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2 Corn

Since 1884, NK has earned a reputation for innovation.

1884 Among the companies operating today, Northrup King was the first to sell seed corn.
1922 One of the first private seed companies to create a formal research program.
1973 First private company to sell a proprietary soybean variety, S1474.
1993 First company to introduce bulk soybean containers, Q-Bit®.
1996 First company to market Bt seed corn.
1999 First company to market TruBulk® for easier delivery of soybean seed.
From day one, NK® has been forward-thinking and driven by science. We continue to live up to this legacy through strong investments in R&D, committed field support teams and an award-winning data analytics program.

Our latest advancements include high-speed trait conversion, which brings NK hybrids and varieties to market faster than before. The latest gene-editing technology helps NK seed breeders and scientists pinpoint high performing genetics. All done with one goal in mind—to help growers maximize whole-farm ROI potential.

**Latest technology**
Our technological advancements have allowed us to develop 12 new trait stacks in 13 years. These Agrisure® corn traits help growers protect genetic potential from pests while also optimizing water usage.

Our technology goes beyond the field and into the feedlot and ethanol plant. Enogen® and Enogen Feed offer a unique in-seed innovation that can help improve the profit potential of fields, feedlots or dairy farms.

**Proven genetics**
Yield is the most important factor when choosing a hybrid, and the NK hybrid yield results speak for themselves. In 2018, NK hybrids secured more than 100 top-10 finishes across 14 states in trials conducted by Farmers’ Independent Research of Seed Technologies (FIRST), including 28 top-three appearances.

**Incredible value**
ROI isn’t all about high yields. It’s a combination of several factors. Like market conditions, choosing seeds with consistent and excellent performance, competitive pricing and committed partners. And, it’s finding unique opportunities to offer growers greater value like we do with Enogen and Enogen Feed. NK is the complete package, helping growers achieve a better return on investment.

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1 Farmers’ Independent Research of Seed Technologies (FIRST). No product recommendation by FIRST is implied. See firstseedtests.com for details.
When it comes to yield, NK corn hybrids with Agrisure traits are among the best in the business. And for your business. The newest NK hybrids launched in 2019 outyielded major competitors in pre-launch trials by as much as 5.4 bu/A.

But that’s not all. NK breeders are constantly leveraging the award-winning R&D capabilities of Syngenta to deliver cutting-edge corn and soybean technology. This includes state-of-the-art trait conversion techniques that significantly shorten the breeding process and bring new products to market faster than ever before.

We’re also making advancements on the digital frontier with a digital seed selector tool that offers field-specific optimized seed recommendations based on local data, weather pattern history and more. NKcorn.com

Seeds built to boost your bottom line.

Protect yield potential with the latest trait technology.

Innovative Agrisure traits are designed with one thing in mind: to protect a grower’s investment in high-performance NK genetics. Our advanced Agrisure traits portfolio offers a wide choice of market-leading trait stacks to fit the unique needs of every acre. From proactively managing corn rootworm to controlling western bean cutworm to water optimization, count on Agrisure traits to safeguard NK genetics and help improve ROI.

Industry-leading insect control
Agrisure trait stacks offer in-seed control options for up to 16 key corn insect pests, with options for above- and below-ground control. AgrisureTraits.com

Agrisure Duracade®
Controlling corn rootworm (CRW) is important. So is managing resistance. By rotating with other traits, growers can help ensure corn rootworm trait technologies will be effective for the long term.

Trait stacks with the Agrisure Duracade trait express a unique protein that binds differently in the gut of corn rootworm that is essential to successful CRW management.

Agrisure Duracade 5222 E-Z Refuge® is the ultimate trait stack for insect control, simplicity and choice, providing protection from 16 above- and below-ground pests.

Agrisure Viptera®
Above-ground Agrisure trait stacks offer industry-leading control of ear-, stalk- and leaf-feeding insects for reduced insect damage, noticeably healthier ears and more kernels.

Trait stacks featuring Agrisure Viptera offer access to the only trait available that effectively controls western bean cutworm—no other trait in the industry provides better or more complete above-ground insect control.

Agrisure Viptera 3330 E-Z Refuge® trait stack includes three modes of action for key lepidopteran pests, including corn earworm.

Season-long drought protection
All Agrisure trait stacks are also available in hybrids with Agrisure Artesian® technology to maximize yield when it rains and increase yield when it doesn’t.

Agrisure Artesian
The most advanced water optimization technology on the market.

A simple, efficient way to help manage the unpredictability of weather.

Many trait stacks are available with E-Z Refuge seed blend, offering a convenient in-bag refuge.

To learn more about the elite Agrisure traits portfolio, visit AgrisureTraits.com
CORN CHARACTERISTICS

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>TRAIT OFFERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above/Below Ground</td>
<td>Above Ground</td>
</tr>
<tr>
<td>Insect Protection with</td>
<td>Insect Protection with</td>
</tr>
<tr>
<td>E-Z Refuge</td>
<td>E-Z Refuge</td>
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<tr>
<td><strong>Agrisure Duracade</strong></td>
<td><strong>Agrisure 3122</strong></td>
</tr>
<tr>
<td><strong>Agrisure Viptera</strong></td>
<td><strong>Agrisure Viptera</strong></td>
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<tr>
<td><strong>Agrisure GT/LL</strong></td>
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<tr>
<td>NK Hybrid Series</td>
<td></td>
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<tr>
<td>NK7706</td>
<td></td>
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<tr>
<td>NK7837</td>
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<tr>
<td>NK8005</td>
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<td>NK8204</td>
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<tr>
<td>NK8455</td>
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<tr>
<td>NK8519</td>
<td>3220</td>
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<tr>
<td>NK8618</td>
<td>3220A <strong>NEW</strong></td>
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<tr>
<td>NK8881</td>
<td>3220A</td>
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<td>NK8920</td>
<td>5122A <strong>NEW</strong></td>
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<tr>
<td>NK9227</td>
<td>5222A <strong>NEW</strong></td>
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<tr>
<td>NK9468 <strong>NEW</strong></td>
<td>5122A <strong>NEW</strong></td>
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<tr>
<td>NK9610 <strong>NEW</strong></td>
<td>5122 <strong>NEW</strong></td>
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<td>NK9738</td>
<td>5222</td>
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<tr>
<td>NK9813</td>
<td>5122</td>
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<tr>
<td>NK9930 <strong>NEW</strong></td>
<td>5122 <strong>NEW</strong></td>
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<tr>
<td>NK0199</td>
<td>5122 <strong>NEW</strong></td>
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<tr>
<td>NK0243 <strong>NEW</strong></td>
<td>5122 <strong>NEW</strong></td>
</tr>
<tr>
<td>NK0440</td>
<td>3122</td>
</tr>
<tr>
<td>NK0472 <strong>NEW</strong></td>
<td>5222 <strong>NEW</strong></td>
</tr>
</tbody>
</table>

Flex hybrids adjust to growing conditions by changing ear length or kernel depth. Determinate/Fixed hybrids are less able to adjust ear size. Plant Population is considered more important for a determinate-ear hybrid than for a flex-ear hybrid. Ratings are based on interpretation of data gathered by Syngenta and/or observations across areas of adaptation and may change as additional data is gathered.

Seed products with the LibertyLink® (LL) trait are resistant to the herbicide glufosinate ammonium, an alternative to glyphosate in corn, and combine high-yielding genetics with the powerful, non-selective, postemergent weed control of Liberty® herbicide.
### MATURITY INFORMATION
- **Relative Maturity (RM):** Emergence to Silk, GDUs to Black Layer.

### AGRONOMIC CHARACTERISTICS
- **GDUs to Silk:**
  - 77 1080 1815
  - 78 1150 1890
  - 80 1150 1810
  - 82 1210 2075
  - 84 1200 2100
  - 85 1220 2140
  - 86 1200 2140
  - 88 1205 2280
  - 89 1215 2280
  - 91 1240 2300
  - 92 1265 2325
  - 94 1260 2400
  - 95 1280 2400
  - 96 1245 2365
  - 97 1275 2400
  - 98 1295 2410
  - 99 1315 2420
  - 101 1335 2460
  - 102 1305 2475
  - 104 1385 2570
  - 104 1335 2445

### PLANT CHARACTERISTICS
- **Plant Height:** 1 = Tall, 9 = Short.
- **Ear Height:** 1 = High, 9 = Low.
- **Root Type:** P = Penetrating, M = Modified, F = Fibrous.
- **Ear Flex:** F = Flex, SF = Semi-Flex, DF = Determinate.
- **LEAF TYPE:** U = Upright, S-U = Semi-Upright, P = Pendulum.
- **Husk Cover:** S = Short, M = Medium, L = Long.
- **Cob Color:** R = Red, Pi = Pink, W = White.
- **Drought:** Agrisure Artesian water-optimized hybrid.

### DISEASE TOLERANCE
- **Gray Leaf Spot:** 1 = High, 9 = Low.
- **Southern Corn Leaf Blight:** 1 = High, 9 = Low.
- **Northern Corn Leaf Blight:** 1 = High, 9 = Low.
- **Goss's Wilt:** 1 = High, 9 = Low.
- **Eyespot:** 1 = High, 9 = Low.
- **Anthracnose Stalk Rot:** 1 = High, 9 = Low.
- **Fusarium Crown Rot:** 1 = High, 9 = Low.
- **Common Rust:** 1 = High, 9 = Low.

### PRODUCT
- **NK Hybrid Series:**
  - NK7706
  - NK7837
  - NK6005
  - NK8204
  - NK8455
  - NK8519
  - NK8618
  - NK8881
  - NK8920
  - NK9175
  - NK9227
  - NK9468
  - NK9535
  - NK9610
  - NK9738
  - NK9813
  - NK9930
  - NK0199
  - NK0243
  - NK0440
  - NK0472

### RATING SCALE
- **1 = High**
- **9 = Low**
- **- = Not available**
**NK7837**

**GREAT DROUGHT TOLERANCE FOR CONSISTENT YIELDS**

- Broad adaptation across yield environments
- Very good emergence and vigor
- Heavy test weight with good grain quality

Rating:
- Emergence: 9
- Root Strength: 7
- Stalk Strength: 5
- Staygreen: 3
- Drydown: 1

NK7837-3220 E-Z Refuge®

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**NK8005 Artesian**

**SUPERIOR YIELD COMBINED WITH AGRISURE ARTESIAN TECHNOLOGY**

- Maximizes yield when it rains; increases yield when it doesn’t
- Broad adaptability allows wide placement across the Northern Corn Belt
- Heavy test weight

Rating:
- Emergence: 9
- Root Strength: 7
- Stalk Strength: 5
- Staygreen: 3
- Drydown: 1
- Season Long Drought Protection

NK8005-3220A E-Z Refuge®
NK8005-GTA/LL®

---

**NK8204**

**EXCITING YIELD PERFORMANCE WITH QUICK DRYDOWN**

- Maximum yields on highly productive soils
- Very strong roots for season-long standability
- Strong emergence with great early vigor

Rating:
- Emergence: 9
- Root Strength: 7
- Stalk Strength: 5
- Staygreen: 3
- Drydown: 1

NK8204-3220 E-Z Refuge®

---

**NK8455 Artesian**

**EXCITING YIELD LEVELS PAIRED WITH AGRISURE ARTESIAN TECHNOLOGY**

- Maximizes yield when it rains; increases yield when it doesn’t
- Strong emergence and great vigor for a fast start
- Short plant stature with outstanding roots and stalks

Rating:
- Emergence: 9
- Root Strength: 7
- Stalk Strength: 5
- Staygreen: 3
- Drydown: 1
- Season Long Drought Protection

NK8455-3220A E-Z Refuge®
NK8455-GTA/LL®

---

**NK8519**

**CONSISTENT PERFORMANCE ACROSS ENVIRONMENTS**

- Strong stalks for season-long standability
- Outstanding drought tolerance for consistent yields
- Dependable emergence with excellent seedling vigor

Rating:
- Emergence: 9
- Root Strength: 7
- Stalk Strength: 5
- Staygreen: 3
- Drydown: 1

NK8519-5222 E-Z Refuge®
NK8519-3220 E-Z Refuge®

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**NK8618 Artesian**

**ELITE GENETICS WITH AGRISURE ARTESIAN TECHNOLOGY**

- Maximizes yield when it rains; increases yield when it doesn’t
- Strong stalks and roots for season-long standability
- Superior drought tolerance with heavy test weight

Rating:
- Emergence: 9
- Root Strength: 7
- Stalk Strength: 5
- Staygreen: 3
- Drydown: 1
- Season Long Drought Protection

NK8618-3120A E-Z Refuge®
NK8618-GTA®

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To order, contact your NK retailer or call 1-800-258-0521 or visit NKSeeds.com
<table>
<thead>
<tr>
<th><strong>NK8881 Artesian</strong></th>
<th><strong>NK8920</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NEW GENETICS WITH AGRISURE ARTESIAN TECHNOLOGY</strong></td>
<td><strong>EXCITING YIELD WITH WIDEST ADAPTATION</strong></td>
</tr>
<tr>
<td>• Maximizes yield when it rains; increases yield when it doesn’t</td>
<td>• Excellent emergence and seedling vigor for a fast start</td>
</tr>
<tr>
<td>• Western-adapted hybrid with excellent stress tolerance</td>
<td>• Moderate stature with strong roots and stalks</td>
</tr>
<tr>
<td>• Semi-flex ear type allows population flexibility</td>
<td>• Superb staygreen and late-season plant health</td>
</tr>
<tr>
<td>Rating: 9</td>
<td>Rating: 9</td>
</tr>
<tr>
<td>Emergence: 7</td>
<td>Root Strength: 7</td>
</tr>
<tr>
<td>Stalk Strength: 5</td>
<td>Stalk Strength: 6</td>
</tr>
<tr>
<td>Staygreen: 3</td>
<td>Staygreen: 5</td>
</tr>
<tr>
<td>Drydown: 7</td>
<td>Drought: 1</td>
</tr>
<tr>
<td>Season-Long Drought Protection: NW</td>
<td>Season-Long Drought Protection: NW</td>
</tr>
<tr>
<td>NK8881-3120A E-Z Refuge® brand</td>
<td>NK8920-5122 E-Z Refuge® brand</td>
</tr>
<tr>
<td><strong>NK9175 Artesian</strong></td>
<td><strong>NK9227 Artesian</strong></td>
</tr>
<tr>
<td><strong>TOP-END YIELD POTENTIAL WITH WIDEST ADAPTATION</strong></td>
<td><strong>EXCITING YIELD LEVELS PAIRED WITH AGRISURE ARTESIAN TECHNOLOGY</strong></td>
</tr>
<tr>
<td>• Exceptional early disease package</td>
<td>• Maximizes yield when it rains; increases yield when it doesn’t</td>
</tr>
<tr>
<td>• Consistent performance brings exciting yield levels to this maturity range</td>
<td>• Superb stalk strength for ease of harvest</td>
</tr>
<tr>
<td>• Outstanding drought tolerance in the Northern Corn Belt</td>
<td>• Very good staygreen and drydown</td>
</tr>
<tr>
<td>Rating: 9</td>
<td>Rating: 9</td>
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<tr>
<td>Emergence: 7</td>
<td>Root Strength: 7</td>
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<tr>
<td>Stalk Strength: 5</td>
<td>Stalk Strength: 6</td>
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<tr>
<td>Staygreen: 3</td>
<td>Staygreen: 5</td>
</tr>
<tr>
<td>Drydown: 7</td>
<td>Drought: NW</td>
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<tr>
<td>Season-Long Drought Protection: NW</td>
<td>Season-Long Drought Protection: NW</td>
</tr>
<tr>
<td>NK9175-3110A® brand</td>
<td>NK9227-5222A E-Z Refuge® brand</td>
</tr>
<tr>
<td><strong>NK9468 Artesian</strong></td>
<td><strong>NK9535</strong></td>
</tr>
<tr>
<td><strong>COMPLETE AGRONOMIC PACKAGE TO SUPPORT OUTSTANDING YIELD POTENTIAL</strong></td>
<td><strong>DIVERSE GENETICS WITH EXCITING YIELD PERFORMANCE</strong></td>
</tr>
<tr>
<td>• Agrisure Artesian technology to maximize yield when it rains; increases yield when it doesn’t</td>
<td>• Broad adaptation across yield environments</td>
</tr>
<tr>
<td>• Excellent stalk strength</td>
<td>• Superb stalks for season-long standability</td>
</tr>
<tr>
<td>• Diverse genetics allow for broad placement</td>
<td>• Solid agronomics for continuous corn acres</td>
</tr>
<tr>
<td>Rating: 9</td>
<td>Rating: 9</td>
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<tr>
<td>Emergence: 7</td>
<td>Root Strength: 7</td>
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<tr>
<td>Stalk Strength: 5</td>
<td>Stalk Strength: 6</td>
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<tr>
<td>Staygreen: 3</td>
<td>Staygreen: 5</td>
</tr>
<tr>
<td>Drydown: 7</td>
<td>Drought: NW</td>
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<tr>
<td>Season-Long Drought Protection: NW</td>
<td>Season-Long Drought Protection: NW</td>
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<tr>
<td>NK9468-5122A E-Z Refuge® brand</td>
<td>NK9535-3220 E-Z Refuge® brand</td>
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<tr>
<td><strong>NK9535</strong></td>
<td><strong>NK9535</strong></td>
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<tr>
<td><strong>DIVERSE GENETICS WITH EXCITING YIELD PERFORMANCE</strong></td>
<td><strong>DIVERSE GENETICS WITH EXCITING YIELD PERFORMANCE</strong></td>
</tr>
<tr>
<td>• Broad adaptation across yield environments</td>
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<tr>
<td>• Superb stalks for season-long standability</td>
<td>• Superb stalks for season-long standability</td>
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<tr>
<td>Staygreen: 3</td>
<td>Staygreen: 5</td>
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<tr>
<td>NK9535-3220 E-Z Refuge® brand</td>
<td>NK9535-5122A E-Z Refuge® brand</td>
</tr>
</tbody>
</table>
NK9610
CONSISTENT PERFORMER WITH STRONG AGRONOMICS

- Strong roots and stalks for season-long standability
- Yield maximized when placed on highly managed acres
- Excellent tolerance to moderate-to-poorly drained soils

Rating
Emergence 9 7 5 3
Root Strength
Stalk Strength
Staysgreen
Drought

NK9610-5122 E-Z Refuge

RM: 96

NK9738
EXCELLENT YIELD PERFORMANCE IN HIGH-YIELD ENVIRONMENTS

- Dependable emergence with strong early vigor
- Responds well to high populations
- Superb stalks for season-long standability

Rating
Emergence 9 7 5 3
Root Strength
Stalk Strength
Staysgreen
Drought

NK9738-5222 E-Z Refuge
NK9738-3220 E-Z Refuge

RM: 97

NK9813
BROADLY ADAPTED PRODUCT WITH STRONG DROUGHT TOLERANCE

- Strong stalks and late-season plant health provide very good harvestability
- Solid agronomic characteristics for consistent performance
- Very good dual purpose hybrid

Rating
Emergence 9 7 5 3
Root Strength
Stalk Strength
Staysgreen
Drought

NK9813-5122 E-Z Refuge

RM: 98

NK9930
GREAT YIELD STABILITY ACROSS ENVIRONMENTS

- Shorter plant stature with medium ear placement
- Strong drought tolerance
- Solid stalks and roots for season-long standability

Rating
Emergence 9 7 5 3
Root Strength
Stalk Strength
Staysgreen
Drought

NK9930-5122 E-Z Refuge

RM: 99

NK0199
Artesian
EXCITING YIELD LEVELS PAIRED WITH AGRISURE ARTESIAN TECHNOLOGY

- Maximizes yield when it rains; increases yield when it doesn’t
- Well suited to continuous corn environments
- Dependable stalks with superior late-season plant health

Rating
Emergence 9 7 5 3
Root Strength
Stalk Strength
Staysgreen
Drought

Season-Long Drought Protection

NK0199-3122 A-Z Refuge
NK0199-GTA/LL

RM: 101

NK0243
EXCELLENT AGRONOMICS IN A BROADLY ADAPTED HYBRID

- Strong stalks and roots deliver season long standability
- Strong late season plant health for harvest flexibility
- Great emergence and vigor for fast stand establishment in cooler environments

Rating
Emergence 9 7 5 3
Root Strength
Stalk Strength
Staysgreen
Drought

Season-Long Drought Protection

NK0243-5122 E-Z Refuge
NK0243-3120 E-Z Refuge

RM: 102

To order, contact your NK retailer or call 1-800-258-0521 or visit NKSeeds.com
Control more insects, above and below ground.

Talk to your local NK® retailer about defending your yield.
AgrisureDuracade.com
## CORN AGRONOMIC MANAGEMENT

### PRODUCT | AGRONOMIC MANAGEMENT AND PLACEMENT TRAITS | END-USE TRAITS
--- | --- | ---
 | SEEDING RATE % ADJUSTMENT | ADAPTATION TO SOIL TYPES/YIELD ENVIRONMENTS | 

### INFLUENCE OF YIELD ENVIRONMENT AND COMMODITY PRICE ON OPTIMUM SEEDING RATE

<table>
<thead>
<tr>
<th>YIELD ENVIRONMENT (BU/A)</th>
<th>HIGHEST YIELDING SEEDING RATE (SEEDS/A)</th>
<th>OPTIMUM SEEDING RATE (SEEDS/A) BY COMMODITY PRICE ($/BU) (SEED COST = $200/80K UNIT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>$3.00</td>
</tr>
<tr>
<td>280</td>
<td>40,200</td>
<td>36,600</td>
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<td>240</td>
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<tr>
<td>160</td>
<td>33,800</td>
<td>26,900</td>
</tr>
<tr>
<td>120</td>
<td>29,700</td>
<td>20,900</td>
</tr>
</tbody>
</table>

### RATING SCALE | SCORE INTERPRETATION | DROUGHT
---|---|---
1 = Best | = Best Choice | Agrisure Artesian
9 = Worst | = Good Choice | water-optimized hybrid.
- = Not available | = Average to Slightly Below Average |
| = Not Recommended | = Not Available |
Agromony ratings are based on statistically analyzed results of studies conducted by Syngenta and are relative to other hybrids within the same maturity group.

### GENERAL INTERPRETATION OF HYBRID RESPONSE TO MANAGEMENT/PLACEMENT SITUATIONS AND END-USE TRAITS

**Seeding Rate % Adjustment**: Indicates how well a hybrid responds to lower or higher planting populations. Your local NK retailer has a calculator tool to help determine optimal seedling population for various environments.

**Adaptation to Soil Types/Yield Environments**: Ratings and soil type classifications are based on interpretation of studies conducted by Syngenta. Continuous Corn: Ratings indicate whether hybrid contains multiple agronomic phenotypic traits deemed important for continuous corn systems. Ratings are weighted based on the individual hybrid characteristics: emergence strength, early vigor, root and stalk strength, staygreen and yield.

**High pH Performance**: Ratings represent an assessment of stand establishment, chlorosis severity and yield performance.

**End-Use Traits**: Ratings indicate end-use suitability based on the level of each grain quality characteristic.

**Feed to Gain**: Favorable ratings indicate hybrids with kernel density and weight associated with optimized feed to gain in a dry-rolled corn ration according to independent testing.

### CORN POPULATION RESPONSE FACTORS

This annual study aids growers’ understanding of how yield environment, grain price, seed cost and hybrid population response influence seeding rate recommendations. Information from this study is useful in determining the optimum planting population for each hybrid and field.
# CORN SILAGE HYBRID SELECTION

Silage quality and yield scores are based on actual tonnage—the silage analysis values were compared to hybrids of similar maturity.

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>AGRONOMIC CHARACTERISTICS</th>
<th>DISEASE TOLERANCE</th>
<th>AGRONOMIC RESEARCH RATINGS</th>
<th>FEED EFFECT ON*</th>
</tr>
</thead>
<tbody>
<tr>
<td>NK Hybrid Series</td>
<td>Relative Maturity (RM)</td>
<td>Emergence</td>
<td>Root Strength</td>
<td>Drought</td>
</tr>
<tr>
<td>NK7706</td>
<td>77</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>NK8204</td>
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**NOTE:** Hybrid characteristics such as staygreen and drought stress tolerance are also important to consider when selecting hybrids for silage. Digestibility ratings are based on NIR and in-vitro digestibility analysis. Milk performance estimates generated from University of Wisconsin equations. Comparisons should only be made among hybrids within a maturity group. Although actual silage yield and quality analysis of a hybrid will vary with environment, the relative ranking of a hybrid will be similar. These ratings are a relative performance guide. Conduct a laboratory test to determine actual silage quality when balancing a feed ration.

**USING THIS CHART**

**Yield:** Calculated on a per-acre basis and adjusted to standard moisture.

**Crude Protein (CP):** Indicates the percent content of feed component relative to other hybrids.

**Neutral Detergent Fiber (NDF):** Measure of the indigestible and slowly digestible components of the silage.

**Neutral Detergent Fiber Digestibility 48 Hour (NDFD 48 hr):** Estimates the ruminant digestibility of the NDF fraction.

**Starch:** Indicates the percent content of feed component.

**Total Digestible Nutrients (TDN):** Sum of the digestibility of different nutrients.

**Net Energy Lactation (NEL):** Feed effect on net energy for lactating cows based on acid detergent fiber (ADF).

**Milk/Ton:** An estimate of forage quality driven by starch content, starch digestibility and NDF. Milk/A combines the estimate of forage quality (Milk/Ton) and yield (Tons/A) into a single term.**

**Beef/Ton:** A proprietary estimate of forage quality driven by TDN; Beef/A combines the estimate of forage quality (Beef/Ton) and yield (Tons/A) into a single term.

**RATING SCALE**

1 = Best
9 = Worst
- = Not Available

**PLANT HEIGHT**

1 = Tall
9 = Short

**EAR HEIGHT**

1 = High
9 = Low

**RATINGS KEY**

★ = Best Choice
★ = Good Choice
▼ = Average to Slightly Below Average
★ = Not Recommended
- = Not Available

**DROUGHT**

Agrisure Artesian water-optimized hybrid.

**NOTE:** These ratings should not be used to estimate actual production per animal, but instead they should be used to determine relative overall silage quality and yield of each hybrid.

Feed with more ROI potential.

Enogen Feed hybrids don’t just offer excellent yield potential across a variety of soil types and conditions.

The proven trait also boosts the energy potential of a feedlot or dairy ration. Enogen technology increases starch availability, digestibility, total digestive nutrients and silage quality, and can increase the feed efficiency of a beef cattle production by an average of 5 percent. And when incorporated into a dairy ration, predictive modeling software has indicated a potential 3–5 percent gain in potential income over feed cost.

Putting Enogen Feed to work on the farm is as easy as replacing the grain or silage currently grown and fed and complying with simple stewardship requirements. To learn more, visit EnogenFeed.com

INVEST IN ENERGY.

The first biotech corn output trait designed for ethanol production, Enogen increases ROI potential. Featuring corn enzyme technology, Enogen helps ethanol plant profitability by increasing potential throughput and reducing natural gas, water and electricity use. Available in industry-leading trait packages with high-yielding genetics, Enogen is another way NK is helping growers find unique ways to boost profitability.

1 University of Nebraska Lincoln research study, 2016.
2 Syngenta contract research, 2016.
### ENOGEN HYBRID CHARACTERISTICS

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>TRAIT OFFERS*</th>
<th>MATURITY INFORMATION</th>
<th>AGRONOMIC CHARACTERISTICS</th>
<th>PLANT CHARACTERISTICS</th>
<th>DISEASE TOLERANCE</th>
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<td>Enogen Hybrid Series</td>
<td>Above/Below Ground Protection</td>
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<td>Test Weight</td>
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</table>

**RATING SCALE**

- **PLANT HEIGHT**
  - 1 = Tall
  - 9 = Short
  - - = Not available

- **TEST WEIGHT**
  - 1 = High
  - 9 = Low

- **ROOT TYPE**
  - P = Penetrating
  - M = Modified
  - F = Fibrous

- **LEAF TYPE**
  - U = Upright
  - S-U = Semi-Upright
  - P = Pendulum

- **EAR FLEX**
  - F = Flex
  - SF = Semi-Flex
  - SD = Semi-Determinate
  - D = Determinate

- **HUSK COVER**
  - S = Short
  - M = Medium
  - L = Long

- **COB COLOR**
  - R = Red
  - Pi = Pink
  - W = White

- **DROUGHT**
  - Agrisure Artesian water-optimized hybrid.

Flex hybrids adjust to growing conditions by changing ear length or kernel depth. Determine/Fixed hybrids are less able to adjust ear size. Plant Population is considered more important for a determinate-ear hybrid than for a flex-ear hybrid.

**NOTE: DISEASE AND INSECT RATINGS**

Ratings are not absolute; environmental conditions and certain cultural practices, such as continuous corn, play a critical role in disease development and insect infestation, which can, in turn, predispose plants to secondary disease such as stalk and ear rots. If conditions are severe, even hybrids rated as resistant can be adversely affected. Growers should balance yield potential, hybrid maturity and cultural practices against the anticipated risk of disease or insect pressure.

Ratings are based on interpretation of statistically analyzed results of studies conducted by Syngenta.

*HERBICIDE TOLERANCE FOR AGRISURE TRAITS IN ENOGEN HYBRIDS*

Examples of Enogen hybrid-specific trait herbicide tolerance:

- **3000GT-EVT3/3011A-EVT3**: Can only be sprayed with glyphosate; cannot be sprayed with glufosinate.
- **3000GT-EVT5.1**: Can be sprayed with glyphosate and glufosinate.
- **All Enogen 5122/5122A**: Can only be sprayed with glyphosate; cannot be sprayed with glufosinate.

Important: Always read and follow label and bag tag instructions; only those labeled as tolerant to glufosinate may be sprayed with glufosinate ammonium-based herbicides.

Seed products with the LibertyLink (LL) trait are resistant to the herbicide glufosinate ammonium, an alternative to glyphosate in corn, and combine high-yielding genetics with the powerful, non-selective, postemergent weed control of Liberty herbicide.

![Agrisure Artesian water-optimized hybrid.](image-url)
E080Q1 Artesian

**SUPERIOR YIELD COMBINED WITH AGRISURE ARTESIAN TECHNOLOGY**

- Maximizes yield when it rains; increases yield when it doesn’t
- Broad adaptability allows wide placement across the Northern Corn Belt
- Heavy test weight

**Rating**

- Emergence
- Root Strength
- Stalk Strength
- Staygreen
- Drydown
- Season-Long Drought Protection

**E080Q1-5122A E-Z Refuge brand**

---

E086J9 Artesian

**ELITE GENETICS WITH AGRISURE ARTESIAN TECHNOLOGY**

- Maximizes yield when it rains; increases yield when it doesn’t
- Strong stalks and roots for season-long standability
- Superior drought tolerance with heavy test weight

**Rating**

- Emergence
- Root Strength
- Stalk Strength
- Staygreen
- Drydown
- Season-Long Drought Protection

**E086J9-5122A E-Z Refuge brand**

---

E092T4

**TOP-END YIELD POTENTIAL WITH BROAD ADAPTATION**

- Superior grain yields across changing soil types
- Very good drought tolerance and drydown
- Great dual purpose silage option

**Rating**

- Emergence
- Root Strength
- Stalk Strength
- Staygreen
- Drydown
- Drought

**E092T4-3000GT brand**

---

E095D3

**DIVERSE GENETICS WITH EXCITING YIELD PERFORMANCE**

- Broad adaptation across yield environments
- Superb stalks for season-long standability
- Solid agronomics for continuous corn acres

**Rating**

- Emergence
- Root Strength
- Stalk Strength
- Staygreen
- Drydown
- Drought

**E095D3-5122 E-Z Refuge brand**

---

E101P5 Artesian

**EXCITING YIELD LEVELS PAIRED WITH AGRISURE ARTESIAN TECHNOLOGY**

- Maximizes yield when it rains; increases yield when it doesn’t
- Well suited to continuous corn environments
- Dependable stalks with superior late-season plant health

**Rating**

- Emergence
- Root Strength
- Stalk Strength
- Staygreen
- Drydown
- Season-Long Drought Protection

**E101P5-3011A brand**

---

E105T1

**EXCELLENT TOP-END YIELD WITH STRONG AGRONOMICS TO MAXIMIZE GROWER PRODUCTIVITY**

- Adapted to continuous corn acres
- Fantastic late-season plant health and stalk strength allow movement south of zone
- Good drought tolerance allows for flexible placement on soil types

**Rating**

- Emergence
- Root Strength
- Stalk Strength
- Staygreen
- Drydown
- Drought

**E105T1-3000GT brand**

---

To order, contact your NK retailer or call 1-800-258-0521 or visit NKSeeds.com
ENOGEN HYBRID AGRONOMIC MANAGEMENT

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>AGRONOMIC MANAGEMENT AND PLACEMENT TRAITS</th>
<th>END-USE TRAITS</th>
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CORN POPULATION RESPONSE FACTORS
This annual study aids growers’ understanding of how yield environment, grain price, seed cost and hybrid population response influence seeding rate recommendations. Information from this study is useful in determining the optimum planting population for each hybrid and field.

INFLUENCE OF YIELD ENVIRONMENT AND COMMODITY PRICE ON OPTIMUM SEEDING RATE

<table>
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<tr>
<th>YIELD ENVIRONMENT (BU/A)</th>
<th>HIGHEST YIELDING SEEDING RATE (SEEDS/A)</th>
<th>OPTIMUM SEEDING RATE (SEEDS/A) BY COMMODITY PRICE ($/BU) (SEED COST = $200/80K UNIT)</th>
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RATING SCALE
1 = Best
9 = Worst
- = Not available

SCORE INTERPRETATION
- = Best Choice
= Good Choice
- = Average to Slightly Below Average
- = Not Recommended
- = Not Available

DROUGHT
Agrisure Artesian water-optimized hybrid.

AGRONOMY RATINGS ARE BASED ON STATISTICALLY ANALYZED RESULTS OF STUDIES CONDUCTED BY SYNGENTA. AGRONOMY RATINGS ARE RELATIVE BASED ON OTHER HYBRIDS WITHIN THE SAME MATURITY GROUP.

GENERAL INTERPRETATION OF HYBRID RESPONSE TO MANAGEMENT/PLACEMENT SITUATIONS AND END-USE TRAITS

Seeding Rate % Adjustment: The seeding rate columns indicate how well a hybrid responds to lower or higher planting populations. Your local Syngenta Representative has a calculator tool to help determine the optimal seeding population for various environments in your local geography.

Adaptation to Soil Types/Yield Environments: Ratings and soil type classifications are based on interpretation of studies conducted by Syngenta.

Continuous Corn Agronomic Characteristics: Favorable ratings in this column indicate hybrids containing multiple agronomic phenotypic traits deemed important for fields where corn is being cultivated for consecutive years. Ratings are weighted based on the following individual hybrid characteristics: yield, emergence strength, early vigor, root and stalk strength, staygreen and foliar disease tolerance.

High pH Performance: Ratings represent an assessment of stand establishment, chlorosis severity and yield performance.

End-Use Traits: Ratings indicate end-use suitability based on the level of each grain quality characteristic.
Soybean genetics that maximize profit potential.

NK soybeans have a track record of high performance from an established genetics portfolio with proven disease and pest protection. We’re also unmatched when it comes to bringing new industry-leading soybean varieties to market faster while also delivering superior yield potential.

Traits packed with technology
To maximize ROI, growers need to maximize the potential of our advanced genetics. Our best-in-class agronomic characteristics make that possible. The latest NK offerings allow growers to protect yield potential from more threats than ever before, including Soybean Cyst Nematode (SCN), Sudden Death Syndrome (SDS), Iron Deficiency Chlorosis (IDC) and Phytophthora root rot. NKsoybeans.com

MORE VALUE. MORE ROI.
NK will be a volume leader for both Enlist E3™ and Roundup Ready 2 Xtend®. Plus, among leading soybean companies, only NK soybeans and the trait owner offer a full lineup of unique Roundup Ready 2 Xtend varieties. All available for simplified, tiered pricing.
Industry-leading traits.

Weed management is the biggest concern of most soybean producers. Among leading soybean companies, only NK soybeans offer all herbicide trait options to help growers with weed management. We also offer the expertise to help growers choose the right technology platform. And with a state-of-the-art greenhouse, we can provide more options with accelerated trait conversion.

**Roundup Ready 2 Xtend®**
The industry’s first biotech stacked soybean trait that confers tolerance to glyphosate and dicamba herbicides—two different modes of action that deter resistance in weeds.

**Enlist E3™**
The first three-gene herbicide tolerant trait stack, Enlist E3 soybeans confer robust tolerance to glyphosate, glufosinate and 2,4-D herbicides, offering exceptional weed control and resistance management options. And with an advanced molecular construction, the Enlist E3 trait enables efficient breeding, which brings high-quality varieties to market faster.

CONVERTING GENETICS
Multiple NK genetics are in the pipeline to be converted from the Roundup Ready 2 Xtend portfolio to future trait Xtendflex® (RR2X/LL).

**ALWAYS READ AND FOLLOW PESTICIDE PRODUCT LABELING.** It is a violation of federal and state law to use any pesticide product in a manner inconsistent with its labeling.

Only dicamba formulations that employ VaporGrip® Technology are approved for use with Roundup Ready 2 Xtend® soybeans.

Only 2,4-D chloride formulations with Colex-D® Technology are approved for use with Enlist E3™ soybeans.

Enlist Duo and Enlist One herbicides are not registered for sale or use in all states or counties. Contact your state pesticide regulatory agency to determine if a product is registered for sale or use in your area.
## SOYBEAN CHARACTERISTICS

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>AGRONOMIC/PLANT CHARACTERISTICS*</th>
<th>ADAPTATION TO SOIL TYPES/YIELD ENVIRONMENTS</th>
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<td>Soybean Brands</td>
<td>HERBICIDE TOLERANT TRAITS</td>
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### HERBICIDE TOLERANT TRAITS

- **GENRR2Y** = Genuity® Roundup Ready 2 Yield®
- **RR2X** = Roundup Ready 2 Xtend®
- **RR2X/STS** = Roundup Ready 2 Xtend® and STS®
- **E3** = ENLIST E3™
- **E3/STS** = ENLIST E3™ and STS®
- **LL** = LibertyLink®
- **STS** = Sulfonylurea Tolerant Soybean

### SOYBEAN CHARACTERISTICS

- **S007-Y4** GENRR2Y 0.05
- **S006-R7X** NEW RR2X 0.06
- **S008-N2** GENRR2Y 0.08
- **S009-E3** NEW E3 0.09
- **S01-C4X** RR2X 0.1
- **S02-E3** NEW E3 0.2
- **S03-G9** GENRR2Y 0.3
- **S03-S6X** RR2X 0.3
- **S05-E3** NEW E3 0.5
- **S05-N5X** NEW RR2X 0.5
- **S06-L8X** RR2X 0.6
- **S07-E3** NEW E3 0.7
- **S08-2E3** NEW E3 0.9
- **S09-D4X** NEW RR2X 1.0
- **S10-H7X** RR2X 1.2
- **S11-E3** NEW E3 1.3
- **S12-A6** GENRR2Y 1.4
- **S13-D3X** NEW E3 1.5
- **S14-A6** GENRR2Y 1.6
- **S15-B6X** RR2X 1.8
- **S16-D3X** NEW E3 1.9
- **S17-D6X** RR2X 2.0
- **S18-D6X** RR2X 2.1

### CULTIVATION NOTES

- **NOTE:** E3 product descriptions and ratings are sourced from the variety’s genetic supplier and may change as additional data are gathered.
### Soybeans

#### PHYTOPHTHORA

<table>
<thead>
<tr>
<th>Gene Resistance</th>
<th>Field Tolerance</th>
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<th>Brown Stem Rot (BSR)</th>
<th>Sclerotinia White Mold (SWM)</th>
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### Resistance Rating System

Indicates when a variety is resistant to a specific disease or pest. For Soybean Cyst Nematode (SCN) resistance, the nematode races the variety is resistant against are specified, when available. For Phytophthora, the gene conveying the resistance is listed.

### Soybean Cyst Nematode (SCN)

- **R** = Resistant
- **MR** = Moderately Resistant
- **S** = Susceptible
- **3 and/or 14** = Specific race of soybean cyst nematode
- **= Race not specified

### Phytophthora Field Tolerance

Usually not as complete as race-specific resistance, but it offers general protection. Resistance is not expressed in early stages of plant development. Numerical rating scale of 1-9; 1 = Best.

### Disease/Pest Rating System

- **1 = Best**
- **9 = Worst**
- **= Not available**
In order to help ensure maximum performance and protection of our advanced genetics, we recommend innovative products from the Syngenta seed treatment portfolio. These high-performance seed treatments protect your investment against early season diseases, insects and season-long activity for nematodes.

Through our work at the Seedcare Institute and our R&D teams, we are committed to bringing the newest technologies to market. And we have a deep pipeline of seed treatment products in development, including a new defense against soybean Sudden Death Syndrome (SDS) and new modes of action against some of the toughest pests in soybeans. SyngentaSeedcare.com

Coming soon—a new soybean seed treatment for Sudden Death Syndrome (SDS) and nematodes.

Upon registration with the US EPA, Adepidyn® fungicide will be marketed as Saitro® fungicide. It will offer:

- Based on 3 years of field trial results, consistent yield improvement over a leading SDS competitor under high SDS pressure.
- The highest intrinsic activity against Fusarium virguliforme, the causal organism of SDS.
- Activity against soybean cyst, root knot, lesion and lance nematodes.
- Protection from SDS without signs of early season plant stress, including phytotoxicity, stunting, susceptibility to pests or weather and reduced plant stands.

Provides broad-spectrum protection from damaging early season insects and diseases from day one because what’s on your seed matters, and not all seed treatments are created equal.

- Optimizes root health, nutrient and water uptake and stress tolerance for better emergence through the unique RootingPower of Vibrance® fungicide.
- Delivers faster speed to canopy and more robust, vigorous plants for improved overall performance through the Cruiser® Vigor Effect.
- Helps establish a higher stand count vs. competitor seed treatments and generics, and reduces the risk and costs of replants.
- Consistently outperforms against custom blends.

Season-long, lethal activity against Soybean Cyst Nematode (SCN), with added broad-spectrum, early season protection from damaging insects and diseases.

- Offers the only season-long, lethal activity against SCN on the market.
- Is a premix formulation of Clariva® pn nematicide and CruiserMaxx® Vibrance seed treatment to optimize root health and plant vigor.

- Delivers an attractive return on investment with an average yield increase of 2.7 bushels per acre, with some fields achieving yield increases of more than 10 bu/A.

- Establishes a higher stand count and stronger emergence vs. Acceleron® Elite + iLeVO® delivering more yield.

- Combines with Mertect® 340-F fungicide for increased activity against SDS and other SCN-related diseases.

Give soybeans the treatment they deserve.

1 Adepidyn/Saitro is not registered for sale or use as a seed treatment in the US and is not being offered for sale.
2 Includes locations that exhibited 20 percent SDS incidence or more as measured by a local scientist Syngenta Seedcare trials, 2015-2017, trial locations: AR, IL, IA, KY, MI, MN, TN, WI (p<0.1).
3 2015 Syngenta trials. Competitor comparisons: Performance evaluations are based solely upon interpretation of public information and field observations.
**S007-Y4**

**BRAND**

**PROVEN YIELD LEADER WITH BROAD ADAPTATION**

- Very good Iron Deficiency Chlorosis tolerance
- Strong Phytophthora Root Rot field tolerance with the Rps1c gene
- Solid emergence with excellent Sclerotinia White Mold tolerance

**S006-R7X**

**BRAND**

**NEW NK YIELD LEADER IN MID-GROUP 00**

- Moves south of zone well
- Excellent standability
- Strong tolerance to Sclerotinia White Mold

**S008-E3**

**BRAND**

**NEW**

**EARLY E3 VARIETY WITH SCN RESISTANCE**

- Strong tolerance to Sclerotinia White Mold
- Solid stress tolerance
- Above-average tolerance to Iron Deficiency Chlorosis

**S009-E3**

**BRAND**

**NEW**

**GOOD CHOICE FOR HIGH YIELD ENVIRONMENTS**

- Strong Iron Deficiency Chlorosis tolerance
- Thin-line bean with good adaptation to narrow rows
- Provides herbicide options on the canola acre

**S01-C4X**

**BRAND**

**EARLY MATURITY YIELD LEADER**

- Strong fit for high pH soil types
- Good plant height, even when moved south of zone
- Rps1c with excellent field tolerance to Phytophthora Root Rot

**S02-E3**

**BRAND**

**NEW**

**STRONG AGRONOMICS FOR THE NORTHERN ACRE**

- Rps3a with outstanding field tolerance to Phytophthora Root Rot
- Solid tolerance to Iron Deficiency Chlorosis
- Very good standability
### S02-F9X BRAND
**NEW**
**RM:** 0.2

**EXCELLENT STANDABILITY WITH OUTSTANDING YIELD**
- Very strong tolerance to Sclerotinia White Mold
- Dependable emergence for early planting
- Stress tolerance, as well as Top-end yield

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<tr>
<th>Rating</th>
<th>Emergence</th>
<th>Standability</th>
<th>Phytophthora Field Tolerance</th>
<th>Iron Deficiency Chlorosis</th>
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### S03-E3 BRAND
**NEW**
**RM:** 0.3

**EXCELLENT YIELD FOR MATURITY**
- SCN protection in an early bean
- Solid standability
- Performed in and out of the Red River Valley

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### S03-G9 BRAND
**RM:** 0.3

**YIELD LEADER WITH OUTSTANDING TOLERANCE TO IRON DEFICIENCY CHLOROSIS**
- Performs across soil types, weather patterns, and yield environments
- Profuse branching allows fast canopy closure
- Excellent field tolerance to Phytophthora Root Rot

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### S03-S6X BRAND
**RM:** 0.3

**BROAD ADAPTATION WITH A STRONG DISEASE PACKAGE**
- Solid performance in moderate to poorly drained soils
-Rpst1c gene for resistance to Phytophthora Root Rot with strong field tolerance
- Strong tolerance to Sclerotinia White Mold

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### S05-E3 BRAND
**NEW**
**RM:** 0.5

**SCN BEAN WITH STRONG IRON DEFICIENCY CHLOROSIS TOLERANCE**
- Rpst3a gene for resistance to Phytophthora Root Rot
- Medium-bush canopy works well in wide rows
- Above average standability

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### S05-N5X BRAND
**NEW**
**RM:** 0.5

**TOP-END YIELD WITH EXCELLENT STANDABILITY**
- Stacked Rpst1c/3a Phytophthora genes
- Performs across soil types
- Solid tolerance to Sclerotinia White Mold

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**S06-K4X**

**STRONG YIELDS WITH OUTSTANDING DROUGHT TOLERANCE**

- Great choice for medium to coarse textured soils with moderate to low organic matter
- **Rps3a** gene for control of race 25 Phytophthora Root Rot
- Performs well north and south of zone

**S06-T8L**

**TOP-END YIELD WITH SOLID DEFENSE**

- **Rps1k** gene with above-average Phytophthora field tolerance
- Solid Iron Deficiency Chlorosis tolerance
- Medium-tall, bushy plant type allows planting on stress soils

**S07-E3**

**NEW**

**STRONG YIELD FOR MATURITY**

- SCN protection with good tolerance to Iron Deficiency Chlorosis
- **Rps3a** with solid field tolerance to Phytophthora Root Rot
- Bush type bean is quick to canopy

**S07-Q4X**

**GREAT CHOICE FOR HIGH PH SOILS**

- SCN resistance with strong tolerance to Iron Deficiency Chlorosis
- Excellent standability with strong Sclerotinia White Mold tolerance
- **Rps1c** gene with strong field tolerance to Phytophthora Root Rot

**S09-2E3**

**NEW**

**RPS3A GENE WITH OUTSTANDING PHYTOPHTHORA ROOT ROT FIELD TOLERANCE**

- Solid tolerance to SDS
- Medium-bush type bean works well in wide rows
- Best performance in zone

**S09-D4X**

**NEW**

**HIGH YIELDING GENETICS WITH A WELL ROUNDED AGRONOMIC PACKAGE**

- Strong tolerance to Iron Deficiency Chlorosis
- **Rps1k/3a** for Phytophthora Root Rot resistance
- Performs well across all yield environments
### S10-H7X Brand

**Stable Performance Across Variable Soil Types**
- Excellent standability and good pod height allows for ease of harvest
- Good choice for drought-prone soils
- Very strong field tolerance with Rps1c gene for resistance to Phytophthora Root Rot

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### S11-E3 Brand

**RPS1K Phytophthora Root Rot Gene with Solid Field Tolerance**
- Very good Iron Deficiency Chlorosis tolerance
- Exceeds in high yield environments
- Strong performance north and south of zone

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### S12-R3 Brand

**Dominant Performance with Solid Agronomics**
- Outstanding standability with very strong Sclerotinia White Mold tolerance
- Excellent stress tolerance and Iron Deficiency Chlorosis protection
- Strong tolerance to SDS

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### S13-E3 Brand

**Strong Performance Across a Wide Geography**
- SCN protection with very good tolerance to Iron Deficiency Chlorosis
- Rps1c gene with strong Phytophthora Root Rot field tolerance
- Excellent emergence and medium-bush canopy helps close the row

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</table>

### S14-A6 Brand

**Exceptional Yields with Broad Soil Adaptability**
- Dependable Phytophthora Root Rot field tolerance
- Superior emergence and very strong standability
- Solid Iron Deficiency Chlorosis tolerance for high pH soils

<table>
<thead>
<tr>
<th>Rating</th>
<th>Emergence</th>
<th>Standability</th>
<th>Phytophthora Field Tolerance</th>
<th>Iron Deficiency Chlorosis</th>
<th>Sclerotinia White Mold</th>
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<tbody>
<tr>
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</tbody>
</table>

### S14-B2X Brand

**Strong Yields with an Outstanding Disease Package**
- Strong tolerance to Sclerotinia White Mold and SDS
- Very good field tolerance with Rps1c gene for resistance to Phytophthora Root Rot
- Good stress tolerance for the less productive acre

<table>
<thead>
<tr>
<th>Rating</th>
<th>Emergence</th>
<th>Standability</th>
<th>Phytophthora Field Tolerance</th>
<th>Iron Deficiency Chlorosis</th>
<th>Sclerotinia White Mold</th>
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<tbody>
<tr>
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<td>BEST</td>
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</table>
Buy a Ram® Truck. Get an NK seed rebate.

Get a $250 soybean seed rebate or a $1,000 corn seed rebate with the purchase of a new Ram truck from a Ram AgPack dealer. Learn more at RamAgDealer.com/Ram-AgPack-promo

The latest agronomic insights to help maximize yield potential.

Visit KnowMoreGrowMore.com to see what’s happening throughout the country, for support with crop management decisions, and to sign up for agronomic email updates.
# NK CORN AGRISURE TRAIT BREAKDOWN

## AGRISURE® TRAIT STACK

<table>
<thead>
<tr>
<th>AGRISURE® TRAIT STACK</th>
<th>MODES OF ACTION</th>
<th>ARTESIAN</th>
<th>HERBICIDE TOLERANCE</th>
<th>CORN BELT INSECT REFUGE REQUIREMENT**</th>
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<tbody>
<tr>
<td>Agrisure® GT</td>
<td>BROAD LEP*</td>
<td>CORN BORER*</td>
<td>ROOTWORM*</td>
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## INSECT EVENT TRAIT NAMES

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<thead>
<tr>
<th>AGRISURE TRAIT STACK</th>
<th>INSECT TRAIT EVENTS*</th>
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<tr>
<td>MIR162</td>
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<td>TC1507</td>
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<td>Bt11, TC1507</td>
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<tr>
<td>MIR162, MON89034</td>
<td>Bt11, MON89034</td>
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<tr>
<td>MIR162</td>
<td>Bt11</td>
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<tr>
<td>TC1507</td>
<td>Bt11, TC1507</td>
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<tr>
<td>Agrisure® 3010</td>
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## INSECT EVENT TRAIT EVENT BRAND NAMES

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<th>INSECT EVENT NAMES</th>
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<tbody>
<tr>
<td>Bt11</td>
<td>Agrisure® CB</td>
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<td>MIR162</td>
<td>Agrisure Viptera®</td>
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<td>MIR604</td>
<td>Agrisure® RW</td>
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<td>5307</td>
<td>Agrisure Duracade®</td>
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<td>TC1507</td>
<td>Herculex® I</td>
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<td>DAS 59122-7</td>
<td>Herculex® RW</td>
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<tr>
<td>MON89034</td>
<td>YieldGard VT Pro**</td>
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</tbody>
</table>

* Refer to Insect Trait Event Brand Names.
** Refer to Stewardship page for complete details.

For more information check [www.ncga.com/for-farmers/know-before-you-grow/trait-table](http://www.ncga.com/for-farmers/know-before-you-grow/trait-table)
### NK CORN

**NK9227 Artesian**

**EXCITING YIELD LEVELS PAIRED WITH AGRISURE ARTESIAN TECHNOLOGY**
- Maximizes yield when it rains.
- Increases yield when it doesn’t.
- Super stalk strength for ease of harvest.
- Very good staygreen and drydown.

**Trait versions available in this hybrid series.**

**RM:** 92

**NEW:** Indicates hybrid series or hybrid trait versions new for 2020.

**Hybrid Series:** All hybrids within this series were developed from the same base genetics.

**RM:** Specific relative maturity for this hybrid series.

**Agrisure Artesian**
- “A” indicates the presence of Agrisure Artesian technology for water optimization in the hybrid.

**E-Z Refuge:** Products include integrated in-bag 5% refuge.
- The dash separates the genetic and trait portions.
- The trait designator aligns with the Agrisure traits nomenclature system.

**NEW:** Indicates hybrid series or hybrid trait versions new for 2020.

### ENOGEN CORN

**E109Y2 Artesian**

**EXCITING GENETICS WITH AGRISURE ARTESIAN TECHNOLOGY**
- Maximizes yield when it rains.
- Increases yield when it doesn’t.
- Population flexibility across all environments.
- Top end yield potential with stability when conditions are tough.

**Trait versions available in this hybrid series.**

**RM:** 109

**NEW:** Indicates hybrid series or hybrid trait versions new for 2020.

**Hybrid Series:** All hybrids within this series were developed from the same base genetics.

**RM:** Specific relative maturity for this hybrid series.

**Agrisure Artesian**
- “A” indicates the presence of Agrisure Artesian technology for water optimization in the hybrid.

**E-Z Refuge:** Products include integrated in-bag 5% refuge.
- The dash separates the genetic and trait portions.
- The trait designator aligns with the Agrisure traits nomenclature system.

**NEW:** Indicates hybrid series or hybrid trait versions new for 2020.

### NK SOYBEANS

**S20-J5X BRAND**

**HIGH-YIELDING GENETICS PLUS RESILIENCE AGAINST KEY DISEASES**
- Excellent SDS tolerance safeguards your crop.
- Strong Sclerotinia White Mold tolerance.
- Sui-4 to any row-spacing or population.

**Herbicide tolerance and other traits**

**RM:** 2.0

**A** “S” indicates NK soybeans
**B** Indicates maturity group (00-7)
**C** Indicates within group maturity rating on a 0-9 scale (0 = early, 9 = late)
**D** Randomly designated letter and number
**E** Denotes herbicide technology – E = Enlist E3; L = LibertyLink®; X = Roundup Ready 2 Xtend® technology

**RM:** Specific relative maturity for this variety.

**NEW:** Indicates hybrid series or hybrid trait versions new for 2020.
A strong stewardship program is essential for protecting and preserving the long-term value of insect-protected trait technology. Syngenta provides responsible agriculture programs and information regarding the safe handling and storage of product.

Stewardship Requirements
Read and understand the stewardship requirements found in the Syngenta Stewardship Guide, including applicable refuge requirements when planting insect-protected traits as set forth in the Syngenta Seeds, LLC Stewardship Agreement that you sign. To sign an agreement or view recommended planting configurations, please visit SyngentaStewardship.com or contact the Syngenta stewardship team: 1-877-476-2676. By opening and using a bag of seed, you are reaffirming your obligation to comply with those stewardship requirements.

Best Management Practices
The agricultural industry has learned that, in addition to planting a refuge, a sound Integrated Pest Management (IPM) strategy is needed to prevent Corn Rootworm (CRW) resistance. For more information on how you can implement Best Management Practices (BMPs) on your farm, refer to the industry CRW BMPs found on the NCGA website at NCGA.com/CornRootworm or SyngentaStewardship.com

Grain Marketing
Growers are encouraged to consult the Bio Trade Status website for the approval status of commercially available hybrids: BioTradeStatus.com. Talk to your grain handler prior to delivering crop so that it can be handled and marketed appropriately. Please contact your local seed representative with any questions.

Agrisure Duracade growers needing grain marketing assistance may contact Gavilon Grain, LLC at 844-559-1500 to identify an accepting location near you or visit syngenta-us.com/agrisure/duracade-stewardship.aspx for more information.

CORN REFUGE REQUIREMENTS
It is important to recognize that different hybrid/trait packages may have different Insect Resistance Management (IRM) requirements. On-farm mixing of any seed is not an approved method to comply with stewardship requirements.

<table>
<thead>
<tr>
<th>TRAIT STACK*</th>
<th>MINIMUM REFUGE REQUIREMENT CORN-GROWING REGION</th>
<th>MINIMUM REFUGE REQUIREMENT COTTON-GROWING REGION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrisure3000GT</td>
<td>20%</td>
<td>50%</td>
</tr>
<tr>
<td>Agrisure3010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AgrisureArtesian™</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AgrisureViptera™</td>
<td></td>
<td></td>
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<tr>
<td>Agrisure3120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agrisure3122</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AgrisureDuracade®</td>
<td>E-Z Refuge—no additional refuge required</td>
<td>20% supplemental refuge</td>
</tr>
</tbody>
</table>

Refuge size is calculated by applying the appropriate percentage (e.g., 20%, 50%) to the TOTAL CORN ACRES. Calculator available to help farmers plan how to meet the minimum refuge requirements for each Bt corn product on their farm. Download at www.irmcalculator.com

* These products may be offered as Agrisure Artesian® corn hybrids, which convert water to grain more efficiently. Artesian™ corn hybrids are designated by an ‘A’ at the end of the trait stack name.

The Agrisure® 3010 trait stack was previously sold as Agrisure® GT/CB/LL.

Important: Always read and follow label and bag tag instructions; only those labeled as tolerant to glufosinate may be sprayed with glufosinate ammonium-based herbicides.

Syngenta hereby disclaims any liability to Third Party websites referenced herein.

To order, contact your NK retailer or call 1-800-258-0521 or visit NKSeeds.com
Delivering technology, genetics and value:

All photos are either property of Syngenta or are used with permission. Product performance assumes disease presence.

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Some seed treatment offers are separately registered products applied to the seed as a combined slurry. Always read individual product labels and treater instructions before combining and applying component products. CruiserMaxx Vibrance® Beans is an on-seed application of CruiserMaxx Vibrance alone or with Apron® XL. Saltro® is currently not registered for sale or use in the U.S. and is not being offered for sale. Azoxy® is not currently registered as a seed treatment in the U.S. and is not being offered for sale.

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