the short season tests
- Medium-high plant with medium-high ear height
- Very good stalks and excellent roots
- Semi-flex ear type

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<th>STALK</th>
<th>STAY GREEN</th>
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### 134 AVAILABLE AS: PR RIB
**101 DAYS**
- Short season hybrid
- Consistent top yields in short season tests
- Medium-tall plant with medium ear height
- Proven consistent performance
- Excellent roots and good stalks

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### 228 AVAILABLE AS: PR RIB
**105 DAYS**
- Widely adapted early hybrid
- Very good Goss's Wilt and greensnap tolerance
- Medium-tall plant with medium ear height
- Good stalks and roots
- Good drought tolerance
- Very good disease package

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### 240 AVAILABLE AS: PR RIB
**105 DAYS**
- Exceptional top end yield for RM from east to west
- Late flowering and fast drydown for RM
- Good disease scores for Goss's, CLS, and NLB
- Consistent, girthy ears with deep kernels
- Consistently good test weight
- Semi-flex ear that averages 16-18 around

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### 347 AVAILABLE AS: PR RIB
**108 DAYS**
- Top yields for maturity in 2015-2018 Midland tests
- Medium-tall height, semi-flex ear
- Good tolerance to GLS and Goss's Wilt
- Very good roots and good stalks
- Widely adapted hybrid, works on most soils

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349 **AVAILABLE AS:** PR RIB  
108 DAYS  
- Top yields in 2017-18 tests  
- Widely adapted hybrid for most soil types  
- Medium height plant with medium ear height  
- Good stalks and very good roots  
- Semi-flex ear, very good greensnap tolerance  

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429 **AVAILABLE AS:** CONV, PR RIB, SS RIB  
110 DAYS  
- Top yields in 2017-18 tests  
- Excellent tolerance to stalk diseases  
- Medium-tall plant with medium ear height  
- Very good stalks and roots  
- Excellent test weight and grain quality  
- Good greensnap and GLS tolerance  

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430 **AVAILABLE AS:** PR RIB, SS RIB  
110 DAYS  
- Exceptional multi year yield performance in testing  
- Outstanding agronomic package and test weight history  
- Widely adaptable with good southern movement  
- Good tip fill and husk coverage for ear  
- Great late season plant health: Good on GLS and Goss’s  
- Excellent silage tonnage and quality  

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559 **AVAILABLE AS:** CONVENTIONAL  
112 DAYS  
- Outstanding yield performance across multiple years  
- Highly tolerant to Goss’s Wilt and Southern Rust  
- Widely adapted with very good southern movement  
- Medium-long ear with good kernel flex 18-20 around  
- Adapts well to moderate seeding populations  

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570 **AVAILABLE AS:** PR RIB, SS RIB  
112 DAYS  
- #1 overall hybrid in 2018 testing (107% of test)  
- Consistent yield across all environments  
- Very good stalks and very good roots  
- Strong emergence and excellent on reduced tillage acres  
- Very good greensnap tolerance  
- Good drought and stress tolerance  
- Moves south very well  

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### 757
**AVAILABLE AS:** PR RIB  
**115 DAYS**

- Full season hybrid with semi-flex ear
- Good performance in Midland tests in 2015-2018
- Consistent across KS, MO, and NE
- Medium-tall plant with medium ear height
- Widely adapted for most soils, handles stress
- High test weight, good canopy closure

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### 775
**AVAILABLE AS:** PR DG RIB  
**115 DAYS**

- DroughtGard® hybrid, drought tolerant trait
- High yield potential with semi-flex ear
- Medium plant and ear height
- Very good stalks and roots
- Improved greensnap tolerance
- Best in North Kansas, Nebraska, and North Missouri

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### NOTES
## Product Chart

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<th>Drought Tolerance</th>
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**RATING SCALE: 1-5, 1 = BEST**
## Corn Chart

### Conventional

<table>
<thead>
<tr>
<th>Ear Flex</th>
<th>Test Weight</th>
<th>Stay Green</th>
<th>Stalk</th>
<th>Root</th>
<th>Silage</th>
<th>Grey Leaf Spot</th>
<th>Goss’s Wilt</th>
<th>Fungicide Response</th>
<th>Product</th>
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<tbody>
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### VT Double PRO® RIB Complete® Corn Blend

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<th>Stay Green</th>
<th>Stalk</th>
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<th>Goss’s Wilt</th>
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### DroughtGard® Hybrids with VT Double PRO® RIB Complete® Corn Blend

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<th>Stay Green</th>
<th>Stalk</th>
<th>Root</th>
<th>Silage</th>
<th>Grey Leaf Spot</th>
<th>Goss’s Wilt</th>
<th>Fungicide Response</th>
<th>Product</th>
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### SmartStax® RIB Complete® Corn Blend

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### Agrisure Viptera® 3111

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<th>Stalk</th>
<th>Root</th>
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Benefits of Exceed\textsuperscript{SAR}

High Yielding Soybeans
- An increase of 5.5 bushels over the non-inoculated control was demonstrated in replicated Midwest trial locations for the 2016 growing season. See chart at right.

Nematode Suppression
- By disrupting the life cycle of the J1 and J2 soybean cyst nematode, Exceed\textsuperscript{SAR} can alter the effect the nematode has on young soybean plants.
- A replicated greenhouse study performed in the fall of 2015 at Auburn University showed Exceed\textsuperscript{SAR} to cause a decline in nematode populations over the control recorded by 84%. See chart at right.

Plant Vigor
- The Exceed\textsuperscript{SAR} mode of action enables the seed to germinate quickly and stimulates plant hormones responsible for root formation and development. An increase in stand count of 12% DAE has been demonstrated in many trials across the midwest.

Components of Exceed\textsuperscript{SAR}

Super Concentrated Liquid Inoculant
- 10 Billion (1x10\textsuperscript{10}) active Bradyrhizobium japonicum per ml. This concentration allows for superior nodulation thus producing maximum nodulation and nitrogen fixation.

Low Viscosity Extender
- Up to 30% thinner than the leading brands of extender on the market, thus eliminating treatment system problems and bridging or clumping of seed.

Application Rates and Package Sizes
- New for 2017- Exceed\textsuperscript{SAR} has a reduced on seed application rate.
- 2.0 fluid ounces/cwt when combined with the application of a seed treatment*.
- 0.94 fluid ounces/140,000 seeds
- 2x250 case size and the 4x50 case size, both sizes come 48 case per pallet.

*When used alone add non-chlorinated water for a total application rate to 5.0 fluid ounces/cwt
The active ingredient in ExceedSAR is Chitosan (poly-D-glucosamine) which is contained in the rhizobium extender. It has gone through the rigorous, lengthy, and very expensive process of deeming a product worthy of an EPA approved substance for use in agriculture.

**EPA Label for ExceedSAR**
- To paraphrase the EPA label, the Chitosan molecule in ExceedSAR can boost seed germination and vitality, enhance plant vigor, increase crop yields, and suppress plant parasitic nematodes.
- For many crops including legumes, it protects against fungus, mosaic virus, stem wilt, damp-off, early and late blight, and mold.

**ExceedSAR Mode of Action**
- Systemic Acquired Resistance (SAR) is a mechanism of plant defense that provides broad spectrum protection against multiple pathogens including both disease and nematodes.
- ExceedSAR behaves like a general plant elicitor, inducing a non-host resistance and priming the systemic acquired immunity within the plant’s cellular tissue. In other words, the Chitosan molecule tricks the plant into thinking it’s being attacked by a pathogenic force.
- SAR takes as little as 24-48 hours to activate plant responses, and lasts through the early stages of plant growth when disease and nematode pressure are most detrimental.
- See chart at right to understand the different stages of how ExceedSAR protects soybean plants.

**Proprietary Manufacturing Process of ExceedSAR**
- The proprietary manufacturing process to produce the Chitosan molecule, contained in ExceedSAR allows for a concentrated version without any adverse effect on the rhizobium. The molecule is considered a bio-chemical therefore allowing it to be very stable on the seed until time of planting and enhances the adherence of inoculants on seed.
- The short molecular chain of the ExceedSAR Chitosan allows the chemical to more effectively bind to receptor sites in the plant cell wall thus giving the plant faster defense against diverse pathogens, including bacteria, fungi, and nematodes.
- ExceedSAR triggers signaling to increase structural integrity and rapid alteration of the cell wall, initiates the synthesis of pathogenic-related proteins and phytoalexins (to inhibit parasite growth), and produces or activates various defense related enzymes including salicylic acid, jasmonic acid, and ethylene.
<table>
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<th>SOYBEAN PRODUCTS</th>
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<td><strong>ROUNDUP READY 2 XTEND® SOYBEANS</strong></td>
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<tr>
<td>• Mid Group III Maturity</td>
</tr>
<tr>
<td>• Tall plant with good standability</td>
</tr>
<tr>
<td>• Good yield for maturity</td>
</tr>
<tr>
<td>• Very good S.D.S tolerance</td>
</tr>
<tr>
<td>• Adapted to all row widths</td>
</tr>
<tr>
<td>• Has salt “excluder”</td>
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<tr>
<td><strong>EMERGENCE</strong></td>
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<tr>
<td><strong>STANDABILITY</strong></td>
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<td><strong>SHATTER</strong></td>
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<tr>
<td><strong>P.R.R.</strong></td>
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<td><strong>S.D.S.</strong></td>
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</tbody>
</table>

| **3910 NXS** |
| **ROUNDUP READY 2 XTEND® SOYBEANS WITH STS®** |
| • Great yield potential with western adaptation |
| • “Stacked” with STS® tolerance, has salt “excluder” |
| • Medium plant height |
| • Very good stress tolerance |
| • Very good emergence scores |
| • Good iron chlorosis and standability scores |
| **EMERGENCE** | 1.3 |
| **STANDABILITY** | 2.0 |
| **SHATTER** | 1.1 |
| **P.R.R.** | 1.7 |
| **S.D.S.** | 2.0 |

| **4140 NXS** |
| **ROUNDUP READY 2 XTEND® SOYBEANS WITH STS®** |
| • Early Group IV Maturity |
| • #1 yielding variety in Early Group IV Kansas breeder data |
| • Medium-tall plant height with very good standability |
| • “Stacked” with STS® tolerance |
| • Excellent emergence and very good S.D.S. |
| • Has salt “excluder” |
| **EMERGENCE** | 1.3 |
| **STANDABILITY** | 1.7 |
| **SHATTER** | 1.1 |
| **P.R.R.** | 2.0 |
| **S.D.S.** | 2.0 |

| **4278 NX** |
| **ROUNDUP READY 2 XTEND® SOYBEANS** |
| • Early Group IV Maturity |
| • Medium-tall plant that stands well |
| • Widely adapted for most soils |
| • Top yields in south central Kansas |
| • Canopies quickly |
| **EMERGENCE** | 1.5 |
| **STANDABILITY** | 1.9 |
| **SHATTER** | 1.0 |
| **P.R.R.** | 2.0 |
| **S.D.S.** | 2.1 |

| **4418 NXS** |
| **ROUNDUP READY 2 XTEND® SOYBEANS WITH STS®** |
| • Mid Group IV Maturity |
| • Top yields in south central Kansas |
| • Tall plant with good standability |
| • "Stacked" with STS® tolerance |
| • Excellent Double Crop |
| **EMERGENCE** | 1.8 |
| **STANDABILITY** | 2.4 |
| **SHATTER** | 1.0 |
| **P.R.R.** | 2.2 |
| **S.D.S.** | 2.4 |
### 4598 NX

**R O U N D U P  R E A D Y  2  X T E N D ®  S O Y B E A N S**

- Mid Group IV Maturity
- Medium plant height
- Medium bush plant type
- Very good standability
- Has salt “excluder”
- Good iron chlorosis and standability scores

<table>
<thead>
<tr>
<th>Trait</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergence</td>
<td>2.0</td>
</tr>
<tr>
<td>Standability</td>
<td>1.8</td>
</tr>
<tr>
<td>Shatter</td>
<td>1.0</td>
</tr>
<tr>
<td>P.R.R.</td>
<td>3.0</td>
</tr>
<tr>
<td>S.D.S.</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**R A T I N G  S C A L E  1-5, 1 = BEST**

### 4677 NXS

**R O U N D U P  R E A D Y  2  X T E N D ®  S O Y B E A N S  W I T H  S T S ®**

- Mid Group IV Maturity
- Top yields in SE Kansas and Missouri in 2016-2018 testing
- Medium-tall plant height, with good standability
- "Stacked" with STS® tolerance
- Excellent green stem tolerance
- Has salt “excluder”

<table>
<thead>
<tr>
<th>Trait</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergence</td>
<td>1.3</td>
</tr>
<tr>
<td>Standability</td>
<td>1.7</td>
</tr>
<tr>
<td>Shatter</td>
<td>1.0</td>
</tr>
<tr>
<td>P.R.R.</td>
<td>2.1</td>
</tr>
<tr>
<td>S.D.S.</td>
<td>2.1</td>
</tr>
</tbody>
</table>

### 4838 NXS

**R O U N D U P  R E A D Y  2  X T E N D ®  S O Y B E A N S  W I T H  S T S ®**

- Late Group IV Maturity
- Tall plant with good standability
- Excellent S.D.S. tolerance
- Adapted to Kansas east to west
- "Stacked" with STS® tolerance
- Has salt “excluder”

<table>
<thead>
<tr>
<th>Trait</th>
<th>Rating</th>
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</thead>
<tbody>
<tr>
<td>Emergence</td>
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</tr>
<tr>
<td>Shatter</td>
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</tr>
<tr>
<td>P.R.R.</td>
<td>2.3</td>
</tr>
<tr>
<td>S.D.S.</td>
<td>1.5</td>
</tr>
</tbody>
</table>

### 4850 X

**R O U N D U P  R E A D Y  2  X T E N D ®  S O Y B E A N S**

- Late Group IV Maturity
- Consistently a high yielder across all testing areas
- Medium plant height with good standability
- Very good tolerance to stem canker and S.D.S.
- Very good lateral branching and pod clustering

<table>
<thead>
<tr>
<th>Trait</th>
<th>Rating</th>
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</thead>
<tbody>
<tr>
<td>Standability</td>
<td>1.7</td>
</tr>
<tr>
<td>Shatter</td>
<td>1.1</td>
</tr>
<tr>
<td>S.D.S.</td>
<td>1.8</td>
</tr>
</tbody>
</table>

### 4960 X

**R O U N D U P  R E A D Y  2  X T E N D ®  S O Y B E A N S**

- Late Group IV Maturity
- Medium-tall plant height
- Good standability for taller plant type
- 104.3% above check average in western data summary
- Yields well across multiple soil types
- Good scores for S.D.S. and stem canker

<table>
<thead>
<tr>
<th>Trait</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standability</td>
<td>2.1</td>
</tr>
<tr>
<td>Shatter</td>
<td>1.1</td>
</tr>
<tr>
<td>S.D.S.</td>
<td>2.3</td>
</tr>
</tbody>
</table>
**3729E3**

**ENLIST E3™ SOYBEANS**
- Mid to Late Group III Maturity
- Medium to medium-tall height
- Widely adapted with large footprint
- Excellent stress tolerance
- Very good standability and emergence ratings
- 109% yield index in national testing

**RATING:** 3.7 RM

**EMERGENCE:** 1.7
**STANDABILITY:** 1.7
**SHATTER:** 1.1
**P.R.R.:** 1.5
**S.D.S.:** 1.5

---

**3770E3S**

**ENLIST E3™ SOYBEANS WITH STS®**
- Mid to Late Group III Maturity
- Medium-tall plant
- Great emergence and standability scores
- Very good IDC scores
- Good S.D.S. tolerance
- "Stacked" with STS® tolerance

**RATING:** 3.7 RM

**EMERGENCE:** 1.3
**STANDABILITY:** 1.7
**SHATTER:** 1.1
**P.R.R.:** 1.5
**S.D.S.:** 2.5

---

**3880E3**

**ENLIST E3™ SOYBEANS**
- Late Group III Maturity
- Medium-tall height
- Very good stress tolerance
- Very good emergence and standability
- Broad adaptability from east to west
- Excellent candidate for nematicide for high nematode pressure

**RATING:** 3.8 RM

**EMERGENCE:** 2.1
**STANDABILITY:** 1.9
**SHATTER:** 1.1
**P.R.R.:** 3.0
**S.D.S.:** 2.5

---

**3999E3**

**ENLIST E3™ SOYBEANS**
- Late Group III Maturity
- Yielded nationally with great western movement
- Medium-tall plant height
- Excellent emergence and stress tolerance
- Very good S.D.S. and standability
- Superior field performance in Midland seed production

**RATING:** 3.9 RM

**EMERGENCE:** 1.2
**STANDABILITY:** 1.4
**SHATTER:** 1.0
**P.R.R.:** 1.2
**S.D.S.:** 1.4

---

**4249E3**

**ENLIST E3™ SOYBEANS**
- Early Group IV Maturity
- Medium-tall plant height
- Excellent standability and emergence
- Solid Phytophthora Root Rot Score
- Widely adaptable

**RATING:** 4.2 RM

**EMERGENCE:** 1.9
**STANDABILITY:** 1.7
**SHATTER:** 1.1
**P.R.R.:** 2.0

---
### 4260 E3S
**ENLIST E3™ SOYBEANS WITH STS®**
- Early Group IV Maturity
- Excellent yields in Kansas and W Missouri
- Medium plant height
- *Stacked* with STS® tolerance
- Excellent standability and emergence
- Has salt “includer”

<table>
<thead>
<tr>
<th>Trait</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Emergence</td>
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<td>Shatter</td>
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</tr>
<tr>
<td>P.R.R.</td>
<td>2.0</td>
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</tbody>
</table>

**Rating:** 4.2 RM

---

### 4440 E3
**ENLIST E3™ SOYBEANS**
- Mid Group IV Maturity
- New Enlist Line for mid-south and the west
- Medium plant height
- Good standability
- SCN resistance
- Good S.D.S. tolerance

<table>
<thead>
<tr>
<th>Trait</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standability</td>
<td>1.8</td>
</tr>
<tr>
<td>Shatter</td>
<td>1.1</td>
</tr>
<tr>
<td>S.D.S.</td>
<td>2.4</td>
</tr>
</tbody>
</table>

**Rating:** 4.4 RM

---

### 4550 E3S
**ENLIST E3™ SOYBEANS WITH STS®**
- Mid Group IV Maturity
- Very consistent across all soil types, excellent on clay soils
- Tall plant height
- *Stacked* with STS® tolerance
- Excellent emergence and good standability
- Has salt “excluder”

<table>
<thead>
<tr>
<th>Trait</th>
<th>Rating</th>
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</thead>
<tbody>
<tr>
<td>Emergence</td>
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<tr>
<td>Shatter</td>
<td>1.0</td>
</tr>
<tr>
<td>P.R.R.</td>
<td>1.8</td>
</tr>
</tbody>
</table>

**Rating:** 4.5 RM

---

### 4660 E3S
**ENLIST E3™ SOYBEANS WITH STS®**
- Mid Group IV Maturity
- Medium plant height
- *Stacked* with STS® tolerance
- Good standability
- Very good performance on lighter soils
- Has salt “excluder”

<table>
<thead>
<tr>
<th>Trait</th>
<th>Rating</th>
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</thead>
<tbody>
<tr>
<td>Emergence</td>
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<tr>
<td>Standability</td>
<td>1.9</td>
</tr>
<tr>
<td>Shatter</td>
<td>1.1</td>
</tr>
</tbody>
</table>

**Rating:** 4.6 RM

---

### 4880 E3S
**ENLIST E3™ SOYBEANS WITH STS®**
- Late Group IV Maturity
- Tall plant height
- *Stacked* with STS® tolerance
- Good S.D.S. tolerance
- Good standability rating
- Strong Double Crop option

<table>
<thead>
<tr>
<th>Trait</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standability</td>
<td>2.4</td>
</tr>
<tr>
<td>Shatter</td>
<td>1.1</td>
</tr>
<tr>
<td>S.D.S.</td>
<td>2.1</td>
</tr>
</tbody>
</table>

**Rating:** 4.8 RM

---
SOYBEAN PRODUCTS

BUILT BY FAMILY. BACKED BY PERFORMANCE.

3670 LG+

LIBERTYLINK® GT27™

- Mid Group III Maturity
- Great testing performance in Kansas
- Strong stress tolerance
- Medium-tall plant
- Very good emergence and standability scores

LIBERTYLINK® GT27

EMERGENCE 1.3
STANDABILITY 1.9
SHATTER 1.1
P.R.R. 2
S.D.S. 2

4119 LG+

LIBERTYLINK® GT27™

- Early Group IV Maturity
- Consistently at top of breeder tests in 2016-2018
- Medium-tall plant with very good standability
- Very good phytophthora field tolerance
- Excellent S.D.S. tolerance and good I.D.C. tolerance

LIBERTYLINK® GT27

EMERGENCE 1.1
STANDABILITY 1.5
SHATTER 1.0
P.R.R. 1.6
S.D.S. 1.7

4509 LG+

LIBERTYLINK® GT27™

- Mid Group IV Maturity
- Medium-tall plant height
- Broad adaptability across RM range
- Great standability and emergence scores
- Great yield performance in south central Kansas test

LIBERTYLINK® GT27

EMERGENCE 1.7
STANDABILITY 1.5
SHATTER 1.1
P.R.R. 2

Soybean Piracy Statement

Seed containing a patented trait can only be used to plant a single commercial crop from which seed cannot be saved and replanted. Examples of seed containing a patented trait include but are not limited to Roundup Ready 2 Yield® soybeans and Roundup Ready 2 Xtend® soybeans. Additional information and limitations on the use of these products are provided in the Monsanto Technology Stewardship Agreement and the Monsanto Technology Use Guide. U.S. patents for Monsanto technologies can be found at the following webpage: http://www.monsantotechnology.com

The Enlist™ System - Get Control of Tough Weeds

Enlist Duo®

- Convenient blend of 2,4-D choline and glyphosate
- Two modes of action to deliver control and help prevent resistance in your fields

Enlist One®

- Straight-goods 2,4-D choline with additional tank-mix flexibility
- Ability to tank-mix with glufosinate and other qualified herbicides, customizing the ratio of herbicides to match each farm’s needs

On-Target Applications

- 90% less drift than traditional 2,4-D
- 96% less volatile than 2,4-D ester

Enlist E3 SOYBEANS

- New 2,4-D Choline
- Glyphosate
- Glufosinate

Following burndown, Enlist Duo® and Enlist One® with Colex-D® technology are the only herbicides containing 2,4-D that are labeled for preemergence and postemergence use with Enlist E3® soybeans.
## Soybean Chart

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>STS</th>
<th>RELATIVE MATURITY</th>
<th>HEIGHT</th>
<th>EMERGENCE</th>
<th>STANDABILITY</th>
<th>SHATTER</th>
<th>P.R.R.</th>
<th>S.D.S.</th>
<th>I.D.C.</th>
<th>CVST</th>
<th>HIGHLIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Roundup Ready 2 Yield® Soybeans with STS®</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4963NRS2 X 4.9 Medium</td>
<td>2.1</td>
<td>2.0</td>
<td>1.0</td>
<td>2.3</td>
<td>2.0</td>
<td>-</td>
<td>R3, MR14</td>
<td><em>Stacked</em> with STS®, top yields in tests 2012 - 2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Roundup Ready 2 Xtend® Soybeans</strong></td>
<td><strong>Roundup Ready 2 Xtend® Soybeans with STS®</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3017NX X 4.9 Tall</td>
<td>2.0</td>
<td>2.0</td>
<td>1.1</td>
<td>1.7</td>
<td>1.5</td>
<td>1.9</td>
<td>R3, MR14</td>
<td>Widely adapted, excellent S.D.S in a tall plant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3537NX X 3.5 Medium-Tall</td>
<td>1.8</td>
<td>2.0</td>
<td>1.0</td>
<td>1.9</td>
<td>1.9</td>
<td>-</td>
<td>R3, MR14</td>
<td>Excellent stress tolerance, wide plant type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3648NX X 3.6 Tall</td>
<td>1.8</td>
<td>2.0</td>
<td>1.0</td>
<td>1.9</td>
<td>1.9</td>
<td>-</td>
<td>R3, MR14</td>
<td>Tall plant type, salt “excluder”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 3910NXS X 3.9 Medium</td>
<td>1.3</td>
<td>2.0</td>
<td>1.1</td>
<td>1.7</td>
<td>2.0</td>
<td>-</td>
<td>R3, MR14</td>
<td><em>Stacked</em> with STS, strong western adaptation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 3930NX X 3.9 Medium</td>
<td>2.1</td>
<td>1.9</td>
<td>1.1</td>
<td>1.7</td>
<td>1.8</td>
<td>-</td>
<td>R3, MR14</td>
<td><em>Stacked</em> with STS®, excellent S.D.S and PRR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 4140NXS X 4.1 Medium-Tall</td>
<td>1.3</td>
<td>1.7</td>
<td>1.1</td>
<td>2.0</td>
<td>2</td>
<td>-</td>
<td>R3, MR14</td>
<td>Top yielder in 2018 Kansas Tests, “Stacked” with STS®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4278NX X 4.3 Medium-Tall</td>
<td>1.9</td>
<td>1.0</td>
<td>2.0</td>
<td>2.1</td>
<td>-</td>
<td>-</td>
<td>R3, MR14</td>
<td>Top in breeder tests in Kansas and Missouri in 2016-18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4418NXS X 4.4 Tall</td>
<td>1.8</td>
<td>2.4</td>
<td>1.0</td>
<td>2.2</td>
<td>2.4</td>
<td>-</td>
<td>R3, MR14</td>
<td>Excellent Double Crop, “Stacked” with STS®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4596NX X 4.5 Medium</td>
<td>2.0</td>
<td>1.8</td>
<td>1.0</td>
<td>3.0</td>
<td>2.5</td>
<td>2.5</td>
<td>R3, MR14</td>
<td>Medium bush plant type, salt “excluder”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4677NXS X 4.6 Medium-Tall</td>
<td>1.3</td>
<td>1.7</td>
<td>1.0</td>
<td>2.1</td>
<td>2.1</td>
<td>-</td>
<td>R3, MR14</td>
<td>“Stacked” with STS®, salt “excluder”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4838NXS X 4.8 Tall</td>
<td>1.9</td>
<td>2.0</td>
<td>1.0</td>
<td>2.3</td>
<td>1.5</td>
<td>-</td>
<td>R3, MR14</td>
<td>Tall plant type, “Stacked” with STS®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 4850X X 4.8 Medium-Tall</td>
<td>NA</td>
<td>1.7</td>
<td>1.1</td>
<td>NA</td>
<td>1.8</td>
<td>NA</td>
<td>-</td>
<td>Excellent lodging scores with strong S.D.S. package</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 4960X X 4.9 Medium-Tall</td>
<td>NA</td>
<td>2.1</td>
<td>1.1</td>
<td>NA</td>
<td>2.3</td>
<td>NA</td>
<td>-</td>
<td>Strong yield performance across many environments</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Enlist E3™ Soybeans</strong></td>
<td><strong>Enlist E3™ Soybeans with STS®</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 3729E3 X 3.7 Medium</td>
<td>1.7</td>
<td>1.7</td>
<td>1.1</td>
<td>1.5</td>
<td>1.5</td>
<td>-</td>
<td>R3, MR14</td>
<td>High yield potential with strong agronomic package</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 3770E3S X 3.7 Medium-Tall</td>
<td>1.3</td>
<td>1.7</td>
<td>1.1</td>
<td>1.5</td>
<td>2.5</td>
<td>1.9</td>
<td>R3, MR14</td>
<td>Very good agronomic package, “Stacked” with STS®</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>New</strong> 3880E3 X 3.8 Medium-Tall</td>
<td>2.1</td>
<td>1.9</td>
<td>1.1</td>
<td>3.0</td>
<td>2.5</td>
<td>-</td>
<td>-</td>
<td>Excellent yield performance and stress tolerance</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>New</strong> 3999E3 X 3.9 Medium-Tall</td>
<td>1.2</td>
<td>1.4</td>
<td>1.0</td>
<td>1.2</td>
<td>1.4</td>
<td>-</td>
<td>R3, MR14</td>
<td>Outstanding yield in 2018 production, must plant</td>
<td></td>
<td></td>
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<tr>
<td><strong>New</strong> 4249E3 X 4.2 Medium-Tall</td>
<td>1.9</td>
<td>1.7</td>
<td>1.1</td>
<td>2.0</td>
<td>NA</td>
<td>-</td>
<td>R3, MR14</td>
<td>Widely adaptable with good standability</td>
<td></td>
<td></td>
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<tr>
<td><strong>New</strong> 4260E3S X 4.2 Medium</td>
<td>1.2</td>
<td>1.2</td>
<td>1.1</td>
<td>2.0</td>
<td>NA</td>
<td>NA</td>
<td>R3, MR14</td>
<td>Great in KS and MO testing, “Stacked” with STS®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 4440E3 X 4.4 Medium</td>
<td>NA</td>
<td>1.8</td>
<td>1.1</td>
<td>NA</td>
<td>2.4</td>
<td>-</td>
<td>-</td>
<td>Very good standability with stem canker resistance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 4550E3S X 4.5 Tall</td>
<td>1.5</td>
<td>1.7</td>
<td>1.0</td>
<td>1.8</td>
<td>NA</td>
<td>NA</td>
<td>R3, MR14</td>
<td>Great on clay soils. “Stacked” with STS®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 4660E3S X 4.6 Medium</td>
<td>2.1</td>
<td>1.9</td>
<td>1.1</td>
<td>NA</td>
<td>NA</td>
<td>R3, MR14</td>
<td>Works on light soils, Stacked with STS®, salt “excluder”</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>New</strong> 4880E3S X 4.8 Tall</td>
<td>NA</td>
<td>2.4</td>
<td>1.1</td>
<td>NA</td>
<td>2.1</td>
<td>-</td>
<td>-</td>
<td>Good Double Crop option, “Stacked” with STS®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 5090E3 X 5.0 Medium</td>
<td>1.4</td>
<td>1.4</td>
<td>1.0</td>
<td>2.0</td>
<td>NA</td>
<td>NA</td>
<td>R3, MR14</td>
<td>Very adaptable to different soil types and environments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LibertyLink® GT27™</strong></td>
<td><strong>LibertyLink® GT27™ with STS®</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 3670LG+ X 3.6 Medium-Tall</td>
<td>1.3</td>
<td>1.9</td>
<td>1.1</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>R3, MR14</td>
<td>Widely adaptable with excellent test history in Kansas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 4119LG+ X 4.1 Medium-Tall</td>
<td>1.1</td>
<td>1.5</td>
<td>1.0</td>
<td>1.6</td>
<td>1.7</td>
<td>1.8</td>
<td>R3, MR14</td>
<td>#1 LL performer in limited Midland testing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 4330LGS+ X 4.3 Medium</td>
<td>1.2</td>
<td>1.4</td>
<td>1.0</td>
<td>2.0</td>
<td>NA</td>
<td>NA</td>
<td>R3, MR14</td>
<td>Strong performance on broad acres, “Stacked” with STS®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 4509LG+ X 4.5 Medium-Tall</td>
<td>1.7</td>
<td>1.5</td>
<td>1.1</td>
<td>2</td>
<td>NA</td>
<td>-</td>
<td>R3, MR14</td>
<td>Excellent yield performance in Kansas trials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 4610LGS+ X 4.6 Medium</td>
<td>1.4</td>
<td>1.3</td>
<td>1.0</td>
<td>1.7</td>
<td>2.2</td>
<td>NA</td>
<td>R3, MR14</td>
<td>Strong on clays and loams, “Stacked” with STS®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong> 4820LG+ X 4.8 Tall</td>
<td>1.4</td>
<td>1.6</td>
<td>1.0</td>
<td>2.2</td>
<td>NA</td>
<td>NA</td>
<td>R3, MR14</td>
<td>Great on stress acres, strong on heavy clays</td>
<td></td>
<td></td>
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</tbody>
</table>

**RATING SCALE: 1-5, 1 = BEST**
Seeds containing the LibertyLink® trait may be protected under one or more U.S. patents and may be planted only to produce one (1) commercial crop in a single season, and only after signing a BASF Technology Agreement. It is illegal to save seeds containing the LibertyLink trait for use as planting seed or for transfer to others for use as planting seed.

LibertyLink® GT27™ soybeans offer triple stack tolerance to Liberty, glyphosate, and, pending EPA approval, the first HPPD-based herbicide, LibertyLink. LibertyLink GT27 is not tolerant to all HPPD herbicides. HPPD herbicides currently on the market are prohibited for use with LibertyLink GT27 soybeans and may result in significant crop injury.

Always read and follow label directions. Liberty and LibertyLink are registered trademarks of M.S. Technologies LLC and BASF. MS Technologies is a trademark of M.S. Technologies, L.L.C. ©2019 BASF Corporation / M.S. Technologies, L.L.C. All Rights Reserved. APN 18-INT-0014

Seeds containing the Enlist, Hercules and PowerCore traits are protected under numerous US patents. Seeds containing patented traits can only be used to plant a single commercial crop and cannot be saved or replanted.

You acknowledge and agree to be bound by the terms and conditions set forth in the Technology Use Agreement in effect at the time of planting of this seed.

(i) the Technology Use Agreement and (ii) the Product Use Guides for all technologies in this seed, including the Herbicide Resistance Management (HRM), and Use recommendations detailed therein www.corteva.us/Resources/trait-stewardship.html.

To plant Enlist seed, you must have a limited license from Dow AgroSciences LLC (or other appropriate affiliates). In consideration of the foregoing, Dow AgroSciences grants to the Grower the limited license to use its technology to produce only a single commercial crop in the United States under the terms and conditions set forth in the Technology Use Agreement in effect at the time of planting of this seed.

**WARNING:** Enlist products are tolerant of over-the-top applications of glyphosate, glufosinate and 2,4-D herbicides. Failure to follow the specific label instructions for the Enlist herbicide product can cause crop injury. Enlist products are only for use on crops that are labeled to be resistant to the Enlist herbicide. Enlist E3™ soybean soybeans containing the Enlist E3 trait can only be used to plant a single commercial crop. It is unlawful to save and replant Enlist E3™ soybeans. Additional information and limitations on the use of these products are provided in the Dow AgroSciences Technology Use Agreement and the Enlist Soybean Product Use Guide. U.S. patents for Dow AgroSciences technologies may be found at www.corteva.us/Resources/trait-stewardship.html.

DuPont™ and STS™ are trademarks of DuPont or its affiliates.

**Varieties with the DuPont™ STS® gene (STS) are tolerant to corn rootworm (SU) and the subsequent soybean herbicide treatment.**

DuPont™ STS® soybeans provide post-emergent applications of DuPont™ Synchrony® XP and DuPont™ Classic® herbicides without crop injury or stress (see herbicide product labels). Note: A soybean variety with a herbicide tolerant trait does not confer tolerance to all herbicides. Spraying herbicides not labeled for use with a soybean variety will result in severe plant injury or plant death. Always read and follow herbicide label directions and precautions for use.
Verification Required  The last patent on the original Roundup Ready® soybean trait expired a few years ago and U.S. farmers may legally plant saved seed from some varieties of soybean containing the Roundup Ready® soybean trait. However, it is important that you check with your seed supplier to determine if a specific Roundup Ready® soybean variety is covered by other intellectual property rights, and if so, the policy for saving seed of that variety.

Higher Seeding Rate  A higher seeding rate may be required for bin-run Roundup Ready® soybeans compared to new branded seed.

Yield Loss  Genuity® Roundup Ready 2 Yield® soybean varieties and Roundup Ready 2 Xtend® soybean varieties typically have a higher yield opportunity than Roundup Ready® soybean varieties.*

Cleanout Loss  Loss of seed and/or shrink occurs during the seed cleaning and handling processes for bin-run seed.

Seed Treatment Costs  Treating your seed will add costs—both the cost of the treatment and the application of that treatment.

Lost Income  Every bushel of saved seed you plant is a bushel you’re not selling as commodity grain.

Increased Seed Management  If you plan to save and bin-run Roundup Ready® soybeans for planting, you will have to manage your harvest operations and grain storage so that the seed isn’t co-mingled with other seed that’s covered by intellectual property rights.

Monsanto receives calls and letters each year about potential seed compliance matters. Anyone with a concern or question can anonymously call 1-800-768-6387.

For more information about seed innovation and intellectual property protection, please visit www.seedipalliance.com.

Monsanto Company is a subsidiary of Bayer AG.

Monsanto Company is a member of Excellence Through Stewardship® (ETS). Monsanto products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Monsanto’s Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. Roundup Ready® soybeans, Genuity® Roundup Ready 2 Yield® soybeans, and Roundup Ready 2 Xtend® soybeans have been approved for import into key export markets with functioning regulatory systems. Any crop or material produced from these products can only be exported to, or used, processed or sold in countries where all necessary regulatory approvals have been granted. It is a violation of national and international law to move material containing biotech traits across boundaries into nations where import is not permitted. Growers should talk to their grain handler or product purchaser to confirm their buying position for this product. Excellence Through Stewardship® is a registered trademark of Excellence Through Stewardship.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Roundup Ready® soybeans and Roundup Ready 2 Yield® soybeans contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® brand agricultural herbicides. Roundup® brand agricultural herbicides will kill crops that are not tolerant to glyphosate. Roundup Ready 2 Xtend® soybeans contain genes that confer tolerance to glyphosate and dicamba, the active ingredient in XtendMax® herbicide with VaporGrip® Technology. Dicamba will kill crops that are not tolerant to dicamba. XtendMax® herbicide with VaporGrip® Technology is part of the Roundup Ready® Xtend Crop System and is a restricted use pesticide. Genuity®, Roundup Ready®, Roundup Ready 2 Yield®, Roundup Ready 2 Xtend®, Roundup®, VaporGrip® and XtendMax® are registered trademarks of Bayer Group. ©2019 Bayer Group. All Rights Reserved. [19-00070pc] S45N198247
### 4595

- Early maturity
- Bronze grain
- Excellent yield for maturity
- Very good choice for double crop
- Well adapted for southern Kansas environment

**RATING**: 90-100 DAYS

**STALK STRENGTH**: 2
**DROUGHT STRESS**: 1.5
**SCA TOLERANCE**: 1.5

### 4656Y

- Medium-early maturity
- Cream color grain, yellow endosperm
- Excellent drought tolerance
- Excellent yield for maturity
- Very good choice for double crop and late planting

**RATING**: 105-110 DAYS

**STALK STRENGTH**: 2.5
**DROUGHT STRESS**: 2.5

### 4748

- Medium maturity
- High yield
- Excellent drought tolerance
- Excellent standability

**RATING**: 100-110 DAYS

**STALK STRENGTH**: 1.5
**DROUGHT STRESS**: 1.5

### 4758Y

- Medium maturity
- Yellow grain
- Excellent drought tolerance
- Excellent standability

**RATING**: 105-110 DAYS

**STALK STRENGTH**: 1
**DROUGHT STRESS**: 1.5

### 5710

- NEW medium maturity grain sorghum
- Highly tolerant to Sugarcane aphids
- Excellent top end yield potential for maturity
- Excellent stalks and roots: FHB tolerance

**RATING**: 105-115 DAYS

**STALK STRENGTH**: 2
**DROUGHT STRESS**: 2.5
**SCA TOLERANCE**: 1.5

### 5790

- Medium-late maturity
- Highly tolerant to Sugarcane aphids
- Dual purpose grain and silage
- Tall plant type
- Strong consistent yield performance

**RATING**: 110-115 DAYS

**STALK STRENGTH**: 2.5
**DROUGHT STRESS**: 2.5
**SCA TOLERANCE**: 1.5
5727

- Medium-late maturity
- Highly tolerant to Sugarcane aphids
- Good stalk quality
- Best under irrigation or good dryland

110-115 DAYS

<table>
<thead>
<tr>
<th>Metric</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stalk Strength</td>
<td>1.5</td>
</tr>
<tr>
<td>Drought Stress</td>
<td>2.5</td>
</tr>
<tr>
<td>SCA Tolerance</td>
<td>1.5</td>
</tr>
</tbody>
</table>

5730

- NEW medium-late maturity
- Sugarcane aphid tolerance
- Strong yield performance in higher yield potential trials
- Excellent test weight history; very good stalk and root rating

110-115 DAYS

<table>
<thead>
<tr>
<th>Metric</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stalk Strength</td>
<td>2</td>
</tr>
<tr>
<td>Drought Stress</td>
<td>2.5</td>
</tr>
<tr>
<td>SCA Tolerance</td>
<td>1.5</td>
</tr>
</tbody>
</table>

5740

- NEW medium-late maturity
- Widely adaptable hybrid with Sugarcane aphid tolerance
- Excellent top end yield potential and test weight
- Moderately tall hybrid with very good stalk and root ratings; FHB tolerance

110-115 DAYS

<table>
<thead>
<tr>
<th>Metric</th>
<th>Rating</th>
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</thead>
<tbody>
<tr>
<td>Stalk Strength</td>
<td>2</td>
</tr>
<tr>
<td>Drought Stress</td>
<td>2.5</td>
</tr>
<tr>
<td>SCA Tolerance</td>
<td>1.5</td>
</tr>
</tbody>
</table>

5797

- Medium-late maturity
- Highly tolerant to Sugarcane aphids
- Strong consistent yield performance
- Bronze grain
- Best under irrigation or good dryland

115-120 DAYS

<table>
<thead>
<tr>
<th>Metric</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stalk Strength</td>
<td>2.5</td>
</tr>
<tr>
<td>Drought Stress</td>
<td>1.5</td>
</tr>
<tr>
<td>SCA Tolerance</td>
<td>1.5</td>
</tr>
</tbody>
</table>

5745W

- Medium maturity
- White grain
- Excellent drought tolerance
- Food grade hybrid with tan plant color
- Very good choice for double crop

105-110 DAYS

<table>
<thead>
<tr>
<th>Metric</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stalk Strength</td>
<td>1.5</td>
</tr>
<tr>
<td>Drought Stress</td>
<td>1.5</td>
</tr>
<tr>
<td>SCA Tolerance</td>
<td>2.5</td>
</tr>
</tbody>
</table>

W902

- Medium-late maturity
- White grain
- Excellent yield potential
- Food grade hybrid with tan plant color
- Good overall plant health

115-120 DAYS

<table>
<thead>
<tr>
<th>Metric</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stalk Strength</td>
<td>1.5</td>
</tr>
<tr>
<td>Drought Stress</td>
<td>1.5</td>
</tr>
<tr>
<td>SCA Tolerance</td>
<td>2.5</td>
</tr>
</tbody>
</table>
# SUPER SIOUX

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Rating Scale</th>
<th>Rating</th>
<th>Rating</th>
<th>Rating</th>
</tr>
</thead>
</table>
| SUPER SIOUX   | Sorghum-Sudangrass  
55 days to boot stage  
Juicy, semi-sweet stalks  
Excellent regrowth  
Great quality for haying or grazing                                                                 | MEDIUM-EARLY | 2      | 2      | 2      |
| SUPER SIOUX DEFENSE | Sorghum-Sudangrass  
55 days to boot stage  
SCA Tolerant  
Excellent regrowth  
Great quality for haying or grazing                                                                 | MEDIUM-EARLY | 2      | 2      | 2      |
| SWEETLEAF     | Sorghum-Sudangrass  
60 days to boot stage  
Good leaf to stem ratio  
Works well planted late  
Has good salt tolerance                                                                                                           | MEDIUM       | 2      | 2      | 2      | 1      |
| KRITTER KANDY II | BMR Sorghum-Sudangrass  
50-60 days to boot stage  
High TDN values  
Significantly improved digestibility  
High yields under top management                                                                 | MEDIUM-EARLY | 2      | 2      | 2      |
| SWEET KANDY   | BMR 6 Sorghum-Sudangrass  
60 days to boot stage  
Excellent forage quality  
Excellent regrowth                                                                                                                | MEDIUM       | 2      | 2      | 2      | 1      |
| KANDY GRAZ    | BMR 6 Sorghum-Sudangrass  
50-60 days to boot stage  
Highly palatable  
Low water requirements                                                                                                           | MEDIUM-EARLY | 2      | 2      | 1      | 1      |
### N-RGY LEAF
- **Product:** N-RGY LEAF
- **Rating:** MEDIUM-EARLY
- **Features:**
  - BMR 6 Sorghum-Sudangrass
  - 50-60 days to first harvest
  - Brachytic dwarf for maximum leaf area and standability
  - High sugar content
  - Very good drought tolerance
- **Yield Ratings:**
  - Hay Yield: 2
  - Silage: 1
  - Drought: 1
  - Regrowth: 1

### SHORTY
- **Product:** SHORTY
- **Rating:** MEDIUM-LATE
- **Features:**
  - BMR 6 Sorghum-Sudangrass
  - Brachytic dwarf for maximum leaf area and standability
  - Medium-late maturity
  - Newest generation BMR for improved digestibility and palatability
  - Produces equal or higher tonnage than taller hybrids
- **Yield Ratings:**
  - Hay Yield: 2
  - Silage: 2
  - Drought: 1
  - Regrowth: 1

### MULTI-LEAF PPS
- **Product:** MULTI-LEAF PPS
- **Rating:** PPS
- **Features:**
  - Photoperiod Sensitive Sorghum-Sudangrass
  - BMR 6 Brachytic dwarf
  - Purple plant type
  - Excellent standability
  - Good SCA tolerance
  - Excellent regrowth
- **Yield Ratings:**
  - Hay Yield: 1
  - Silage: 1
  - Drought: 2
  - Regrowth: 1

### TALL ONE
- **Product:** TALL ONE
- **Rating:** FULL
- **Features:**
  - Hybrid Forage Sorghum
  - Full season 120 to harvest silage
  - Very tall with good standability
  - Good drought tolerance
  - Very good tonnage
  - Very sweet with high sugar content
- **Yield Ratings:**
  - Silage: 1
  - Drought: 1
  - Regrowth: 2

### MG 808
- **Product:** MG 808
- **Rating:** MEDIUM-LONG
- **Features:**
  - BMR 6 Sorghum Bicolor
  - High yields
  - Newest generation of BMR quality
  - Brachytic dwarf for maximum leaf area and standability
  - Very high leaf to stem ratio
  - Excellent drought tolerance
- **Yield Ratings:**
  - Hay Yield: 1
  - Silage: 1
  - Drought: 2
  - Regrowth: 2

### MG 809W
- **Product:** MG 809W
- **Rating:** MEDIUM-LONG
- **Features:**
  - BMR 6 Forage Sorghum
  - White grain color
  - Brachytic dwarf for maximum leaf area and standability
  - Widely adapted
  - Very good silage yields
- **Yield Ratings:**
  - Hay Yield: 2
  - Silage: 1
  - Drought: 1
  - Regrowth: 2
**SORGHUM CHART**

**Grain Sorghum**

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>DAYS TO 1/2 BLOOM</th>
<th>RELATIVE MATURITY</th>
<th>HEIGHT</th>
<th>HEAD TYPE</th>
<th>GRAIN COLOR</th>
<th>STALK STRENGTH</th>
<th>DROUGHT STRESS</th>
<th>SCA TOLERANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>4595</td>
<td>55-60</td>
<td>90-100</td>
<td>30-36</td>
<td>Semi-Open</td>
<td>Bronze</td>
<td>Very Good</td>
<td>Excellent</td>
<td>Excellent</td>
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<tr>
<td>4656Y</td>
<td>59-63</td>
<td>105-110</td>
<td>30-36</td>
<td>Semi-Open</td>
<td>Cream</td>
<td>Good</td>
<td>Good</td>
<td>Not rated</td>
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<tr>
<td>4748</td>
<td>62-65</td>
<td>100-110</td>
<td>38-48</td>
<td>Semi-Open</td>
<td>Bronze</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Not rated</td>
</tr>
<tr>
<td>4758Y</td>
<td>62-65</td>
<td>105-110</td>
<td>44-48</td>
<td>Semi-Open</td>
<td>Yellow</td>
<td>Outstanding</td>
<td>Excellent</td>
<td>Not rated</td>
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<tr>
<td>5710</td>
<td>64-66</td>
<td>105-115</td>
<td>49-53</td>
<td>Compact</td>
<td>Bronze</td>
<td>Very Good</td>
<td>Good</td>
<td>Excellent</td>
</tr>
<tr>
<td>5790</td>
<td>68-70</td>
<td>110-115</td>
<td>48-54</td>
<td>Semi-Open</td>
<td>Red</td>
<td>Good</td>
<td>Good</td>
<td>Excellent</td>
</tr>
<tr>
<td>5727</td>
<td>70-74</td>
<td>110-115</td>
<td>40-46</td>
<td>Semi-Open</td>
<td>Red</td>
<td>Excellent</td>
<td>Good</td>
<td>Excellent</td>
</tr>
<tr>
<td>5730</td>
<td>69-71</td>
<td>110-115</td>
<td>49-53</td>
<td>Compact</td>
<td>Red</td>
<td>Very Good</td>
<td>Good</td>
<td>Excellent</td>
</tr>
<tr>
<td>5740</td>
<td>70-72</td>
<td>110-115</td>
<td>53-57</td>
<td>Compact</td>
<td>Red</td>
<td>Very Good</td>
<td>Good</td>
<td>Excellent</td>
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<tr>
<td>5797</td>
<td>72-76</td>
<td>115-120</td>
<td>40-46</td>
<td>Semi-Open</td>
<td>Bronze</td>
<td>Good</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

**Food Grade**

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>DAYS TO 1/2 BLOOM</th>
<th>RELATIVE MATURITY</th>
<th>HEIGHT</th>
<th>HEAD TYPE</th>
<th>GRAIN COLOR</th>
<th>STALK STRENGTH</th>
<th>DROUGHT STRESS</th>
<th>SCA TOLERANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>W902</td>
<td>68-70</td>
<td>115-120</td>
<td>48-54</td>
<td>Semi-Open</td>
<td>White</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Good</td>
</tr>
<tr>
<td>5745W</td>
<td>58-62</td>
<td>105-110</td>
<td>40-45</td>
<td>Semi-Compact</td>
<td>White</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Good</td>
</tr>
</tbody>
</table>

**PRODUCT TRAIT USAGE**

<table>
<thead>
<tr>
<th>TRAIT</th>
<th>USAGE</th>
<th>DAYS TO BOOT</th>
<th>MATURITY</th>
<th>AVERAGE SEED SIZE</th>
<th>PLANTING RATE</th>
<th>HEIGHT AT BOOT</th>
<th>HAY YIELD</th>
<th>SILAGE</th>
<th>DROUGHT</th>
<th>REGROWTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hay and Bale Products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super Sioux</td>
<td>H.G</td>
<td>55-60</td>
<td>ME</td>
<td>18-22,000</td>
<td>15-30 lb.</td>
<td>5-6 ft</td>
<td>2</td>
<td>N/A</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Super Sioux Defense</td>
<td>SCA Tolerant</td>
<td>H.G</td>
<td>55-60</td>
<td>ME</td>
<td>18-20,000</td>
<td>15-30 lb.</td>
<td>5-6 ft</td>
<td>2</td>
<td>N/A</td>
<td>2</td>
</tr>
<tr>
<td>Sweetleaf</td>
<td>H.G.S</td>
<td>60-65</td>
<td>M</td>
<td>13-15,000</td>
<td>15-30 lb.</td>
<td>5-6 ft</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Kritter Kandy II</td>
<td>BMR</td>
<td>H.G</td>
<td>55-60</td>
<td>ME</td>
<td>19-21,000</td>
<td>15-30 lb.</td>
<td>5-6 ft</td>
<td>2</td>
<td>N/A</td>
<td>2</td>
</tr>
<tr>
<td>Sweet Kandy</td>
<td>BMR 6</td>
<td>H.G.S</td>
<td>60-65</td>
<td>M</td>
<td>15-16,000</td>
<td>15-30 lb.</td>
<td>6-7 ft</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Kandy Graz</td>
<td>BMR 6</td>
<td>H.G.S</td>
<td>55-60</td>
<td>ME</td>
<td>14-16,000</td>
<td>15-30 lb.</td>
<td>5-6 ft</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>N-rgy Leaf</td>
<td>BMR 6</td>
<td>H.G.S</td>
<td>50-60</td>
<td>ME</td>
<td>14-16,000</td>
<td>15-30 lb.</td>
<td>6-7 ft</td>
<td>2</td>
<td>1</td>
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<tr>
<td>Shorty</td>
<td>BMR 6</td>
<td>H.G.S</td>
<td>65-70</td>
<td>ML</td>
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<td>15-30 lb.</td>
<td>5-6 ft</td>
<td>2</td>
<td>2</td>
<td>1</td>
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<tr>
<td>Multi-Leaf PPS</td>
<td>BMR 6</td>
<td>H.G.S</td>
<td>PPS</td>
<td>PPS</td>
<td>13-15,000</td>
<td>15-30 lb.</td>
<td>6-7 ft</td>
<td>1</td>
<td>1</td>
<td>2</td>
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</table>

Silage Products

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>TRAIT</th>
<th>USAGE</th>
<th>DAYS TO BOOT</th>
<th>MATURITY</th>
<th>AVERAGE SEED SIZE</th>
<th>PLANTING RATE</th>
<th>HEIGHT AT BOOT</th>
<th>HAY YIELD</th>
<th>SILAGE</th>
<th>DROUGHT</th>
<th>REGROWTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tall One</td>
<td>S, GC</td>
<td>90-95</td>
<td>Full</td>
<td>14-15,000</td>
<td>6-10 lb.</td>
<td>8-10 ft</td>
<td>NA</td>
<td>1</td>
<td>1</td>
<td>1</td>
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</tr>
<tr>
<td>MG 808</td>
<td>BMR 6</td>
<td>S.GC</td>
<td>68-74</td>
<td>ML</td>
<td>13-16,000</td>
<td>6-10 lb.</td>
<td>7-8 ft</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>MG 809W</td>
<td>BMR 6</td>
<td>S, GC</td>
<td>75-80</td>
<td>ML</td>
<td>15-17,000</td>
<td>6-10 lb.</td>
<td>7-8 ft</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**NOTES**

- **USAGE**: H = HAY, G = GRAZING, S = SILAGE, GC = GREEN CHOP
- **MATURITY**: ME = MEDIUM EARLY, M = MEDIUM, ML = MEDIUM LATE, F = FULL SEASON

23
AmeriStand
427TQ RR
Traffic Tested®
WINTERHARDINESS: 2.0
CUTTINGS/SEASON: 4-5

Top Quality Traffic Tested® Alfalfa with Roundup Ready® Tolerance
• Performance of very popular AmeriStand 407TQ with herbicide resistance
• Excellent forage quality for optimal animal performance
• Very fast recovery for frequent harvest schedules under intensive management
• Improved salt tolerance of germinating seeds*

AmeriStand
480 HVXRR
Traffic Tested®
WINTERHARDINESS: 1.8
CUTTINGS/SEASON: 4-5

Top Productivity with High Resistance to Aphanomyces Root Rot Race 1 and 2
• Trial topping forage yield with Traffic Tested® variety performance
• Perfect disease resistance score of 35/35 DRI with HR for both races 1 and 2 of Aphanomyces
• Selected for superior forage quality
• Very fast recovery for frequent harvest schedules under intensive management
• Improved salt tolerance of germinating seeds*

28 DAY VS. 35 DAY FORAGE YIELD
3 YEAR SUMMARY | WEST SALEM, WI (F13 SEEDING)

<table>
<thead>
<tr>
<th>Year</th>
<th>28 Day Cut</th>
<th>35 Day Cut</th>
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</thead>
<tbody>
<tr>
<td>2014</td>
<td>15% increase</td>
<td>20% increase</td>
</tr>
<tr>
<td>2015</td>
<td>20% increase</td>
<td>25% increase</td>
</tr>
<tr>
<td>2016</td>
<td>30% increase</td>
<td>35% increase</td>
</tr>
</tbody>
</table>

*NOTE: 35d quality was equal to/better than 28d quality

HR = >51% Resistance, R = 31-50% Resistance, MR = 15-30% Resistance, LR = 6-14% Resistance
*In tests established by the NAAIC Review Board, this variety demonstrated improved salt tolerance of germinating seeds (Ger) as compared to the industry salt tolerant checks in each category. References available upon request.
### Spring

**Spring Triticale**
- Cool season grass
- Upright plant
- High water use and good salinity tolerance
- Excellent regrowth
- Very good forage quality and quantity
- Will form arbuscular mycorrhizal associations

**Spring Barley**
- Cool season grass
- Upright plant
- Low water use and good salinity tolerance
- Benefits from arbuscular mycorrhizal association
- Very good forage production
- Very good nitrogen scavenger

**Black Oats**
- Cool season grass
- Winter cereal for Zone 8 and warmer
- Very fibrous root mass and tillers well
- Very good biomass production
- Works as a spring planted crop in colder climates
- Very durable residue when it reaches maturity

**Spring Oats**
- Cool season grass
- Upright plant
- Medium water use and fair salinity tolerance
- Will form arbuscular mycorrhizal associations
- Very good nitrogen scavenger
- Very good forage quality

**Safflower**
- Warm season broadleaf
- Upright plant
- High water use and good salinity tolerance
- Self pollinated, but flowers may attract pollinators
- Forms arbuscular mycorrhizal associations and flowers attract pollinators

**Lentils**
- Cool season legume
- Upright and spreading plant
- Low water use
- Poor salinity tolerance
- Forms arbuscular mycorrhizal associations
- Self pollinated, but flowers may attract pollinators

**Yellow Field Peas**
- Cool season legume
- Upright and spreading plant
- Low water use
- Poor salinity tolerance
- Flowers attract pollinators
- Forms arbuscular mycorrhizal associations

**Spring Forage Peas**
- Cool season legume
- Upright plant
- Low water use
- Poor salinity tolerance
- Flowers attract pollinators
- Forms arbuscular mycorrhizal associations

**AC Greenfix (chickling vetch)**
- Cool season legume
- Very good nitrogen producer
- Good forage production
- Very efficient with moisture
- Short season plant, can produce up to 134# at 72 days of growth

### Summer

**Sunn Hemp**
- Warm season legume
- Upright plant
- Tolerates poor, sandy, droughty soils and requires good drainage
- Has a strong taproot with many well-developed lateral roots
- Very good nitrogen producer
- Can produce 6-7 tons dry matter per acre

**Laredo Soybeans**
- Warm season legume
- Upright and spreading plant
- Medium water use
- Black seeded, pure forage soybean
- Self pollinated, but flowers may attract pollinators
- Forms arbuscular mycorrhizal associations

**Cowpeas**
- Warm season legume
- Upright and spreading plant (vine)
- Low water use
- Poor salinity tolerance
- Flowers attract pollinators
- Forms arbuscular mycorrhizal associations

**Mungbeans**
- Warm season legume
- Upright and spreading plant (vine)
- Low to medium water use
- Poor salinity tolerance
- Forms arbuscular mycorrhizal associations
- Self pollinated

**Sunflowers**
- Warm season broadleaf
- Upright plant
- High water use and fair salinity tolerance
- Deep rooting plant that can aid in reducing soil compaction
- Effective at reclaiming mobile nutrients deep in the soil profile
- Will form arbuscular mycorrhizal associations and flowers attract pollinators

**Sorghum Sudangrass**
- Warm season grass
- Upright plant
- Medium water use
- Fair salinity tolerance
- Benefits from arbuscular mycorrhizal associations
- Self pollinated by the wind

**Pearl Millet**
- Warm season grass
- Upright plant
- Low water use
- Good protein content
- Self pollinated by the wind
- Will form arbuscular mycorrhizal associations

**Guar**
- Warm season legume
- Very good heat tolerance and drought tolerance
- 90-120 day maturity
- Good salinity tolerance
- Forms arbuscular mycorrhizal associations

**German “R” Millet**
- Warm season, grass
- Annual
- Upright plant type
- Low water use
- Poor salinity tolerance
- Forms arbuscular mycorrhizal associations

### Fall

**Subterranean Clover**
- Legume
- Reseeding cool season annual
- Excellent weed and erosion suppressor
- Prostrate very dense plant growth
- Forms seed pods at, or below ground level

**Annual Ryegrass**
- Cool season grass
- Annual or perennial types
- Medium water use
- Fair salinity tolerance
- Will form arbuscular mycorrhizal associations
- Very good nitrogen scavenger

**Phacelia**
- Cool season broadleaf
- Upright plant
- Low water use and low salinity tolerance
- Very fibrous roots and good nitrogen catch crop
- Will form arbuscular mycorrhizal associations
- Attracts beneficial insects

**Buckwheat**
- Cool season broadleaf with warm season growth characteristics
- Upright plant
- Medium water use and poor salinity tolerance
- Enhances soil P availability
- Does not form arbuscular mycorrhizal associations
- Attracts pollinators very well

**Oil Seed Radish**
- Cool season broadleaf (Brassica)
- Upright and spreading plant
- High water use and poor salinity tolerance
- Very good nitrogen scavenger
- Can aid in reducing compaction
- Does not form arbuscular mycorrhizal associations

**Turnips**
- Cool season broadleaf (Brassica)
- Upright and spreading plant
- High water use and poor salinity tolerance
- Good at scavenging nitrogen
- Good forage production
- Does not form arbuscular mycorrhizal associations

**Dwarf Essex Rape**
- Cool season broadleaf
- Belongs to the cabbage family
- High protein and high energy level feed
- Very cold, heat and drought tolerant
- Valuable feed source when other crops are in a summer slump
- Good nutrient scavenger

**Hybrid Forage Brassicas**
- Works well in fall and spring plantings, as well as summer
- High protein and high energy level feed
- Usually very cold, heat, and drought tolerant
- Bred specifically for forage production and grazing
- Very good regrowth after grazing
- Very good RFV

**Ethiopian Cabbage**
- Unique multipurpose brassica cultivar
- Very good biofumigant
- Very fast growing
- Generally flowers in 60 days
- Effective taproot
- Up to 5,000 lb. DM/acre
**WINTER**

**Austrian Winter Peas**
- Cool season legume
- Upright plant
- Low water use
- Poor salinity tolerance
- Flowers attract pollinators
- Forms arbuscular mycorrhizal associations

**Common Vetch**
- Cool season legume
- Annual or biennial
- Prostrate plant
- Low to medium water use and poor salinity tolerance
- Forms arbuscular mycorrhizal associations
- Flowers attract pollinators

**Hairy Vetch**
- Cool season legume
- Prostrate plant
- Low to medium water use and poor salinity tolerance
- Forms arbuscular mycorrhizal associations
- Flowers attract pollinators

**Lupins**
- Cool season legume
- Upright plant
- Low water use
- Prefers acid soils
- Flowers attract pollinators
- Does not form arbuscular mycorrhizal associations

**Winter Barley**
- Cool season grass
- Upright plant
- Low water use and good salinity tolerance
- Benefits from arbuscular mycorrhizal associations
- Very good forage production
- Very good nitrogen scavenger

**Winter Triticale**
- Cool season grass
- Upright plant
- High water use and good salinity tolerance
- Excellent regrowth
- Very good forage quality and quantity
- Will form arbuscular mycorrhizal associations

**Winter Oats**
- Cool season grass
- Upright plant
- Walken oats have enough cold tolerance to survive our winters for the last 6 years
- Very good early and late forage production
- Medium water use and fair salinity tolerance
- Very good nitrogen scavenger
- Will form arbuscular mycorrhizal associations

**Cereal Rye**
- Cool season grass
- Upright plant
- High water use and good salinity tolerance
- Will form arbuscular mycorrhizal associations
- Very good nitrogen scavenger
- Very good residue builder

**Canola**
- Cool season broadleaf
- Annual and biennial
- Upright and spreading plant
- Medium water use and good salinity tolerance
- Very good at scavenging nitrogen and other nutrients from the soil
- Flowers attract pollinators, and it does not form arbuscular mycorrhizal associations

**PERENNIAL**

**Alfalfa**
- Perennial legume
- Upright plant
- High water use and poor salinity tolerance generally
- Non-dormant cultivators can perform like an annual
- Forms arbuscular mycorrhizal associations
- Flowers attract pollinators

**Red Clover**
- Legume
- Biennial or short lived perennial
- Upright plant
- Medium water use and poor salinity tolerance
- Forms arbuscular mycorrhizal associations
- Flowers attract pollinators

**Crimson Clover**
- Legume
- Biennial or short lived perennial
- Upright plant
- Thrives well on both well-drained sandy soils and clay type soils
- Does not do well in extreme cold or heat
- Good quick producer of nitrogen

**White Clover**
- Legume
- Perennial
- Upright plant
- Medium water use and poor salinity tolerance
- Forms arbuscular mycorrhizal associations
- Flowers attract pollinators

**Yellow Sweet Clover**
- Legume
- Annual/biennial
- Upright plant
- Medium water use and fair salinity tolerance
- Forms arbuscular mycorrhizal associations
- Flowers attract pollinators

**Chicory**
- Warm season broadleaf
- Perennial
- Upright and spreading plant (vine)
- Will form arbuscular mycorrhizal associations
- Attracts Pollinators it does not form arbuscular mycorrhizal associations
Kauffman Seeds only carries the best

LCS Chrome
HARD RED WINTER WHEAT
Blockbuster
yield & proven protein

LCS Mint
HARD RED WINTER WHEAT
Excellent
dryland performance

LCS Revere
HARD RED WINTER WHEAT
Excellent
drought & heat tolerance

Ask for premium LCS certified wheat seed today
Get cleaner fields + higher yields with the CoAXium Wheat Production System

Cost-effective, superior control of annual and perennial yield-robbing grassy weeds

**Elite Germplasm**
Elite LCS germplasm adapted to and proven in your growing region

**AXigen Trait**
Patented, non-GMO AXigen herbicide tolerance trait that works with Aggressor

**Aggressor Herbicide**
ACCase-inhibiting Aggressor herbicide that eliminates grassy weeds

**Stewardship**
Comprehensive stewardship that protects the integrity of CoAXium technology

**LCS Photon AX**
Increased yield & disease tolerance

Learn more about proven LCS varieties
LimagrainCerealSeeds.com/CP
### Smith’s Gold

<table>
<thead>
<tr>
<th>Yield</th>
<th>Grain-only yield</th>
<th>Dual-purpose yield</th>
<th>Forage yield</th>
<th>Test weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disease</td>
<td>Leaf rust</td>
<td>Stripe rust</td>
<td>Powdery mildew</td>
<td>SB/SS complex</td>
</tr>
<tr>
<td>Other Traits</td>
<td>Average or intermediate</td>
<td>Above-average or resistant</td>
<td>Above-average or resistant</td>
<td>Above-average or resistant</td>
</tr>
<tr>
<td>Shattering</td>
<td>Standability</td>
<td>Acid soils</td>
<td>Kernel size</td>
<td>Bread baking</td>
</tr>
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</table>

### Doublestop CL+

<table>
<thead>
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</tr>
</tbody>
</table>

### Gallagher

<table>
<thead>
<tr>
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</tr>
</tbody>
</table>

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**2020 WHEAT FIELD DAY**

**THURSDAY, MAY 21, 2020**

**KAUFFMAN SEEDS**
LARRY

- Top performing variety under intensive management
- Strong resistance to stripe rust
- Excels in environments of Central through Southern Kansas and into Oklahoma

Characteristics

<table>
<thead>
<tr>
<th>Plant Height</th>
<th>Medium Tall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maturity</td>
<td>Medium Late</td>
</tr>
<tr>
<td>Shattering</td>
<td>Good</td>
</tr>
<tr>
<td>Test Weight</td>
<td>Good</td>
</tr>
<tr>
<td>Winter Hardiness</td>
<td>Good</td>
</tr>
<tr>
<td>Drought Tolerance</td>
<td>Good</td>
</tr>
</tbody>
</table>

Pest and Disease Profile

- Leaf Rust
- Yellow (Stripe) Rust
- Hessian Fly
- Wheat Streak Mosaic Virus
- Soilborne Mosaic Virus
- Barley Yellow Dwarf
- Fusarium Head Blight

Rating Scale*: Excellent (1-2), Very Good (3-4), Good (5-6), Fair (7-8), Poor (9)

*Results tested by Kansas State Research and Extension

ZENDA

- Evolved from the top performing Everest variety
- Good stripe rust resistance with improved grain quality
- Excels in environments of Central and Eastern Kansas

Characteristics

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Rating Scale*: Excellent (1-2), Very Good (3-4), Good (5-6), Fair (7-8), Poor (9)

*Results tested by Kansas State Research and Extension
• #1 variety planted in Kansas
• Consistent performance
• Among highest rated tolerance to scab
• Most resistant to barley yellow dwarf

**EVEREST**
The “Go To” Variety for Kansas

- Top performing variety under intensive management
- Strong resistance to stripe rust
- Excels in environments of Central through Southern Kansas and into Oklahoma
- Evolved from the top performing Everest variety
- Good stripe rust resistance with improved grain quality
- Excels in environments of Central and Eastern Kansas

**#1 variety planted in Kansas**
**Consistent performance**
**Among highest rated tolerance to scab**
**Most resistant to barley yellow dwarf**

**Characteristics**
- **Plant Height**: Medium Tall
- **Maturity**: Medium Late
- **Shattering**: Good
- **Test Weight**: Good
- **Winter Hardiness**: Good
- **Drought Tolerance**: Good

**Pest and Disease Profile**
- **Leaf Rust**: 5
- **Yellow (Stripe) Rust**: 4
- **Hessian Fly**: 2
- **Wheat Streak Mosaic Virus**: 2
- **Soilborne Mosaic Virus**: 2
- **Barley Yellow Dwarf**: 2
- **Fusarium Head Blight**: 2

**Rating Scale**:
- Excellent (1-2), Very Good (3-4), Good (5-6), Fair (7-8), Poor (9)

*Results tested by Kansas State Research and Extension

**Number of People Fed by one Farmer**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
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<th></th>
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<tr>
<td>farmers</td>
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<td>16</td>
<td>26</td>
<td>47</td>
<td>76</td>
<td>100</td>
<td>155</td>
</tr>
</tbody>
</table>

As stewards of the land, we’re challenged every year to produce more from the acres we manage. Developed by K-State researchers to best meet the needs of Great Plains farmers, the Kansas Wheat Alliance is proud to introduce this season’s genetically superior varieties.

For more information please call 785.320.4080
or visit our website at www.kswheatalliance.org
AgriPro® Brand Hard Red

**SY Benefit**

*Stripe Rust and Scab Tolerance*
- Fusarium head blight tolerance similar to Everest
- Better stripe rust resistance than Everest
- Good mill and bake quality
- Medium maturity, short height, and aluminum tolerance

**SY Wolverine**

*New for 2020*
- Outstanding yield potential
- Early/medium maturity with stiff straw
- Good wheat streak tolerance
- As tough and tenacious as its name!

**SY Grit**

*Straw Strength and Drought Tolerance*
- The best straw strength in our lineup
- Good drought tolerance
- Medium early maturity
- Good disease package
- Maintains height in drought conditions, stands well in good conditions

**SY Achieve CL²**

*Two-Gene with Early Maturity*
- Two-gene CL variety with very high yield
- Excellent grazing potential
- Earlier maturity than other two-gene varieties
- Good stripe and leaf rust tolerance
- Good quality and good test weights
Winter Wheat Varieties

**SY Monument**

**Disease and Drought Tolerance**
- Broadly adapted with top end yields across the area of adaptation
- Tolerance to leaf and stripe rust
- High tillering with good head size
- Excellent acid soil tolerance and Soil Borne Mosaic Virus resistance

**Bob Dole**

**Leaf Health and High End-Use quality**
- Good disease package—leaf rust, stripe rust, fusarium head blight
- Consistent performance over years
- Excellent end-use quality
- Taller, medium maturating variety

**SY Rugged**

**The Dryland Performer**
- High yields across environments
- Very good test weights
- Good rust tolerance—leaf and stripe
- Good drought tolerance

AgriPro® brand varieties are developed by North America’s largest breeding program to deliver the agronomic traits you need for superior performance. Available as certified seed grown and distributed locally. For more information visit [www.AgriProWheat.com](http://www.AgriProWheat.com).

Protect your crop with leading seed treatments from Syngenta