NEVER ONE TO BACK DOWN FROM A CHALLENGE.

YOU’LL FACE DOUBTERS ALONG THE PATH YOU’RE BLAZING, BUT WITH PIONEER THERE IS NO DOUBT. PIONEER IS HERE TO BACK YOU UP WITH LOCAL AGRONOMIC SUPPORT AND THE BEST GENETICS FROM OUR WORLD-LEADING INNOVATION PROGRAM TO HELP YOU GROW FURTHER THAN EVER BEFORE. LET’S BUST THROUGH.

PIONEER.COM/CANADA
Contest Rules and Regulations:
Subject in all respects to Official Rules at: www.yieldhero.pioneer.com. Contest begins 12:00 a.m. MT 8/16/21 and ends 11:59 p.m. MT 11/15/21. Open to legal residents of SK, AB, MB or BC who are age of majority+ and own or work on a farm. Void outside of the foregoing provinces. Winners who enter via Twitter must correctly answer a time-limited mathematical skill-testing question to be eligible to win a prize. There are 30 grand prizes available to be won. Grand prize winners will be awarded a trip for two (2) to the Commodity Classic in New Orleans, LA March 10-12, 2022. The approximate retail value (“ARV”) is $5000.00 (CAD) per grand prize winner. *Date and location of the 2022 Yield Hero trip subject to change due to unforeseen circumstances.

NEW for the 2021 Yield Hero Contest: Seed and Crop Protection Category
For complete contest rules and details visit: yieldhero.pioneer.com OR follow us @PioneerSeedsCA #yieldhero21

2020 Pioneer Yield Hero Winners

2020 SUSTAINABLE GROWER OF THE YEAR
Crossview Farms Ltd. Crossfield, AB

2020 INNOVATIVE GROWER OF THE YEAR
Mellowdale Dairy Ltd. Barrhead, AB

One (1) of 30 trips for two (2) to the Commodity Classic New Orleans, Louisiana March 10-12, 2022
The Pioneer Yield Hero contest is an opportunity to celebrate your high yields and success! #yieldhero21
Join our growing list of heroes who grow Pioneer® brand seed products.

2020 CANOLA

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Pioneer Protector® Brand Canola

**YIELD, PERFORMANCE AND THE PROTECTION OF THE PIONEER PROTECTOR® TRAITS – BUST THROUGH WITH YIELD!**

- Pioneer Protector® brand canola offers high-yielding, consistently-performing canola hybrids with the added benefit of the Pioneer Protector® traits that:
  - Provide solutions to various agronomic and harvest management challenges on farmer’s fields
  - Manage weed resistance with the strength of the Pioneer® canola portfolio - high yields, consistent performance and Pioneer Protector® traits available in all herbicide tolerant systems

**PIONEER PROTECTOR® CLUBROOT HYBRIDS**

Pioneer Protector® clubroot hybrids provide high yields and protection against multiple races of clubroot across Western Canada. They are for canola growers who want:

- High yields and leading-edge protection against clubroot
- To prevent disease establishment and minimize clubroot spore levels by using clubroot resistant hybrids
- Multiple sources of clubroot resistance available in Pioneer Protector® Clubroot hybrids allows for a proactive approach to clubroot management

All Pioneer Protector® brand canola hybrids will include the Pioneer Protector® clubroot trait, a critical tool against a growing disease threat to Western Canadian farmers.

**PIONEER PROTECTOR® HARVESTMAX HYBRIDS**

Pioneer Protector® HarvestMax is a maximum yield management trait that provides growers the opportunity to choose how and when to harvest their canola crop for maximum yield opportunity and operational efficiency.

- Canola hybrids with the HarvestMax (HMX) trait are for growers looking for:
  - High-yielding hybrids
  - Maximum yield potential and maximum harvest flexibility
  - The opportunity to choose the appropriate harvest management system - normal swath, delayed swath or straight cut, depending on field and weather conditions as well as man and machine power availability
  - Reduced risk by minimizing shatter losses as compared to non-HMX hybrids
  - High-performing hybrids that provide choice for protection against yield-robbing diseases such as clubroot, sclerotinia and blackleg
  - A total package, season-long solution for maximum yield, performance and protection
PIONEER PROTECTOR® HARVESTMAXCR HYBRIDS

A powerhouse combination of clubroot protection and the maximum yield management trait that provides growers with the opportunity to choose how and when to harvest their canola crop for maximum yield opportunity and operational efficiency, while protecting their canola crop from disease.

- Pioneer Protector® canola hybrids with the HarvestMaxCR trait are for growers looking for:
  - High-yielding hybrids.
  - Maximum yield potential and maximum harvest flexibility, plus clubroot protection.
  - The opportunity to choose the appropriate harvest management system – normal, delayed swath or straight cut, depending on field and weather conditions as well as man and machine power availability.
  - Reduced risk by minimizing shatter losses as compared to non-HMX hybrids.
  - High-performing hybrids that provide choice for protection against yield-robbing diseases such as clubroot, sclerotinia and blackleg.
  - A total package, season-long solution for maximum yield, performance and protection.

PIONEER PROTECTOR® SCLEROTINIA HYBRIDS

High yields and the consistent performance of Pioneer Protector® canola hybrids with built-in resistance to the yield-robbing disease sclerotinia.

- Canola hybrids with the Pioneer Protector® Sclerotinia resistance trait are for growers looking to manage the risk of sclerotinia infection and achieve high yields by:
  - Reducing sclerotinia incidence by over 60%, as well as reducing overall severity.
  - Season-long control – providing protection from sclerotinia throughout the entire growing season.
  - Convenience – protection is planted with the seed.
  - Managing risk of sclerotinia infection over large acres/geographies.
  - Peace of mind – providing increased flexibility and insurance when timing fungicide applications for additional control.
  - Proactively managing sclerotinia by reducing the amount of inoculum from returning to the soil.

PIONEER PROTECTOR® PLUS HYBRIDS

Pioneer Protector® Plus hybrids bring all the benefits of the Pioneer Protector® clubroot trait and the power of the Pioneer Protector® Sclerotinia trait – the ultimate disease package.

- Canola hybrids with the Pioneer Protector® Plus package are for growers looking to manage the risk of sclerotinia infection, protect their canola crop from clubroot infection and achieve high yields by:
  - Reducing sclerotinia incidence by over 60%, as well as reducing overall severity.
  - Season-long control – providing protection from sclerotinia throughout the entire growing season.
  - Convenience – protection is planted with the seed.
  - Managing risk of sclerotinia infection over large acres/geographies.
  - Peace of mind – providing increased flexibility and insurance when timing fungicide applications for additional control.
  - Proactively managing sclerotinia by reducing the amount of inoculum from returning to the soil.

Clearfield® canola hybrids provide you with access to premium marketing opportunities and more.

Clearfield canola offers producers differentiated marketing and resistance management opportunities. It provides producers an alternative mode of action option and flushing weed control in one pass.

Why choose the Clearfield canola production system?

- Access to premium Identity Preserved marketing program options.
- An alternative mode of action to manage previous crop volunteers, including volunteer canola.
- Includes Ares® SN herbicide for one-pass, flushing weed control that delivers reliable post emergent control of grass and broadleaf weeds.
- Choose hybrids that work best for your operation. The Clearfield canola production system gives you the flexibility to select hybrids that fit your farm.
- Pioneer® brand seeds offers high-yielding canola hybrids in a variety of maturities, with resistance to disease and superior agronomic traits.
- Clearfield canola hybrids offer the potential to access premium Identity Preserved marketing opportunities.

Visit Pioneer.com/Canada for a full list of available hybrids.

Add an alternative mode of action to your herbicide rotation.

The Clearfield canola production system provides increased crop rotation. And herbicide options for maximum rotational flexibility. You have the option to utilize group 2 chemistry, such as Ares SN or Amity™ WDG herbicides, to balance herbicide rotations and introduce an alternative mode of action to manage previous crop volunteers, including volunteer canola, in tight canola rotations.

Key weeds controlled

- Wild Oats
- Volunteer Cereals (Barley, Canary Seed, Spring and Durum Wheat, Oats)
- Wild Buckwheat (cotyledon to 6 leaf)
- Volunteer Non-Clearfield Canola
- Chickweed
- Cleavers (1-4 whorls)
- Lamb’s quarters
- Redroot Pigweed

For full list of weeds controlled, please refer to the Ares SN or Amity WDG product labels or visit ClearfieldCanola.ca

In the Prairie Provinces except for the Peace Country of Alberta and British Columbia. In the Peace Country, the recommended herbicide option for Clearfield canola is Amity WDG.

"Flushing weed control.

Even more reasons to switch to the Clearfield canola production system

- Control of glyphosate-resistant weeds
- Change resistance genetics for better management of blackleg and clubroot
- Ideal crop rotation choice when growing glyphosate-tolerant and Roundup Ready® soybeans

To learn more about Clearfield canola, visit: ClearfieldCanola.ca
There is something big coming in canola!

Unlock the genetic potential of your canola with Optimum® GLY—a herbicide-tolerant trait technology designed to deliver top yield potential and agronomic trait performance.

What does Optimum GLY canola deliver?

- Improved crop safety. Optimum GLY enables farmers to make herbicide applications at the optimal time and rate without impacting the yield potential of the hybrid.
- Enhanced, broad-spectrum annual and perennial weed control with effective rates of glyphosate. Optimum GLY offers canola producers an excellent weed control system to deliver improved annual and perennial weed control over competitive herbicide systems.
- Greater convenience and flexibility when spraying. Optimum GLY expands the window of application, allowing farmers the flexibility to time their herbicide application to maximize weed removal options. This gives producers time to cover large acres or clean up late flushes of weeds without the risk of yield impact from late-season applications.
- Flexible rates and application timing up to first flower

Total maximum application of 2 REL/ac per season:
- Apply as 1 application from emergence to 6-leaf stage
- Apply as 2 sequential applications of up to 1 REL/ac from emergence to 1st flower
- Sequential applications must be at least 14 days apart
- Allows management of hard-to-control weeds and enhanced crop safety

Optimum GLY herbicide tolerance trait

Weed Control Timing

- Plant Optimum GLY canola
- Apply glyphosate herbicides. No later than 1st flower.

Contact your Pioneer Sales Representative or visit optimumgly.corteva.ca to learn more.

*The Optimum® GLY herbicide tolerance trait will not be offered for sale or distribution until completion of field testing and applicable regulatory reviews.
### Featured Canola Hybrids

**NEW**

**P509L**

An early-maturing Pioneer Protector® clubroot hybrid with shorter stature and blackleg resistance, now with the LibertyLink® herbicide trait.

- Great yield to maturity
- Excellent field emergence
- Very good for lodging
- "R" for Clubroot vs 2F, 3H, 5I, 6M and 8N (CR1)
- "R" for Blackleg
- Early - mid-maturity

**NEW**

**44H44**

Excellent yield, and the Pioneer Protector® clubroot trait in an early-maturity hybrid with strong adult blackleg resistance in one package.

- Excellent yield potential – early-maturity with the yield potential of a mid-maturity
- Excellent early growth and field emergence
- Very good for lodging
- "R" for Clubroot vs 2F, 3H, 5I, 6M and 8N (CR1)
- "R" for Blackleg
- Early-maturity

**NEW**

**45H42**

A high-yielding, mid-maturity Pioneer Protector® clubroot hybrid.

- Superior yield potential
- Excellent field emergence
- "R" for Clubroot vs 2F, 3H, 5I, 6M and 8N (CR1)
- "R" for Blackleg
- Suitable for all growing regions

**NEW**

**P508MCL**

Pioneer Protector® HarvestMax (flexible harvest timing for maximum yield management and operation efficiency) and blackleg, now in the Clearfield® herbicide tolerant system.

- Excellent yield potential
- Suitable for swathing, delayed swath or straight cut
- Excellent early growth and field emergence
- Very good lodging score
- "R" for Blackleg
- Suitable for all growing regions

**NEW**

**P505MSL**

A next generation Pioneer Protector® hybrid with yield, clubroot, sclerotinia, HarvestMax (flexible harvest timing for maximum yield management and operation efficiency) and blackleg – a one-of-a-kind package.

- Superior yield potential
- Suitable for swathing, delayed swath or straight cut
- Excellent early growth and field emergence
- Very good lodging score
- Superior sclerotinia protection
- "R" for Clubroot vs 2F, 3H, 5I, 6M and 8N (CR1)
- "R" for Blackleg
- Suitable for all growing regions

**InVigor® L241C** 100%

**BrettYoung BY 5545CL** 100%

**InVigor® L234PC** 100%

**DEKALB® DKTF 96 SC** 100%

**DEKALB® DKTF 98 CR** 100%

**DEKALB® DKTF 96 SC** 100%

**DEKALB® DKTF 98 CR** 100%

**Canterra CS 2500CL** 100%

**Source:** 2019-2020 Corteva Agriscience field trials
**Featured Canola Hybrids**

**45CM39**
- Exceptional yields, clubroot and flexible harvesting timing for maximum yield management and operation efficiency with the Pioneer Protector® HarvestMaxCR traits (clubroot – new source), plus blackleg.
  - Superior yield potential
  - Suitable for swath, delayed swath or straight cut
  - Excellent early growth and field emergence
  - Very good lodging score
  - "R" for Clubroot vs 2F, 3H, 5I, 6M and 8N (CR1)
  - "R" for Blackleg
  - Suitable for all growing regions

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**45CS40**
- Yield, Pioneer Protector® clubroot, sclerotinia resistance and blackleg – all in one package.
  - Excellent yield potential
  - Excellent early growth and field emergence
  - Very good lodging score
  - Sclerotinia protection
  - "R" for Clubroot vs 2F, 3H, 5I, 6M and 8N (CR1)
  - "R" for Blackleg
  - Suitable for all growing regions

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**45M35**
- Yield, standability and the harvest flexibility for maximum yield management and operation efficiency of the Pioneer Protector® HarvestMax trait – all in one package.
  - Superior yield potential
  - Suitable for swath, delayed swath or straight cut
  - Excellent early growth and field emergence
  - Very good lodging score
  - "MR" for Blackleg
  - Mid- late maturity

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**Pioneer Protector® Canola Hybrids – Days to Maturity**

- **EARLIEST**
  - 45H37
  - P502CL
  - 45M35
  - P508MCL
- **LATEST**
  - 45CM39

Source: 2019-2020 Corteva Agriscience field trials
### Lumiderm™

**INSECTICIDE SEED TREATMENT**

**Serious seed protection**

Lumiderm™ insecticide seed treatment provides excellent plant protection against both flea beetles and cutworms in one convenient bag.

#### See the Lumiderm™ insecticide seed treatment difference in cutworm control

Cutworms are a real problem in canola production. If you’re not paying close attention to your fields, they can destroy a significant portion of your crop in a matter of days. Cutworms are very difficult to detect since they typically live underground during the day and feed at night. During the first 35 days of seedling growth, Lumiderm™ protects your canola from cutworm feeding, which helps enhance early season stand establishment and crop vigour.

#### Look at the results

Treating your seed with Lumiderm is the best way to prevent a patchy, bare field and reduce your loss due to cutworm damage.

#### Key Benefits

- Enhanced protection against crucifer and striped flea beetles.
- Excellent control of early season cutworms.
- Excellent early season seedling stand establishment, vigour and biomass.
- Up to 35 days of protection through the critical stages of seedling growth.
- Novel class of chemistry (Group 28) for resistance management.

#### See the Lumiderm™ insecticide seed treatment difference in protection against flea beetles

Across Western Canada, flea beetles are causing significant damage to canola crops and growers are demanding a better solution. Lumiderm™ insecticide seed treatment offers a new way to obtain enhanced flea beetle protection on both crucifer and striped flea beetles for your canola crop.

#### See the Lumiderm™ Yield results

Lumiderm™ resulted in a positive yield increase 78% of the time across Western Canada.†

- 35% less flea beetle damage* 
- 1.4 bu/ac higher yield**

† Results from large scale grower managed field trials across Western Canada in 2015.


** Source: Canola yield averaged across 137 Grower Demo Strips, Western Canada (2013-2015).

### Insecticide Seed Treatment

**CHARACTERISTIC RATINGS**

| PRODUCT | HERBICIDE TOLERANT TRAIT | STRAIGHT CUT | CUMBOOT | BLACK LEG | BLACK LEG | CLUBROOT | RESISTANCE | SCLEROTINIA | FUSARIUM WILT | EARLY GROWTH | GREEN SEED CONT | STANDABILITY | PLANT HEIGHT |
|---------|---------------------------|--------------|---------|-----------|-----------|-----------|------------|-------------|---------------|--------------|---------------|--------------|-------------|-------------|
| 44H44   | RR                        | G            | CR1     | R         | R         | 7         | R          | 8           | 8             | 7            | 7             | 7            | 7           |
| P505MSL | LL                        | VG           | CR1     | R         | R         | 7         | 6          | R           | 8             | 8            | 7             | 8            | 8           |
| P509L   | LL                        | G            | CR1     | R         | R         | 7         | R          | 8           | 8             | 7            | 7             | 7            | 7           |
| P508MCL | CL                        | VG           | R        | 7         | R         | 8           | 8          | 7           | 7             | 7            | 7             | 7            | 7           |
| 45H42   | RR                        | G            | CR1     | R         | R         | 8         | R          | 9           | 8             | 8            | 7            | 7            | 7           |
| 45H37   | RR                        | G            | CR1     | R         | R         | 7         | R          | 8           | 8             | 7            | 7             | 7            | 7           |
| 45M35   | RR                        | VG           | CR1     | R         | R         | 7         | R          | 8           | 8             | 8            | 7            | 7            | 7           |
| 45CM39  | RR                        | VG           | CR2     | R         | R         | 7         | R          | 8           | 8             | 7            | 7             | 7            | 7           |
| 45CS40  | RR                        | G            | CR1     | R         | R         | 7         | 6          | R           | 8             | 7            | 7            | 7            | 7           |
| P501L   | LL                        | G            | CR1     | R         | R         | 7         | R          | 8           | 8             | 8            | 7            | 7            | 7           |
| P506ML  | LL                        | VG           | CR1     | R         | R         | 7         | R          | 8           | 8             | 8            | 7            | 7            | 7           |
| P607CL  | CL                        | VG           | CR1     | R         | R         | 7         | 8           | 8           | 7            | 7            | 7            | 7            | 7           |
| P502CL  | CL                        | G            | R        | 7         | R         | 7         | 8           | 8           | 7            | 7            | 7            | 7            | 7           |

**NOTES**

For complete definitions and disclaimers related to product descriptions, characteristic ratings and disease ratings, and all other information contained herein, see page 48.

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**A MARK OF ASSURANCE IN SEED TREATMENTS.**

You choose a seed treatment package to help assure a successful season. In turn, you should feel assured that those seed treatments perform as expected, and work well with the genetics you’re planting.

LumiGEN™ seed treatments are designed, verified and proven to work with Pioneer® brand genetics, to help farmers establish healthy, uniform crops and maximize productivity.
Choose From a Full Line-Up of Herbicide Products to Help Protect Your Pioneer Protector® Canola

**Prospect™**

**HERBICIDE**

Give your canola the best start possible with the true pre-seed weed control power of Prospect™ herbicide.

› Controls a wide range of broad leaf weeds, including cleavers (overwintered and group 2 resistant biotypes), hemp-nettle, flixweed, narrow-leaved hawk’s beard and many more
› More consistent and complete control than glyphosate alone
› Flexibility to spray at 5 gal/ac low spray water volume without giving up weed control performance
› When tank mixed with glyphosate, Prospect provides 3 modes of action for control of key broadleaf weeds

**Lontrel™ XC**

**HERBICIDE**

The most effective in-season thistle control available – right down to the roots.

› For use on a number of crops including both corn and canola
› The most effective in-season thistle control available
› Flexibility to choose your rate for optimal thistle control

**Eclipse™ XC**

**HERBICIDE**

Broad-spectrum weed control for superior control of wild buckwheat and Canada thistle.

› Broad-spectrum weed control in both glyphosate-tolerant canola and corn for superior control of wild buckwheat and Canada thistle
› Convenient all-in-one control with 2 modes of action
› Protects canola without negatively impacting yield or maturity, unlike elevated rates of glyphosate

**Ares™ SN**

**HERBICIDE**

The performance standard in weed control for Pioneer® brand canola with the Clearfield® trait.

› Consistent and reliable post-emergent weed control, including subsequent flushes
› Wide window of application on both crop and weeds
› Superior control of lamb’s quarters, wild buckwheat, cleavers and volunteer canola

**Amity™ WDG**

**HERBICIDE**

The herbicide option for Pioneer® brand canola with the Clearfield® trait in the Peace country.

› Rotational flexibility for farmers in the Peace country of Alberta
› Broad-spectrum control for Clearfield canola
› Reliable control of tough grasses and targeted broadleaf weeds

**Surjet™**

**ADJUVANT**

Surjet™ Adjuvant is a blend of surfactant and petroleum hydrocarbons designed for use with Ares™ SN or Amity™ WDG herbicides.

› Rate: 0.5% v/v
› Water volume: 100L/ha or 10 US gal/ac

Need to purchase Surjet Adjuvant when applying Amity WDG

**Need to purchase Surjet Adjuvant when applying Amity WDG**
IT'S SIMPLY THE WORLD'S BEST CORN, TRUSTED BY MORE GROWERS IN CANADA THAN ANY OTHER BRAND. WE OFFER A DIVERSE LINEUP OF HYBRIDS BRED FOR THE WEST, THAT FINISH STRONG AND DRY DOWN FAST. SO YOU CAN HARVEST EARLIER AND MAXIMIZE PROFIT ALONG THE WAY.

THE PROOF IS IN THE YIELD. GET THE #YIELDHERO DATA AT YIELDHERO.PIONEER.COM

Maximized Yields And Simplified Refuge Compliance

Pioneer is committed to delivering integrated refuge products that provide growers with increased flexibility and convenience for insect resistance management (IRM). The Pioneer® brand integrated refuge product lineup brings multiple modes of action for insect protection, to help increase overall farm yields by reducing refuge and extending the durability of important traits.

<table>
<thead>
<tr>
<th>PESTS CONTROLLED OR SUPPRESSED</th>
<th>DESCRIPTION</th>
<th>BENEFITS</th>
<th>REFUGE</th>
<th>REFUGE EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Corn Borer</td>
<td>Single-bag product with integrated corn borer refuge</td>
<td>Ultimate simplicity, Maximized farm yields, Technology preservation</td>
<td>Integrated refuge; no separate refuge required</td>
<td><img src="image1" alt="Optimum AcreMax" /> <img src="image2" alt="AcreMax XTreme" /> <img src="image3" alt="Qrome" /></td>
</tr>
<tr>
<td>Corn Earworm</td>
<td></td>
<td>Maximum yields, Technology preservation, Proven performance, Multiple modes of insect protection</td>
<td>Integrated refuge; no separate refuge required</td>
<td></td>
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<tr>
<td>Fall Armyworm</td>
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<tr>
<td>Black Cutworm</td>
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<tr>
<td>Western Corn Rootworm</td>
<td></td>
<td></td>
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<tr>
<td>Northern Corn Rootworm</td>
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</table>

Pioneer® brand Optimum® AcreMax® Optimum® AcreMax® XTreme and Qrome® Products
## Corn Traits and Technologies

Efficacy levels based on Pioneer university entomologist results against susceptible insect populations. Product responses can vary by location, pest population, environmental conditions and agricultural practices.

<table>
<thead>
<tr>
<th>TECHNOLOGY SEGMENT IDENTIFIERS</th>
<th>CORN TECHNOLOGY TRAITS</th>
<th>INSECT EFFICACY LEVELS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RR2</strong></td>
<td>Roundup Ready® Corn 2</td>
<td></td>
</tr>
<tr>
<td><strong>LL</strong></td>
<td>LibertyLink®</td>
<td></td>
</tr>
<tr>
<td><strong>AM, LL, RR2</strong></td>
<td>Optimum® AcreMax®, LibertyLink®, Roundup Ready®, Corn 2 (Corn Borer)</td>
<td></td>
</tr>
<tr>
<td><strong>AMXT, LL, RR2</strong></td>
<td>Optimum® AcreMax®, X-Treme, LibertyLink®, Roundup Ready®, Corn 2 (Corn Borer / Rootworm)</td>
<td></td>
</tr>
<tr>
<td><strong>Q</strong></td>
<td>Grome®, LibertyLink®, Roundup Ready®, Corn 2 (Corn Borer / Rootworm)</td>
<td></td>
</tr>
</tbody>
</table>

C = Controlled  S = Suppressed  BlanK = Not Labeled
All scores of integrated refuge products are based upon the major component.

* Various factors, including pest pressure, reduced susceptibility, and insect resistance in some pest populations may affect efficacy of certain corn technology products in some regions. To help extend durability of these technologies, Pioneer recommends you implement Integrated Pest Management practices such as crop rotation, cultural and biological control tactics (including rotating sources of Bt-protected corn traits), pest scouting, and appropriate use of pest thresholds when employing management practices such as insecticide application. You must also plant the required refuge when using these technologies. Please contact your authorized Pioneer sales representative or consult with your local university extension for more information regarding insect resistance management guidelines, best management practices and to understand whether there has been a shift in susceptibility or insect resistance with certain pests documented in your area.

* Western bean cutworm has been removed from the Pioneer product use statement for several corn products that contain Herculex® I (Cry1F), but lack another mode of action for western bean cutworm due to a wide-spread decrease in susceptibility, indicating the possibility of field-evolved resistance to Cry1F in most geographies.

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### Featured Grain Corn Hybrids

#### P7211AM

**2050 HEAT UNITS**

- Industry leader in early grain corn performance
- Fantastic yield for early maturity
- Very good test weight and grain quality
- Excellent drought tolerance scores
- Above-average stock strength

**DEKALB® DKC26-40RIB**

12.3 bu/ac

Source: 6 locations

7.7 BU/AC INCREASE | 2.6% MOISTURE ADVANTAGE

#### P7417AM

**2125 HEAT UNITS**

- Very good stalk strength
- Very good drought score
- Average roots
- Average test weight

**DEKALB® DKC26-40RIB**

129.8 bu/ac

Source: 8 locations

7.4 BU/AC INCREASE | 3.0% MOISTURE ADVANTAGE

#### P7455R

**2100 HEAT UNITS**

- Excellent agronomic package from planting to harvest
- Great early season vigour and emergence
- Solid mid-late stalk and root strength
- Strong grain performance across various growing conditions / soil types
- Very good test weight
- Short plant height for improved residue management

**DEKALB® DKC29-89RIB**

136.6 bu/ac

Source: 25 locations

10.1 BU/AC INCREASE | 1.9% MOISTURE ADVANTAGE

#### P7527AM

**2150 HEAT UNITS**

- Top end grain yield with fast dry down
- Dual purpose with strong silage performance
- Good Goss's Wilt resistance score
- Very good drought tolerance and stalk strength scores

**DEKALB® DKC29-89RIB**

146.7 bu/ac

Source: 43 locations

119.9 bu/ac

2.8 BU/AC INCREASE | 0.8% MOISTURE ADVANTAGE
### Featured Grain Corn Hybrids

<table>
<thead>
<tr>
<th>Hybrid</th>
<th>Code</th>
<th>Yield Increase</th>
<th>Moisture Advantage</th>
<th>Heat Units</th>
<th>Source</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>P7574AM</td>
<td>P7574AM</td>
<td>12.8 BU/AC INCREASE</td>
<td>2.0% MOISTURE ADVANTAGE</td>
<td>2150 HEAT UNITS</td>
<td>10 locations</td>
<td>Consistent yield performance across various conditions or soil types where tested. Well suited for grain performance and maturity for Red River Valley and Southern AB. Above average test weight. Excellent early season vigour and emergence. Average root and stalk strength. Great silage characteristics with strong performance.</td>
</tr>
<tr>
<td>P7861AM</td>
<td>P7861AM</td>
<td>6.4 BU/AC INCREASE</td>
<td>2.3% MOISTURE ADVANTAGE</td>
<td>2250 HEAT UNITS</td>
<td>12 locations</td>
<td>Excellent yield performance with solid agronomic package. Strongest Goss's Wilt rating in line-up. Very good drought tolerance and stalk strength scores. Excellent dual-purpose corn product with strong silage traits.</td>
</tr>
<tr>
<td>P7958AM</td>
<td>P7958AM</td>
<td>11.1 BU/AC INCREASE</td>
<td>1.8% MOISTURE ADVANTAGE</td>
<td>2275 HEAT UNITS</td>
<td>7 locations</td>
<td>Optimum® AcmeMax® product delivering integrated refuge for above-ground insect control. Very good drought tolerance and root strength. Moderate Goss’s Wilt resistance. Excellent silage characteristics and performance.</td>
</tr>
<tr>
<td>P8294AM</td>
<td>P8352AM</td>
<td>1% STARCH ADVANTAGE</td>
<td></td>
<td>2400 HEAT UNITS</td>
<td>3 locations</td>
<td>Optimum® AcreMax® product delivering integrated refuge for above-ground insect control. Tall plant stature. Great late-season plant health. Excellent early-season vigour and emergence. Good Goss’s Wilt resistance.</td>
</tr>
<tr>
<td>P8989AM</td>
<td>P8989AM</td>
<td>4.4% STARCH ADVANTAGE</td>
<td></td>
<td>2650 HEAT UNITS</td>
<td>2 locations</td>
<td>Ultra early silage corn hybrid. Very good drought tolerance and stalk strength. Good root strength.</td>
</tr>
</tbody>
</table>


### Featured Silage Corn Hybrids

<table>
<thead>
<tr>
<th>Hybrid</th>
<th>Code</th>
<th>Silage Yields</th>
<th>Moisture Advantage</th>
<th>Heat Units</th>
<th>Source</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>P6909R</td>
<td>P6909R</td>
<td>22.08 Tons/AC</td>
<td>22.22 Tons/AC</td>
<td>2450 HEAT UNITS</td>
<td>3 locations</td>
<td>Double-purpose corn product with excellent drought tolerance. Very good stalks and root scores. Average Goss’s Wilt resistance.</td>
</tr>
<tr>
<td>P8407AM</td>
<td>P8407AM</td>
<td>22.97 Tons/AC</td>
<td>23.34 Tons/AC</td>
<td>2450 HEAT UNITS</td>
<td>3 locations</td>
<td>Very good stalk strength. Good drought tolerance scores. Average stress emergence.</td>
</tr>
</tbody>
</table>

2. One-year (2020) Corteva Agriscience silage research trial data conducted in Western Canada as of Feb 10, 2021.
| HYBRID BRAND* | TECHNOLOGY SEGMENT | CHU | MARKET SEGMENT | CRM | SIL CRM | PHY CRM | GOUS TO SILK | GOUS TO PHY. | MATURITY | MILK SEASON | BOTTLE STALK | ROOT STRENGTH | BRITTLE STALK | BEETLE STALK | HIGH RESILIENCE | Drought Tolerance | Drought Durability |phys | Drought Recovery | PHO | GDUS TO PHY. | GDUS TO SILK | MATURITY | STALK STRENGTH | STALK STRENGTH | BRITTLE STALK | BEETLE STALK | ROOT STRENGTH | BRITTLE STALK | BEETLE STALK | STALK STRENGTH | STALK STRENGTH | BRITTLE STALK | BEETLE STALK | ROOT STRENGTH | BRITTLE STALK | BEETLE STALK | STALK STRENGTH | STALK STRENGTH | BRITTLE STALK | BEETLE STALK | ROOT STRENGTH | BRITTLE STALK | BEETLE STALK | STALK STRENGTH | STALK STRENGTH | BRITTLE STALK | BEETLE STALK | ROOT STRENGTH | BRITTLE STALK | BEETLE STALK | STALK STRENGTH | STALK STRENGTH | BRITTLE STALK | BEETLE STALK | ROOT STRENGTH | BRITTLE STALK | BEETLE STALK | STALK STRENGTH | STALK STRENGTH | BRITTLE STALK | BEETLE STALK | ROOT STRENGTH | BRITTLE STALK | BEETLE 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Corteva Agriscience is the Agricultural Company Dedicated to Farmers.

Our purpose is to enrich the lives of those who produce and those who consume, ensuring progress for generations to come.

We are also dedicated to helping farmers conserve resources and sustain the land. The collective success of Corteva Agriscience has been built on working to develop exceptional seed, crop protection and digital products that farmers trust.

Headquartered in Calgary, Alberta, Corteva Agriscience has over 10 cutting-edge research centres and countless industry experts working closely with farmers across the country.

Our Local Canadian Presence

We dedicate our global and local presence, depth of knowledge and diverse resources, so farmers and their operations flourish, moving our world forward.

Through sustainable and world-class solutions, we are increasing crop productivity to help farmers get the most out of every acre, while conserving resources and sustaining the land.

KEEP GROWING.

Corteva Agriscience 2021 Field Guide App

Scan the code with your mobile device to learn more.

Crop Protection Products for Corn

Lontrel™ XC

HERBICIDE

The most effective in-season thistle control available - right down to the roots.

› For use on a number of crops including corn and canola
› The most effective in-season thistle control available
› Flexibility to choose your rate for optimal thistle control

Eclipse™ XC

HERBICIDE

Broad-spectrum weed control for superior control of wild buckwheat and Canada thistle.

› Now registered for application in glyphosate-tolerant corn from the VE to V6 stage (8 leaf*)
› Convenient all-in-one herbicide solution offering superior control of a broad spectrum of weeds

Sortan™ XS

HERBICIDE

Cleaner field, higher yield potential.

› Provides moisture-activated extended control throughout the critical weed free period (VE to V4)
› Removes early season weed competition with excellent control of volunteer glyphosate-tolerant canola and wild buckwheat
› Tank mix with glyphosate for an additional mode of action, providing a great tool for resistance management

CornHerbicides.corteva.ca

Learn more at corteva.ca

28 | Corn
OUR HIGH-PERFORMING PORTFOLIO OF SOYBEAN VARIETIES HAS ALWAYS DELIVERED RESULTS YOU CAN COUNT ON. AND NOW, WITH THE ADDITION OF EVEN MORE MATURITY OPTIONS FOR PIONEER® BRAND SOYBEANS WITH ROUNDUP READY 2 XTEND® TECHNOLOGY, GROWERS CAN CONTINUE TO ENJOY HIGH-PERFORMING PRODUCTS IN ALL AREAS OF WESTERN CANADA.

THE PROOF IS IN THE YIELD. GET THE #YIELDHERO DATA AT YIELDHERO.PIONEER.COM

Developed and Tested To Deliver Performance

Pioneer® brand A-Series soybeans are products of research innovations powered by AIT 4.0, our proprietary tool for more rapidly developing products with the highest yield potential. Our extensive localized breeding and testing program helps ensure your A-Series soybeans deliver superior yield potential in your fields.

Highest Soybean Yield Potential

With soybean products that are developed across many Western Canada growing areas, Pioneer® brand A-Series soybean have outperformed other soybean varieties across multiple years and locations.

Backed by Unparalleled Research and Development

Pioneer has the industry’s most extensive localized soybean breeding and product testing program to deliver leading yield-potential soybeans customized for your acres.

Leading Defensive Traits to Beat Local Challenges

Our molecular breeding hones the native defensive traits you need to fight SCN, SDS, white mould, Phytophthora and many other yield-robbing diseases. Pioneer rigorously tests its products for disease resistance under the toughest conditions to help ensure peak performance in your local growing conditions.

Key Benefits of Pioneer® brand A-Series Soybeans:

Multiple product choices with Roundup Ready® 2 Xtend trait in all maturity groups
› Maximize yield and profitability on your soybean acres
› Provide varieties suited to all environments in Western Canada

Pioneer® brand soybeans with the Roundup Ready® 2 Xtend trait offer you a resistance management tool to help protect your A-Series soybean yield when glyphosate-resistant weeds (like kochia and wild buckwheat) are present.
The Enlist™ weed control system will change how you think about weed management in soybeans.

Farmers will be able to purchase Pioneer® brand Enlist E3™ soybean varieties for Western Canada in the future and will be able to take control of resistant and hard-to-control weeds.

WHY USE THE ENLIST WEED CONTROL SYSTEM?

- A new system built for Canadian farmers starting with new traits providing herbicide tolerance in soybeans and corn
- Herbicide solutions built on an improved form of 2,4-D, enables management of hard-to-control and resistant weeds with Group 4 herbicides
- Supports the use of multiple modes of action to address resistant weeds, provides training, and promotes responsible and sustainable use

Enlist E3™ Soybeans

Enlist E3 soybeans provide high-yielding soybean genetics and industry-leading triple mode of action herbicide tolerance.

WHY USE ENLIST E3 SOYBEANS?

- Enlist E3 soybeans are tolerant to 2,4-D, glyphosate and glufosinate herbicides, which are part of a strong resistance management strategy
- Excellent crop tolerance enabling applications up to the R2 growth stage

Enlist™ herbicides with Colex-D™ technology

Enlist Duo™ with COLEX-D™ technology

COMPLETE CONVENIENCE.

Enlist Duo provides the convenience of both 2,4-D choline and glyphosate in one formulation for control of grasses and broadleaf weeds, including hard-to-control and resistant weeds.

Enlist™ 1 with COLEX-D™ technology

FLEXIBILITY AND CHOICE.

Enlist™ 1, a stand-alone 2,4-D choline formulation, provides the flexibility to tank-mix and adjust the rates of glyphosate or glufosinate for hard-to-control and resistant weeds.

KEY WEEDS CONTROLLED BY ENLIST DUO™

- Giant ragweed*
- Eastern black nightshade
- Dandelion
- Cleavers
- Chickweed
- Canada thistle
- Buckwheat, tartary & bluebur
- Volunteer barley
- Volunteer canola*
- Waterhemp
- Volunteer canola*
- Vetch
- Velvetleaf
- Red root pigweed
- Palmer Amaranth
- Morning glory
- Kochia*
- Volunteer canola*
- Wild buckwheat
- Wild oats
- Barnyard grass
- Fall panicum
- Barnyard grass
- Barnyard grass
- Barnyard grass
- Waterhemp
- Volunteer canola*
- Volunteer canola*
- Volunteer canola*
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Program approach

Enlist Duo™ and Enlist™ 1 are powerful tools as part of the Enlist™ Weed Control System

- Colex-D technology is designed to land and stay on target.
- Wide window of application from pre-plant burndowns up to the R2 stage (full flower).
- Designed to be used with complimentary herbicides as part of a Program Approach to manage a wide range of hard-to-control and resistant weeds like:
  - Annual saw thistle
  - Cleavers
  - Dandelion
  - Kochia
  - Volunteer canola
  - Wild buckwheat

Always read and follow the product label and consult the Product Use Guide for additional application information. The transgenic soybean event in Enlist E3™ soybeans is jointly developed and owned by Dow AgroSciences LLC and M.S. Technologies, LLC. Enlist Duo™ and Enlist™ are the only 2,4-D products authorized for use with Enlist™ crops. Consult Enlist herbicide labels for weed species controlled. The Enlist weed control system is owned and developed by Dow AgroSciences LLC. LIBERTY is a registered trademark of BASF, used under license by BASF Canada Inc.
### Featured Soybean Varieties

<table>
<thead>
<tr>
<th>Soybean Variety</th>
<th>Yield</th>
<th>Source</th>
<th>Heat Units</th>
<th>Comments</th>
</tr>
</thead>
</table>
| P001A48X        | 31.3  bu/ac | 13 locations | 2300 | Excellent harvest standability and early growth scores  
| NK® 50009-M2    | 28.7  bu/ac | 1.6 BU/AC INCREASE |
| P003A97X        | 37.3  bu/ac | 12 locations | 2350 | Early maturity Xtend soybean with excellent yield potential  
| DEKALB® DKB003-29 | 37.4  bu/ac | 0.9 BU/AC INCREASE |
| P005A52X        | 38.3  bu/ac | 6 locations | 2400 | Excellent field emergence and anti-shattering scores  
| DEKALB® DKB003-29 | 37.4  bu/ac | 0.2 BU/AC INCREASE |
| Thunder Seed TH B7003 R2X | 39.6  bu/ac | 9 locations | 2425 | Good harvets standability score  
| DEKALB® DKB005-52 | 38.2  bu/ac | 0.5 BU/AC INCREASE |
| P006A37X        | 38.7  bu/ac | 6 locations | 2525 | New mid-maturity soybean with SCN resistance  
| DEKALB® DKB005-52 | 38.2  bu/ac | 0.5 BU/AC INCREASE |
| P005A83X        | 42.7  bu/ac | 4 locations | 2375 | Good canopy width soybean with very good yield potential  
| NK® 5007-Y6     | 40.6  bu/ac | 2.1 BU/AC INCREASE |
| P00A49X         | 46.7  bu/ac | 5 locations | 2525 | New mid-maturity soybean with SCP resistance  
| DEKALB® 25-10RY | 44.5  bu/ac | 1.2 BU/AC INCREASE |
| P00A75X         | 42.1  bu/ac | 6 locations | 2525 | Bushy soybean plant type  
| DEKALB® DKB005-52 | 41.4  bu/ac | 0.7 BU/AC INCREASE |
### Soybeans

| VARIETY/BRAND | RELATIVE MATURITY | CANADIAN HEAT UNITS | TECHNOLOGY SEGMENT | FIELD EMERGENCE | PHYTOPHTHORA GENE | DOWNY MILDEW | WHITE MOLD | SUDDEN DEATH SYNDROME | SCN SOURCE | CYST NEMATODE RACE 1 | CYST NEMATODE RACE 3 | CYST NEMATODE RACE 5 | CYST NEMATODE RACE 14 | CANOPY WIDTH | SHATTERING | PLANT HEIGHT FOR MATURITY | % PROTEIN @ 13% MOISTURE | % OIL @ 13% MOISTURE | SEED SIZE RANGE | PUBESCENCE COLOR | HILA COLOR | POD COLOR | PHYTOPHTHORA FIELD TOLERANCE | IRON CHLOROSIS | DOWNY MILDEW | WHITE MOLD | SUDDEN DEATH SYNDROME | SCN SOURCE |
|---------------|-------------------|---------------------|--------------------|----------------|------------------|--------------|-----------|----------------------|-----------|----------------------|------------------|------------------|-------------------|-----------------|----------|-------------------------|---------------------|-----------------|----------------|----------------|----------------|
| P0003A73X™    | 0.007             | 2175                | RR2X               | 6              | 7                | 1a           | 4          | 5                    | 34.1      | 19.8                 | 2400             | 3050             | T                 | BR              | BR                  |
| P0001A48X™    | 0.011             | 2300                | RR2X               | 7              | 8                | 1c           | 5          | 6                    | 34.6      | 19.7                 | 2500             | 3100             | T                 | TN              | TN                  |
| P003A97X™     | 0.05              | 2350                | RR2X               | 6              | 7                | 1k           | 4          | 6                    | 33.9      | 20.2                 | 2700             | 3350             | L                 | G               | BR                  |
| P005A83X™     | 0.05              | 2400                | RR2X               | 7              | 8                | 1c           | 5          | 6                    | 34.6      | 19.6                 | 2350             | 2950             | L                 | BR              | TN                  |
| P006A27X™     | 0.05              | 2400                | RR2X               | 7              | 8                | 1c           | 6          | 6                    | 34.5      | 19.6                 | 2700             | 2950             | L                 | BR              | TN                  |
| P007A08X™     | 0.06              | 2425                | RR2X               | 6              | 7                | 1c           | 4          | 3                    | 33.7      | 20.7                 | 2400             | 3050             | T                 | BR              | BR                  |
| P007A08X™     | 0.07              | 2450                | RR2X               | 6              | 7                | 1c           | 5          | 5                    | 34.8      | 19.7                 | 2750             | 3350             | T                 | G               | BR                  |
| P008A97X™     | 0.0                | 2525                | RR2X               | 6              | 7                | 1c           | 5          | 5                    | 34.3      | 19.9                 | 2600             | 3200             | L                 | G               | BR                  |
| P008A97X™     | 0.0                | 2525                | RR2X               | 6              | 7                | 1k           | 4          | 3                    | 33.7      | 20.7                 | 2350             | 2950             | G                 | IB              | BR                  |

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<thead>
<tr>
<th>CHARACTERISTIC RATINGS*</th>
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### SOYBEANS

**NOTES**

For complete definitions and disclaimers related to product descriptions, characteristic ratings and disease ratings, and all other information contained herein, see page 46.

* Reflects preliminary data. Subject to change when additional data becomes available.

All Pioneer products denoted with * are brand names.

**A MARK OF ASSURANCE IN SEED TREATMENTS.**

You choose a seed treatment package to help assure a successful season. In turn, you should feel assured that those seed treatments perform as expected, and work well with the genetics you’re planting.

LumiGEN® seed treatments are designed, verified and proven to work with Pioneer® brand genetics, to help farmers establish healthy, uniform crops and maximize productivity.

---

**Lumiderm™ INSECTICIDE SEED TREATMENT**

**Key Benefits**

- Broad spectrum protection from early season insect pests including bean leaf beetle and soybean aphid
- Excellent seedling protection delivers uniform, healthy stand to maximize yield potential
- A new mode of action with a favorable environmental profile
- Simplifies your seed treatment decision

**Protection against early season insects**

- Lumiderm contains a unique Group 28 insecticide
- Provides soybean seedings with extended protection against bean leaf beetle and soybean aphids

**Lumiderm Research Authorization Results**

![Lumiderm Research Authorization Results](image)

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<th>Yield (bu/ac)</th>
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FST only  Lumiderm + Lumisena™ + FST  Commercial IST + FST

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<th>No. of bushels</th>
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Lumiderm™ and Lumisena™ Strip Trial
Kelburn Farm, MB

Standard IST + FST  Lumiderm + Lumisena™ + FST

**SoybeanProtection.corteva.ca**

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**Lumisena™ FUNGICIDE SEED TREATMENT**

**Key Benefits**

- Most advanced seed-applied technology to protect against phytophthora
- Enhances emergence and vigour to maximize yield potential
- Improves soybean plant stands
- New class of chemistry for improved above and below ground disease control

**Protection against phytophthora**

- Phytophthora is the #1 disease in soybeans that can significantly reduce yields
- Lumisena™ fungicide seed treatment offers an entirely new mode of action to provide the best protection against phytophthora
- Seed treatment research has demonstrated that Lumisena™ will provide greater protection against phytophthora than existing seed treatments

**Protection against early season insects**

- Lumiderm contains a unique Group 28 insecticide
- Provides soybean seedlings with extended protection against bean leaf beetle and soybean aphids

---

**Lumiderm® and Lumisena™ Strip Trial Kelburn Farm, MB**

Standard IST + FST  Lumiderm + Lumisena™ + FST

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FST only  Lumiderm + Lumisena™ + FST  Commercial IST + FST

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**SoybeanProtection.corteva.ca**

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**NOTES**

For complete definitions and disclaimers related to product descriptions, characteristic ratings and disease ratings, and all other information contained herein, see page 46.

* Reflects preliminary data. Subject to change when additional data becomes available.

All Pioneer products denoted with * are brand names.
| PRODUCT                   | HERBICIDE SYSTEM | RELATIVE MATURITY | EMERGENCE | DROPCROWN | PEER-OIL | MID-OLEIC SCORE | HIGH-OLEIC SCORE | SELF FERTILITY | PLANT HEIGHT | STEM CURVATURE | STALK STRENGTH | ROOT STRENGTH | RUST FIELD TOLERANCE | ROOT SCURVITITIA | Mjong | PHOMOPSIS | MISO CORE | MID-OILE REACH RESISTANCE | TEST WEIGHT | HULL SCORE | PC105 |
|---------------------------|------------------|-------------------|-----------|-----------|----------|----------------|-----------------|---------------|--------------|----------------|----------------|--------------|----------------|----------------|--------|-----------|----------|----------------|................|------------|--------|
| **SUNFLOWER**             |                  |                   |           |           |          |                |                 |               |              |                |                |              |                 |                |        |           |          |                |            |            |       |
| **ALFALFA**               |                  |                   |           |           |          |                |                 |               |              |                |                |              |                 |                |        |           |          |                |            |            |       |
| **PRODUCT**               | **HERBICIDE SYSTEM** | **RELATIVE MATURITY** | **EMERGENCE** | **DROPCROWN** | **PEER-OIL** | **MID-OLEIC SCORE** | **HIGH-OLEIC SCORE** | **SELF FERTILITY** | **PLANT HEIGHT** | **STEM CURVATURE** | **STALK STRENGTH** | **ROOT STRENGTH** | **RUST FIELD TOLERANCE** | **ROOT SCURVITITIA** | **Mjong** | **PHOMOPSIS** | **MISO CORE** | **MID-OILE REACH RESISTANCE** | **TEST WEIGHT** | **HULL SCORE** | **PC105** |
| P63ME80 ExpressSun        |                  |                   |           |           |          |                |                 |               |              |                |                |              |                 |                |        |           |          |                |            |            |       |
| 37                        | 7                | 6                 | 6          | 7          | 8         | 8              | 8               | 7             | 7            | 7              | 6              | 6            | 6               | 1-4            | 7     | 4         | 5         |                |            |            |       |
| **MID-OLEIC (NUSUN® OIL)**|                  |                   |           |           |          |                |                 |               |              |                |                |              |                 |                |        |           |          |                |            |            |       |
| **LINOLEIC (CONVENTIONAL OIL)** |                  |                   |           |           |          |                |                 |               |              |                |                |              |                 |                |        |           |          |                |            |            |       |
| P63HE60 ExpressSun        |                  |                   |           |           |          |                |                 |               |              |                |                |              |                 |                |        |           |          |                |            |            |       |
| 37                        | 7                | 6                 | 6          | 7          | 8         | 8              | 8               | 7             | 7            | 7              | 6              | 6            | 6               | 1-4            | 8     | 4         | 5         |                |            |            |       |
| **HIGH-OLEIC**            |                  |                   |           |           |          |                |                 |               |              |                |                |              |                 |                |        |           |          |                |            |            |       |
| P63HE60 ExpressSun        |                  |                   |           |           |          |                |                 |               |              |                |                |              |                 |                |        |           |          |                |            |            |       |
| 37                        | 7                | 6                 | 6          | 7          | 8         | 8              | 8               | 7             | 7            | 7              | 6              | 6            | 6               | 1-4            | 8     | 4         | 5         |                |            |            |       |

**NOTES**
For complete definitions and disclaimers related to product descriptions, characteristic ratings and disease ratings, and all other information contained herein, see page 47.
Sila-Bac® brand Forage Additives
Crop-Specific Options Using Patented and/or Proprietary Bacterial Strains

**SILA-BAC® BRAND INOCULANTS**

<table>
<thead>
<tr>
<th>SILA-BAC® BRAND INOCULANTS</th>
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**MULTI-CROP**

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<td>Unique blend of patented and/or proprietary strains of Lactobacillus plantarum and Enterococcus faecium</td>
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**IMPROVES FERMENTATION AND REDUCES DRY MATTER LOSS**

X X X X X X X X

**IMPROVES NUTRIENT CONSERVATION**

X X X X X X X X

**SIGNIFICANTLY REDUCES HEATING ON BUNKER/PILE**

X X X X X X X X

**HELPS REDUCE HEATING IN ENTIRE TMR**

X X X X X X X X

**IMPROVES FIBRE DIGESTIBILITY**

X X X

**NOTES**

For complete definitions and disclaimers related to product descriptions, characteristics ratings and disease ratings, and all other information contained herein, see page 58.

* Rapid React aerobic stability technology
** Patented, proprietary and unique L. buchneri strain found only in Nutrivail® Feed Technology products proven to improve rate of fiber digestibility.
† Improved aerobic stability and reduced heating is relative to untreated silage. Actual results may vary. The effect of any Sila-Bac brand inoculant is dependent upon management at harvest, storage and feedout. Factors such as moisture, maturity, chop length and compaction will determine inoculant efficacy.

**Featured Sila-Bac brand Inoculants**

**11CFT CORN FIBRE TECHNOLOGY**

- Multi-strain with L. buchneri
- Improves fiber digestibility
- Enables higher corn silage inclusion rates
- Reduces shrink and improves bunklife of the silage face during feedout

**11GFT GRASS FIBRE TECHNOLOGY**

- Multi-strain with L. buchneri
- Improves fiber digestibility
- Improves forage energy density to help reduce supplemental feeding cost
- Improves grass/cereal fermentation

**11B91 HIGH-MOISTURE CORN**

- Multi-strain with L. buchneri
- Improves fermentation
- Retains nutrient content and enhances digestibility of ensiled high-moisture corn
- Provides improved bunklife and stable feed in 7 days

**1189 HIGH-MOISTURE CORN**

- Improves dry matter digestibility
- Reduces dry matter loss
- Promotes faster, more efficient fermentation
- Helps improve alfalfa silage nutritional quality

**11H50 ALFALFA SILAGE**

- Improves dry matter digestibility
- Reduces dry matter loss
- Promotes faster, more efficient fermentation
- Helps improve alfalfa silage nutritional quality

Rapid React aerobic stability technology contains a proprietary bacterial strain that quickly goes into action, making feed ready in just 7 days. Benefits include:

- Faster access to your most valuable input
- A consistently cool bunker face
- Extended bunklife

Sila-Bac® brand inoculants 11C33, 11G22 and 11B91 — now with Rapid React aerobic stability technology — provide you with earlier aerobic stability for silage consistency and faster access to new crop feed, allowing maximum flexibility when managing feed inventory.
2021 Flex+ Rewards Grower Program

Program Savings

EARLY BOOK
Book by March 15, 2021
(Early book starting Sept 1, 2020)

EARLY TAKE
Pick up by April 30, 2021.
(Early take starting Sept 1, 2020)

5%

LUMIVIA™ CPL BONUS
SAVE 30% ($459/jug) on Lumivia™ CPL matching acres with grass and broadleaf tank mixes and/or cross spectrum products. See reverse for eligible brands (min. 300 acres).

18%

Foundation does not count as a category.

Products in Foundation and the Bonus Seed category do not qualify for the Early Book and Early Take bonus.

*Cross Spectrum counts as 2 categories, but maximum 3 categories when purchasing cross spectrum, grass and broadleaf.

**Bonus Seed Category is a category and tier builder, but is not eligible for a rebate in this program.

Eligible program period: September 01, 2020 - August 31, 2021
Detect Issues Before They Become Problems

Granular Insights provides you with alerts where to scout first so it’s easy to catch issues earlier. Get a complete view of every field with the most frequent, high-resolution satellite imagery available, prioritized by proprietary agronomic models, so you can spend your time on what matters most, not the difference to the bottom line.

Increase Scouting Efficiency

Get a list of the top fields in most need of scouting sent straight to your inbox every week instead of manually sorting through hundreds of images.

Easily Collaborate With Your Team

Easily capture and share geolocated notes and photos with your advisors and team.

Find and Fix Issues Before Yield Impact

Monitor your entire operation anytime from anywhere, and easily pinpoint potential at-risk fields with high frequency, 3-m satellite imagery.

To learn more about Granular Insights, talk to your local Pioneer sales representative or get a demo at ca.granular.ag.

Granular Insights customer? We’re happy to help. Contact us at support.ca@granular.ag or 844.744.8534

References | 45
GRAIN DRYDOWN: Comparing forage crop yield, forage head dry matter yield, and harvest moisture across various silage corn hybrids can be difficult. The Grain Drydown COH ratings provide relative comparison among Pioneer brand hybrids. These ratings are based on historically well-established and проверенное качество ((translated: proven quality) plant material. The COH rating is on a scale of 1-9, with 9 = Outstanding; 5 = Average; and 1 = Poor, based on University of Missouri silage nutrient content and forage analysis results.

10. GRAIN DRYDOWN: Silage yield, nutrient content and forage quality can be challenging to measure correctly. The Grain Drydown COH ratings provide a relative comparison among Pioneer brand hybrids. These ratings are based on historically well-established and proven quality plant material. The COH rating is on a scale of 1-9, with 9 = Outstanding; 5 = Average; and 1 = Poor, based on University of Missouri silage nutrient content and forage analysis results.

11. PLANT HEIGHT FOR MATURITY: This characteristic indicates the duration of the period-of-years testing through 2011 for all Pioneer brand products within a maturity range and harvest moisture across a wide range of both climate and soil types. This characteristic may not predict future results. Individual product results are variable and representative of the general population of a specific maturity group. Consult Enlist herbicide labels for use with Enlist. Consult Enlist Duo™ labels for use with Enlist Duo™. Guar can be found under Enlist Canadensis. Always read and follow label directions. The transgressive silo assay in the Enlist product is jointly developed and owned by Dow AgroSciences LLC and M.S. Technologies, LLC. ** Enlist, Enlist E3, the Enlist E3 logo, and CanolaXtend™ trademarks of The Dow Chemical Company ("Dow"). **Enlist Technology: Excellence Through Stewardship. To learn more about this technology, visit www.enlist.com. EnlistRTM Top is a trademark of M.S. Technologies, L.L.C. ** Enlist, and early seedling growth. Treatment of early seedling growth stage, by reducing the time to mature and improving yield. Temperature. 1 = Very narrow. 9 = Very wide. Canopy density and forage quality can be challenging to measure correctly. The Grain Drydown COH ratings provide a relative comparison among Pioneer brand hybrids. These ratings are based on historically well-established and proven quality plant material. The COH rating is on a scale of 1-9, with 9 = Outstanding; 5 = Average; and 1 = Poor, based on University of Missouri silage nutrient content and forage analysis results.

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13. HILA COLOR: This characteristic indicates the duration of the period-of-years testing through 2011 for all Pioneer brand products within a maturity range and harvest moisture across a wide range of both climate and soil types. This characteristic may not predict future results. Individual product results are variable and representative of the general population of a specific maturity group. Consult Enlist herbicide labels for use with Enlist. Consult Enlist Duo™ labels for use with Enlist Duo™. Guar can be found under Enlist Canadensis. Always read and follow label directions. The transgressive silo assay in the Enlist product is jointly developed and owned by Dow AgroSciences LLC and M.S. Technologies, LLC. ** Enlist, Enlist E3, the Enlist E3 logo, and CanolaXtend™ trademarks of The Dow Chemical Company ("Dow"). **Enlist Technology: Excellence Through Stewardship. To learn more about this technology, visit www.enlist.com. EnlistRTM Top is a trademark of M.S. Technologies, L.L.C. ** Enlist, and early seedling growth. Treatment of early seedling growth stage, by reducing the time to mature and improving yield. Temperature. 1 = Very narrow. 9 = Very wide. Canopy density and forage quality can be challenging to measure correctly. The Grain Drydown COH ratings provide a relative comparison among Pioneer brand hybrids. These ratings are based on historically well-established and proven quality plant material. The COH rating is on a scale of 1-9, with 9 = Outstanding; 5 = Average; and 1 = Poor, based on University of Missouri silage nutrient content and forage analysis results.

14. HILA COLOR: This characteristic indicates the duration of the period-of-years testing through 2011 for all Pioneer brand products within a maturity range and harvest moisture across a wide range of both climate and soil types. This characteristic may not predict future results. Individual product results are variable and representative of the general population of a specific maturity group. Consult Enlist herbicide labels for use with Enlist. Consult Enlist Duo™ labels for use with Enlist Duo™. Guar can be found under Enlist Canadensis. Always read and follow label directions. The transgressive silo assay in the Enlist product is jointly developed and owned by Dow AgroSciences LLC and M.S. Technologies, LLC. ** Enlist, Enlist E3, the Enlist E3 logo, and CanolaXtend™ trademarks of The Dow Chemical Company ("Dow"). **Enlist Technology: Excellence Through Stewardship. To learn more about this technology, visit www.enlist.com. EnlistRTM Top is a trademark of M.S. Technologies, L.L.C. ** Enlist, and early seedling growth. Treatment of early seedling growth stage, by reducing the time to mature and improving yield. Temperature. 1 = Very narrow. 9 = Very wide. Canopy density and forage quality can be challenging to measure correctly. The Grain Drydown COH ratings provide a relative comparison among Pioneer brand hybrids. These ratings are based on historically well-established and proven quality plant material. The COH rating is on a scale of 1-9, with 9 = Outstanding; 5 = Average; and 1 = Poor, based on University of Missouri silage nutrient content and forage analysis results.