













# From seed to harvest Pioneer® brand products and services 2018





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Not all Pioneer® brand products are included in this guide. See your Pioneer Hi-Bred sales representative for information on all our products, or go to pioneer.com/Canada

# **DuPont Pioneer**

# **Welcome to the DuPont Pioneer Seed-to-Harvest Guide for 2018**



We take great pride in providing you with high-quality, top-performing seed and crop protection products, that deliver high yield potential, top performance and maturities that suit where and how you farm. Our seed products, and our people, also help you overcome key challenges that threaten to limit your profitability.

In canola, we are making some great advances. Farmers have come to trust Pioneer® brand canola seed with Pioneer Protector® traits. Last year, we were the first to launch built-in

protection against both sclerotinia and clubroot in one canola hybrid. As well, we introduced the Pioneer Protector® HarvestMax trait that delivers built-in resistance to pod shatter, allowing for flexibility at harvest, and maximum yield. For 2018, we are proud to introduce a canola hybrid, 45CM36, with the Pioneer Protector® HarvestMax CR traits, featuring resistance to both clubroot and pod shatter. Another first.

In the coming years, we expect to make the LibertyLink® technology commercially available in our elite canola genetics, for your canola crop. At the same time, we also plan to introduce Pioneer® brand Optimum® GLY, a novel glyphosate resistance trait.

With more and more prairie farmers growing corn, Pioneer® brand corn seed products are leading the way – bred in Western Canada and backed by the best team of people, who are with you every step of the way.

When you put Pioneer® brand seed in your planter, you'll know you're growing the best corn genetics on the market. You can choose a hybrid that suits where you're farming and the end-use you're growing for (grain corn, silage or grazing). Your local Pioneer Hi-Bred sales representative adds even more value, with the advice and service you need to grow corn and make good money doing it.

With the recent grower interest in planting soybeans, DuPont Pioneer is offering six new soybean varieties for 2018. Our trusted T Series soybeans performed well in 2016, and NEW for your 2018 crop, we are introducing the next level in soybean performance, with our A-Series soybeans. These new soybeans were developed using our Accelerated Yield Technology, which helps develop higher yielding soybeans in less time.

The DuPont Pioneer and DuPont Crop Protection teams are committed to your success. Our agronomic know-how, local expertise and dedication to our customers continue to be key reasons why growers choose Pioneer® brand seed products and DuPont crop protection products.

On behalf of all our people in Western Canada, thank you for making us a part of your success. We hope you have a safe, productive and profitable 2018.

Bryce Eger

Business Director, Pioneer and Crop Protection



With a 90-year legacy of high yielding product performance and four research stations across the prairies, your Pioneer<sup>®</sup> brand canola, corn and soybean products are bred close to home, so they yield more where it matters most – on your farm.







### WIN A TRIP FOR TWO TO THE FINAL WEEKEND OF THE 2018 TIM HORTONS BRIER IN REGINA, SK.



The Yield Hero Contest is a great opportunity for you to share your proudest moments on the farm, when you get to announce the high yields of your Pioneer® brand seed products.

This contest is open to all Manitoba, Saskatchewan, Alberta, or British Columbia growers who have purchased Pioneer® brand canola, soybean or corn seed products, through a Pioneer Hi-Bred sales representative.

### **How to Qualify:**

- Purchase a minimum of 8 units (80 acres) of Pioneer® brand canola seed, 16 units (40 acres) of Pioneer® brand corn seed or 50 units (30 acres) of Pioneer® brand soybean seed.
- Pioneer® brand seed must be purchased through a Pioneer Hi-Bred sales representative.
- Only commercial product of Pioneer® brand seed will qualify.
- Irrigation of designated field is not allowed.
- Yield of the contestant's field must be measured by a Pioneer Hi-Bred sales representative and weigh wagon.
- Yield monitors will not be accepted.

Twenty-one grand prizes and two ways to enter to win! Use both entry methods to improve your odds!

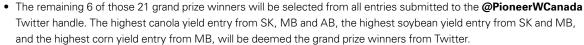
### **How to Enter:**

#### There are two ways to enter the 2017 Yield Hero Contest:

- 1. Enter through your Pioneer Hi-Bred sales representative Contact your local Pioneer Hi-Bred sales representative and have him/her submit your weigh to DuPont Pioneer through the DuPont Pioneer Trials System.
- 2. Enter through Twitter Complete the weigh with your PHI sales representative, let him/her take a picture of you with your yield results on our fancy yield board, then tweet your results to @PioneerWCanada with the hashtags #YieldHero #WestCdnAg and include your picture. Improve your odds of winning by entering the contest through both methods! The contest opens on Monday, August 14th, 2017 at 12:00 a.m. CST and closes on Sunday, November 19th, 2017 at 11:59 p.m. CST.

### **Grand Prize:**

- The grand prize is a trip for 2 to attend the final curling weekend of the 2018 Tim Hortons Brier in Regina, SK.
- There will be 21 grand prize winners in total. The 15 highest entries of those 21 grand prize winners will be selected from all of the DuPont Pioneer Trials System corn and canola data submissions (1 per account manager).



- All canola and soybean weighs entered through the DuPont Pioneer Trials System submission method must be submitted by 11:59 PM CST on Sunday, October 29th, 2017. All corn weighs entered through the DuPont Pioneer Trials System submission method must be submitted by 11:59 PM CST on Sunday, November 19th, 2017
- All canola, corn, and soybean entries submitted to the @PioneerWCanada Twitter handle must submitted by 11:59 PM CST on Sunday, November 19th, 2017

For complete contest information and rules, please visit https://ca.pioneer.com/west/en/events-contests/







**Duane & Neta Fehr** Darlingford, MB P006T46R 67.3 (bu/ac)



Hespler Farms Ltd. Winkler, MB P8387AM™ 229.5 (bu/ac)

Grower Name	Town	Province	Crop	Pioneer® brand seed product	Yield (bu/ac)
Barry Reese	Didsbury	AB	<b>(</b>	45H33 RR	91.9
Florian Hagmann	Birch Hills	SK	<b>(a)</b>	45H33 RR	90.2
Cadrain Farms Inc.	Leask	SK	<b>(4)</b>	45M35 RR	83.4
Wourms Genetics Inc.	St. Walburg	SK	<b>(a)</b>	45CS40 RR	82.0
Chamulka Farms	Nisku	AB		45CS40 RR	81.8
Elmer Enns	Rosthern	SK	<b>(</b>	46H75 CL	80.9
Tim Devereaux	Milestone	SK		46M34 RR	74.3
Michael Hrabarchuk	Benito	МВ	<b>(</b>	45S56 RR	72.2
Sun Tan Farm Ltd.	Grand Coulee	SK		45H33 RR	71.8
Todd & Lesley Wilson	Wawota	SK	<b>(</b>	45H33 RR	68.7
Kevin Love	Vulcan	AB		46M34 RR	66.4
Bridgeview Farms Ltd.	Willingdon	AB	<b>(</b>	45H33 RR	63.6
Donald Thiessen	Wanham	AB		45H33 RR	62.9
Gary Sanocki	Eaglesham	AB	<b>(</b>	45M35 RR	62.4
Thorsteinson Land & Livestock	Foam Lake	SK		45H29 RR	61.5
Hespler Farms Ltd.	Winkler	МВ	<b>Ø</b>	P8387AM™	229.5
Plateau Sands	Miami	МВ		P7958AM™	226.6
Triple P Farms	Steinbach	МВ	Ø	P8387AM™	219.4
Harwest Farms Ltd.	Brandon	МВ	<b>Ø</b>	P7958AM™	204.4
Duane & Neta Fehr	Darlingford	МВ	0	P006T46R	67.3

### The Proving Ground™

### **Where Research Meets Reality**

The Proving Ground™ trials encompass our complete testing program – from research through testing both products and agronomic practices that make a difference on the grower's operation. They truly are where research meets reality.



### Research and **Development**



### **Agronomy Research Efforts**

- Testing different agronomic practices new and old to help us learn more about the factors that impact yield
- Testing of new proprietary traits and treatments to help us understand the true value to farmers of the trait and how it can best help their
- Providing growers with access to unbiased, scientifically-based agronomic information

# **IMPACT™**

**Intensively Managed Product Advancement, Characterization** and Training Trials

- Field-scale program that generates yield performance data to make product advancement

# **Side-by-Sides**

- Field-scale demonstration of commercial products that are managed with
- Customers can "test-drive" DuPont Pioneer genetics against other
- Allows "system comparisons" to measure overall performance of hybrid and weed control

### **Product Knowledge Plot**

- Test new commercial products under many environmental and management conditions
- Gain experience with new products before wide-scale launch



should be protected. Our canola hybrids with Pioneer Protector® traits do exactly that.



CANOLA

SEED

# PROTECTOR Pioneer Protector® Traits

### More ways to protect your canola and your business.

In recent years, growers have come to trust Pioneer® brand canola seed with Pioneer Protector® traits, for protection against some of the key challenges of growing canola: sclerotinia, which surfaced in a number of fields in 2016; clubroot, a devastating disease threat in Alberta every year; and the risk of harvest losses from pod shatter. In 2016, canola hybrids with Pioneer Protector® Plus traits were introduced as the first and only canola seed products to protect you against both diseases at once. Canola hybrids with the Pioneer Protector® HarvestMax trait deliver protection against harvest losses due to pod shatter. And NEW for 2018, Pioneer Protector® HarvestMax CR traits safeguard against clubroot and harvest losses due to pod shatter.



### **NEW Pioneer Protector® HarvestMax CR**

New Pioneer® hybrid 45CM36 delivers both Pioneer Protector® HarvestMax and Pioneer Protector® clubroot resistance traits, with a new source of built-in clubroot resistance. This revolutionary hybrid offers exceptional yields, flexibility to swath or straight cut at harvest, and provides resistance to new variants of clubroot races 2 and 3.



### **Pioneer Protector® Plus**

In 2016, DuPont Pioneer was the first and only company to develop a canola hybrid in Western Canada – Pioneer® hybrid 45CS40 - with built-in disease protection from both sclerotinia AND clubroot.



### Pioneer Protector® HarvestMax

Last year, DuPont Pioneer was the first company to introduce a Genuity® Roundup Ready® canola hybrid with pod shatter resistance, reducing the risk of harvest losses due to pod shatter. This year, we are building on that success by offering another high yielding product, Pioneer® hybrid 45M38.



### Pioneer Protector® Sclerotinia\*

Since 2008, DuPont Pioneer has continued to introduce high-yielding canola hybrids with built-in sclerotinia resistance for Western Canadian growers.



### **Pioneer Protector® Clubroot**

In 2009, DuPont Pioneer was also the first to introduce clubroot resistant canola hybrids into the market. We continue to develop high yielding hybrids with clubroot resistance, and for 2018, offer another competitive product - Pioneer® hybrid 45H37.

Look for the Pioneer Protector® logo on high-performing canola hybrids this season. It's a symbol of canola seed traits that protect your yield and your business.



### Flexibility at harvest, no matter how you cut it.



Heading into the growing season, there's a lot you don't know about your canola crop. When will you be able to plant it? When will the crop be ready for harvest? What other demands will there be on your time and your harvest equipment? Finally, will you swath or straight-cut your canola?

You need *flexibility* and here's the good news. Canola hybrids with the built-in Pioneer Protector® HarvestMax trait give you more control at harvest time.



### Pioneer Protector® HarvestMax trait delivers:

- Strong seed pods
- Swath timing flexibility
- Ability to straight cut
- Maximum yield potential



Pioneer® hybrid 46M34 is one of the canola hybrids with the Pioneer Protector® HarvestMax trait, with strong seed pods for reduction of seed losses at harvest. Photo courtesy of DuPont Pioneer, 2014



Pioneer® hybrid 46M34 in a Proving Ground trial near Lloydminster, AB Photo courtesy of DuPont Pioneer, August 2014

### **Grower benefits:**

- Peace of mind
- Flexibility in harvest timing
- Higher returns
- Later harvest means pods have more time to fill
- More seed in the bin less lost to shatter
- Potential for more profit per acre
- Fewer volunteers to control the following year



### Blackleg

### Management of blackleg in canola

Today's shortened canola rotations have increased the risk of blackleg damage in Western Canada. Blackleg disease is harboured on canola stubble. According to research, one and two-year stubble is associated with high blackleg spore loads.

### How can a grower reduce the incidence of blackleg?

- **1.** Always choose a canola product with a complete package of yield, disease resistance and agronomic characteristics that are best for your operation.
- 2. Crop rotation is key. Tight rotations do not allow enough time for disease-bearing stubble to break down in the soil. If blackleg is a concern, a break of at least two years between canola crops can be effective in reducing blackleg in subsequent crops.

### **How does DuPont Pioneer select for blackleg resistance in canola?**

- DuPont Pioneer currently uses adult stem (quantitative) resistance, and is working toward delivering canola hybrids with both seedling (qualitative) and adult plant resistance
- Resistance at the stem level can provide more durable product performance in situations where selection pressure for overcoming resistance is increased (e.g. high canola frequency in rotations)
- A combination of both seedling and adult plant resistance will be critical to control a changing blackleg pathogen population
- We have quantitative resistance in our canola hybrids, which involves many genes, giving our canola products stability and performance, across many different environments

Seedling (Leaf) Resistance	Adult Plant (Stem) Resistance (Pioneer)
	ilesistance (i foneer)
Qualitative	Quantitative
Complete for specific race	Partial resistance
Resistance at leaf level	Resistance at stem level
Unstable in some areas	Stable over different areas
Selects for pathotypes virulent corresponding resistance gene	Exerts less selection pressure on pathogen population
Breaks down with race shift	Durable over time

### Classification of Pioneer® brand canola products for blackleg resistance

The official blackleg classifications given to canola products are based on disease ratings taken at a number of testing sites over a two-year period.

- Several blackleg strains exist at these testing sites
- DuPont Pioneer selects hybrids which show a consistent resistant reaction at all sites
- Our rating scale for resistance to blackleg is scored from 1 (susceptible) up to 9 (resistant)

The images to the right show blackleg infected canola stems. The letters above the stems on the right side photo represent the WCC/RRC rating system for susceptible to resistant canola hybrids and the numbers along the bottom represent the DuPont Pioneer rating system for screening canola hybrids for resistance to blackleg.



Photo courtesy of DuPont Pioneer canola diseas



Clubroot

### **Pioneer Protector® Clubroot Resistance**

Clubroot is a serious disease that threatens several parts of Western Canada, particularly Alberta. Left unmanaged, clubroot can cause up to 80% yield loss in infected fields.

Compare the healthy roots of a clubroot-resistant canola hybrid (below left) to the severely damaged, clubroot-susceptible hybrid, with characteristic galls showing (below right).







For the last 7 years, DuPont Pioneer has led the way in clubroot management, since introducing the Pioneer Protector® clubroot resistance traits in high-performing Pioneer® brand canola hybrids. Now, DuPont Pioneer has taken another step in reducing the risk of this devastating disease, by developing a **NEW source of clubroot resistance**.

- The new source of clubroot resistance in Pioneer® hybrid 45CM36 has built-in resistance to two new variants of races 2 & 3 along with our multi-race resistance package with protection against races 2, 3, 5, 6 and 8
- Our industry-leading Pioneer® brand canola genetics provide maximum yield potential
- Many of our current canola hybrids contain our consistent, multi-race clubroot resistance providing a high level of resistance to the most prevalent race of clubroot (race 3) and resistance to races 2, 5, 6 and 8
- Pioneer Protector® clubroot resistance traits reduce production of clubroot spores
- Gives you peace of mind that your crop and your investment will be protected

### Managing clubroot in canola

- Proper agronomic and sanitation practices are key to preventing and minimizing the spread of clubroot
- In clubroot-confirmed areas, maintain a one-in-four year rotation
- Clubroot is a soil-borne disease, so growing a canola hybrid with the Pioneer Protector® clubroot resistance traits will not increase the risk of clubroot resistance on a following crop if clubroot is suspected on that field
- Planting clubroot resistant canola hybrids keeps the clubroot inoculum from building up on a particular field

# Canola Hybrids

# PIONEER CANOLA SEED

### Feature Products

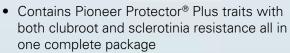
### 43E03 ROUNGUR RADY SPRING CANOLA

- Very early maturity hybrid
- Above average early growth
- "MR" for blackleg
- Low green seed count

### 45CS40 PROTECTOR







- Excellent yield potential
- Excellent early growth
- Very good standability
- "R" for blackleg

### 45H31

- Consistent yield performance
- Superior standability
- Excellent harvestability
- "R" for blackleg

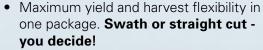
# 45H33 PROTECTOR

- High-yielding clubroot resistant hybrid
- Built-in Pioneer Protector® clubroot resistance trait (races 2, 3, 5, 6 & 8)
- Excellent early growth
- "R" for blackleg and fusarium wilt

### 45M35 PROTECTOR







- Very good standability
- Excellent early growth

### PIONEER ® 45H33 ROUNDUP READY SPRING CANOLA PROTECTOR

### **Canola Numbering System** Example: 45H33

- 4 Canola
- Relative Maturity
- **H**\* Canola Hybrid\*
- 2 5 \*\* Number represents Roundup Ready® tolerant canola
  - Denotes random number of seed product

### 45S56 PROTECTOR



- High-yielding hybrid with built-in Pioneer Protector® sclerotinia resistance trait
- Very good standability
- "MR" for blackleg
- "R" for fusarium wilt

### 46H75



Herbicide for **Clearfield<sup>®</sup> canola** 

- Excellent early growth
- Outstanding standability and harvestability
- "R" for blackleg
- Clearfield® production system provides exceptional weed control with Ares™ herbicide

### 45H76





- Mid maturity Clearfield<sup>®</sup> hybrid
- Very good standability
- "R" for blackleg and fusarium wilt
- Clearfield® production system provides exceptional weed control with Ares™ herbicide

### **Revolutionary NEW Hybrid**

### 45CM36 ROUDFRANT PROTECTOR



- The first canola hybrid with both Pioneer Protector® HarvestMax and Pioneer Protector® clubroot resistance traits
- Exceptional early growth and yield potential
- Very good lodging score

Supplied / Supplied

- "R" for blackleg and clubroot
- Contains a new source of clubroot resistance
- Swath or straight cut you decide!

### **New Canola Products**

45H37 ROUNDERSTOR





- Outstanding early growth and yield potential with the Pioneer Protector® clubroot resistance trait
- Excellent field emergence
- Very good lodging score
- "R" for blackleg and clubroot

### 45M38 PROTECTOR





10

- Good yield potential and maximum harvest flexibility. Swath or straight cut
- you decide! Excellent early growth
- Very good lodging score
- Superior blackleg resistance

### Characteristics

Pioneer® brand Product	Maturity¹	Herbicide Tolerant Trait²	Blackleg³	Blackleg⁴	Sclerotinia <sup>5</sup>	Clubroot <sup>6</sup>	Clubroot <sup>7</sup>	Fusarium Wilt <sup>8</sup>	Early Growth <sup>9</sup>	Green Seed Content <sup>10</sup>	Standability <sup>11</sup>	Straight Cut <sup>12</sup>	Plant Height <sup>13</sup>	0il Content¹⁴
Product					Char	acteris	stic Ra	tings						
43E03	3	ROUNDUP READY SPRING CANOLA	MR	6	1			R	7	9	5		6	7
45H33	5	ROUNDUP READY SPRING CANGLA	R	7	1	R	8	R	8	8	7	G	8	7
45H37*	5	RUUKUUP READY SPRING CANGLA	R	7	1	R	8	R	8	8	7		7	7
45H31	5	ROUNDUP READY SPRING CANGLA	R	7	1			R	8	8	8	G	7	7
45M35	5	RUUKUUP READY SPRING CANGLA	MR	7	1			R	8	8	8	VG	8	8
46M34	6	ROUNDUP READY SPRING CANGLA	MR	7	1			R	8	7	7	VG	7	7
45CM36*	5	ROUNDUP READY SPRING CANDLA	R	7	1	R	8	R	8	8	7	VG	7	8
45M38*	5	ROUNDUP READY SPRING CANDLA	R	8	1			R	8	8	7	VG	7	7
45CS40	5	ROUNGUP READY SPRING CANGLA	R	7	6	R	8	R	8	7	7	G	8	7
45S56	5	RUUKUUP READY SPRING CANGLA	MR	6	6			R	8	8	7	G	7	7
46H75	6	Clearfield Production System for Canola	R	7	1			R	8	8	8	G	8	8
45H76	5	Clearfield Production System for Candla	R	8	1			R	8	8	7	G	8	7

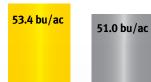
<sup>\*</sup> New

### **Industry-leading canola yields**

45CM36



Pioneer® hybrid 45CM36 is for canola growers who want a high yielding, clubroot resistant canola that can be straight cut or swathed.



45CM36 vs 45H29

2.4 bu/ac increase 83% WINS

Comparisons

45M35

ROUNDUP READY SPRING CANOLA PROTECTOR

Pioneer® hybrid 45M35 delivers maximum vield and harvest **23** flexibility Proving Ground™ package. flexibility in one



45M35 VS InVigor®

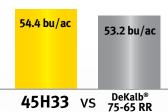
1.5 bu/ac increase

14 DuPont Pioneer research trials

45H33



Pioneer® hybrid 45H33 has yield, standability and clubroot resistance in one package.



**45H33** vs 1.2 bu/ac increase 13

Proving Ground™ Comparisons

51.2 bu/ac 50.3 bu/ac DeKalb® 74-44 BL **45H33** vs

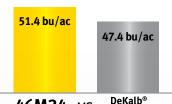
**0.9** bu/ac increase

30 Proving Ground™ Comparisons

46M34



Canola hybrid with Pioneer Protector® HarvestMax traits with outstanding yield potential and very good standability.



4.0 bu/ac increase

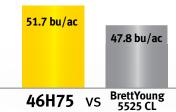
DeKalb® 74-44 BL **46M34** vs **15** Proving Ground™ Comparisons

Pioneer® hybrid 45M35 yield data was summarized over 1 year (2016) from DuPont Pioneer research trials across Western Canada as of April 7, 2016. All other canola yield data summaries were averaged across 2 years (2015 - 2016). Yield data collected from large-scale, grower managed Proving Ground™ trials across Western Canada as of March 8, 2017. Product responses are variable and subject to any number of environmental, disease and pest pressures. Individual results may vary. Multi-year and multi-location data is a better predictor of future performance. Refer to www.pioneer.com/yield or contact a Pioneer Hi-Bred sales representative for the latest and complete listing of traits and scores for each Pioneer® brand product.

46H75

Clearfield\*

Superior yield and standability with the Clearfield® trait.



**3.9** bu/ac increase

Proving Ground™ Comparisons

For complete definitions and disclaimers related to product descriptions, characteristics ratings and disease ratings, and all other information contained herein, see page 41.



# BETTER START. BETTER HARVEST.

### DuPont™ **Lumiderm®**

insecticide seed treatmen

### **Protect Your Seed Investment.**

### **Key Grower Benefits:**

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

### **SEE THE LUMIDERM® 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<sup>®</sup> helps protect your canola from cutworm feeding, which can enhance early season stand establishment and crop vigour

### How do you know if Lumiderm® insecticide seed treatment is working?

- Cutworms usually stop feeding with as little as one or two bites of canola seedlings from canola seed treated with Lumiderm®
- Lumiderm® is very fast acting control is generally achieved within 72 hours of feeding



Source: Seven Persons, AB, 42 Days After Seeding

# Enhanced flea beetle protection

Source: Lumsden, SK, 22 Days After Seeding

### SEE THE LUMIDERM® DIFFERENCE IN **ENHANCING FLEA BEETLE PROTECTION**

Crucifer and striped flea beetles can cause significant damage to canola crops across Western Canada. Lumiderm® insecticide seed treatment offers enhanced protection against flea beetles, to help maximize your canola yield.

- Lumiderm® provided a 35% reduction in flea beetle damage, 14-35 days after seeding, in 192 trials across Western Canada\*
- Growers have achieved a 1.4 bu/acre advantage over the standard treatment, across Western Canada\*



### SPEED, AGILITY AND **EXCEPTIONAL COVERAGE**



### DuPont™ Acapela®

### Protect Your Canola, Soybeans and Corn Against Disease.

- Canola plants that are infected with sclerotinia can lose up to half their yield.
- Yield loss in soybean crops is primarily the result of white mould. With high severity, yield losses may approach 40-50%. Additionally, soybean standability and seed quality may be reduced.

### More Complete Coverage

- Rapidly absorbed, moving quickly into and within each plant
- This allows you to spray even when conditions are challenging

### **4 Unique Movement Properties**

 Acapela® is a one-of-a-kind fungicide that quickly and efficiently surrounds, penetrates, and protects the leaf and stem

### **Plant Performance Benefits**

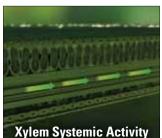
- In addition to outstanding disease control, Acapela® supports positive plant performance, even in stressful conditions
- Acapela® increases chlorophyll content and plant productivity

### **Higher Yield Potential**

- Better coverage means more consistent protection, providing outstanding disease control for greener, healthier crops and higher yield potential
- More moves means more bushels

### More moves, more bushels

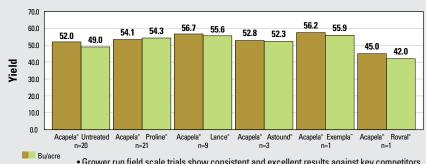








Acapela® Yield Results



- · Grower run field scale trials show consistent and excellent results against key competitors
- · Improved harvestability, standability and plant health





# Realize outstanding savings AND solutions

DuPont™ FarmCare® Connect





Stay tuned for information on how you can save big on all your acres when you purchase both Pioneer® brand seed and select DuPont crop protection products.

### **Partner Product**

# JumpStart<sup>®</sup> inoculant helps to increase the availability of soil and fertilizer phosphate

# JumpStart<sup>®</sup>

JumpStart® is an inoculant containing the naturally occurring soil fungus *Penicillium bilaiae*. *Penicillium bilaiae* releases bound mineral forms of soil and fertilizer phosphate, making it more readily available for the plant to use.

### Increase availability of soil and fertilizer phosphate for:

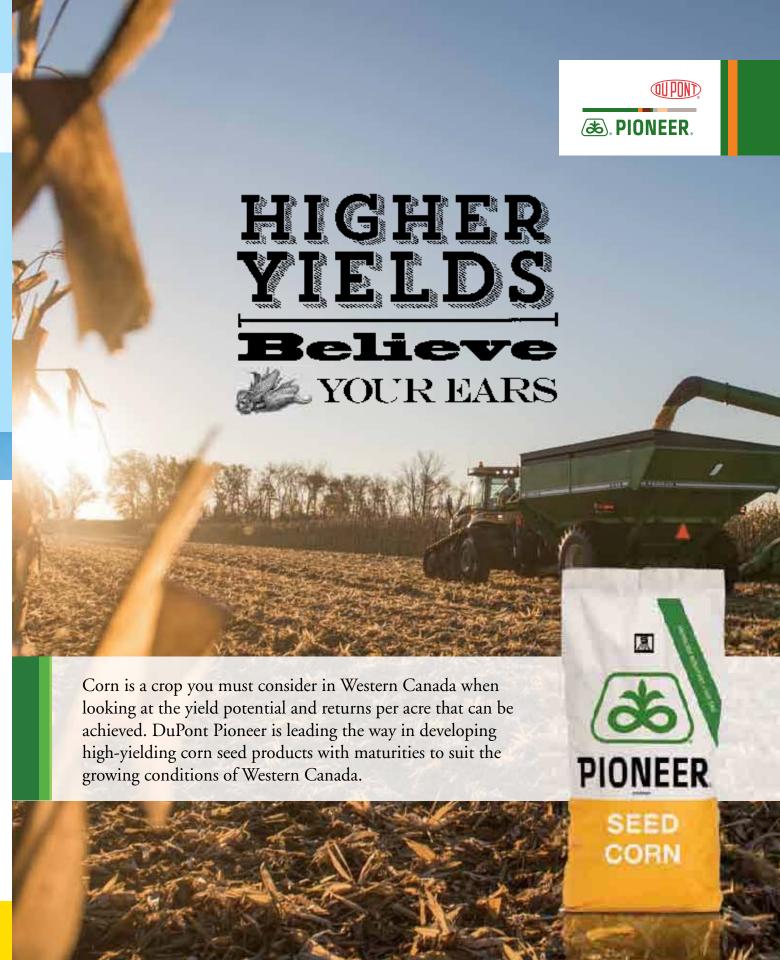
- Enhanced early vigour
- Increased root growth and leaf surface area
- Earlier flowering
- Improved crop uniformity
- Increased number of pods and pod-bearing branches

Order your canola seed pre-treated with JumpStart® inoculant!

For more information, visit UseJumpStart.ca



Photo courtesy of DuPont Pioneer. Pioneer® hybrid 45H29 canola from a Proving Ground™ trial in Northern Saskatchewan.



### **Grain Corn Seed Products**

### Feature Products

### P7005AM<sup>™</sup> AcreMax



- Ultra early maturity
- Excellent yield potential
- Exceptional test weight scores
- Good husk cover

### **P7202**AM™



- Ultra early maturity
- Produces large kernels with superior test weight
- Good root strength

### P7211HR W LIBERTY LINK W



- High yielding with early maturity
- Produces large kernels with good test weight

### P7213R Regarday (Rock)



- Very early hybrid
- Balanced agronomic package
- Very good root strength
- Excellent choice for grain corn

### P7632AM™



- Optimum® AcreMax® product delivering integrated refuge for above-ground insect control
- Good drought tolerance
- Excellent root strength and husk cover

### 39V05

- · Late-flowering hybrid
- Above average root strength
- Very good drought tolerance

### P7958AM



- Optimum® AcreMax® product delivering integrated refuge for above-ground insect control
- Very good drought tolerance and root strength
- Moderate Goss's wilt resistance

### 39**V**09am™



- Above average Goss's wilt resistance
- Good root strength
- Very good drought tolerance
- Good grain drydown

### P8210HR W LINK W PARTY P



- High yielding corn hybrid for Manitoba with very good standability
- Very good stalk strength for ease of harvest





- Excellent yield potential
- Good Goss's wilt resistance
- Choice of harvest management used for silage or grain

# **B** PIONEER P7227<sub>R</sub>

### **Corn Numbering System** Example: P7227R

- P Denotes a Pioneer® brand product
- **72** RM = Relative Maturity
- 27 Random Number 01-99
- **R** Segment Identifier: R = Roundup Ready® Corn 2 gene, HR = Herculex® I aboveground insect control with Roundup Ready® gene and LibertyLink® trait, AM™ = Optimum® AcreMax® technology delivering integrated refuge for above-ground insect protection.

### **New Corn Products**

### P7227R ROUNTER

#### 2125 heat units

- Excellent grain corn and silage corn vield potential
- Exceptional drought resistance score
- Average Goss's wilt resistance
- Very good grain dry down
- Average stalk strength and root strength
- Average grain test weight

### **P7527**AM<sup>™</sup>



- Very early product with excellent drought tolerance and protection against corn borer
- Excellent yield potential
- Average Goss's wilt resistance
- Very good grain dry down
- Average stalk strength and root strength
- Average grain test weight



### **CLEANER FIELDS, HIGHER YIELDS**

DuPont™ Sortan™ IS

NEW Sortan™ IS herbicide will allow growers to remove early season weed pressure, including volunteer Roundup Ready® canola, which is key to maximizing yield and profits in corn.

### **Application Timing**

Sortan™ IS can be used as a pre-emergent or post-emergent application (spike to V3 stage). Recommended to tank-mix with a glyphosate herbicide at 365 g ai/acre (900 ai g/ha) for control of additional weeds (glyphosate-tolerant corn only).

Removes **Early-Season Weed** Competition

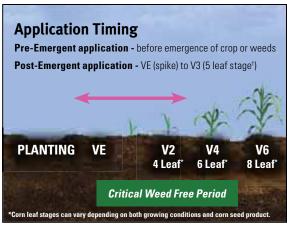
 Designed to remove early season weed competition including volunteer Roundup Ready® canola and wild buckwheat

Resistance Management

• Provides an additional mode of action to glyphosate, making it a great tool for effective resistance management

**Extended Control** 

• Extended control of tough broadleaf and grassy weeds throughout the critical weed free period



Application Information					
Pre-Emergent Rate 30 g/acre, 40 acres/bottle					
Post-Emergent Rate   15 g/acre - 30 g/acre, 40 - 80 acres/bottle (Refer to product label for more details on the post-emergent application).					
Packaging 1.2 kg bottle					
Tank-mix with a glyphosate herbicide at 365 g ai/acr (900 g ai/ha) for control of additional weeds (glyphostolerant corn only).					
Water Volume	Minimum 40 L/acre (9 imp. gal/acre)				



Source: Carman, MB, 2015 \* Tank-mix with glyphosate required for volunteer Clearfield® canola control



#### Morris, MB: August 9, 2016, 63 DAA

### **Industry-leading corn yields**

P7958<sub>AM™</sub> 2275 HEAT UNITS



Optimum® AcreMax® corn product with excellent yield and very good drought tolerance

**P7632**AM™

2225 heat units



High vielding, Optimum® AcreMax® corn product with superior agronomic package

**P7211**HR

2050 heat units



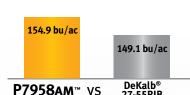
High yielding corn hybrid with corn borer protection

**P7202**AM™

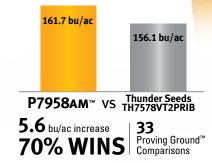
2050 heat units

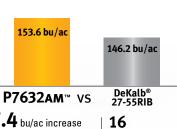


Early corn product that yields, manages harvest timing and provides built-in protection against corn borer

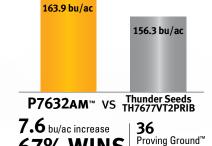


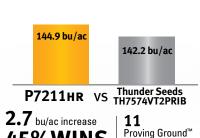
5.8 bu/ac increase 16 **69%WINS** Proving Ground"

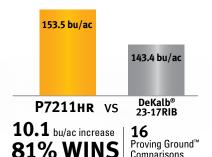


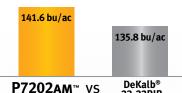


7.4 bu/ac increase Proving Ground™









5.8 bu/ac increase

12

Corn yield data summary averaged across 2 years (2015 - 2016). Yield data collected from large-scale, grower managed Proving Ground™ trials across Western Canada as of March 8, 2017. Product responses are variable and subject to any number of environmental, disease and pest pressures. Individual results may vary. Multi-year and multi-location data is a better predictor of future performance. Refer to www.pioneer.com/yield or contact a Pioneer Hi-Bred sales representative for the latest and complete listing of traits and scores for each Pioneer® brand product.

# Silage Corn Seed Products

### Feature Products

39F44 Rounday Records

### 2000 heat units

- Ultra-early silage hybrid suitable for short growing season areas in Western Canada
- Very good silage characteristics

39B90 Perfective

#### 2200 heat units

- Above average root strength and stalk lodging resistance
- Strong agronomic package

39V05 Regarding (Ready)



- Late-flowering hybrid
- Above average root strength
- Very good drought tolerance

39V09AM AcreMax



- Good Goss's wilt resistance
- Good root strength
- Very good drought tolerance

P7632AM



### 2225 heat units

- Optimum® AcreMax® product delivering integrated refuge for above-ground insect control
- Good drought tolerance
- Excellent root strength and husk cover

P7958am™

- Optimum<sup>®</sup> AcreMax<sup>®</sup> product delivering integrated refuge for above-ground insect control
- Very good drought tolerance and root strength
- Moderate Goss's wilt resistance

P8210HR W LIBERTY



### 2475 heat units

- High yielding corn hybrid for Manitoba with very good standability
- Very good stalk strength for ease of harvest



P8387AM"



### 2500 heat units

- Excellent yield potential
- Good Goss's wilt resistance
- Multi-purpose corn product silage or grain corn

P8542AM™ AcreMax



#### 2550 heat units

- High yielding silage corn product
- Very good root strength
- Very good drought tolerance

P8581R



### 2575 heat units

- Solid silage scores
- Excellent silage yield potential

P8906AM AcreMax



- Exceptional silage yield potential
- High tonnage seed product with high quality

### **New Silage Products**

P7227R ROOM



### 2125 heat units

- Excellent grain corn and silage corn vield potential
- Exceptional drought resistance score
- Average Goss's wilt resistance
- Average stalk strength and root strength
- Average grain test weight

P7527AM™ 👼



#### 2150 heat units

- Very early product with excellent drought tolerance and protection against corn borer
- Excellent yield potential
- Average Goss's wilt resistance
- Average stalk strength and root strength
- Average grain test weight

P8700AM™ Acr



- New high yield potential product with very good Northern leaf blight tolerance and excellent drought tolerance
- Excellent silage yield
- Excellent whole plant digestibility

### **Corn As An Important Feed Source For Animals**

Corn offers a high quality and high quantity feed choice that will outperform other feed options available to producers for winter grazing beef cattle.

In grazing situations, corn will help lower your cost of production, increase your cow-days per acre, and maintain cow health and condition throughout the winter grazing season.

Some things to consider when planning for winter grazing your corn crop:

### **Corn Hybrid Choice & Management for Grazing**

- Grazing corn should be at 30-50% milk line at first killing frost
- Choose a hybrid that is 150-300 CHU later than your corn heat unit area to reduce risk of acidosis and increase palatability
- Plant multiple hybrids to cover off an earlier or later season 2-3 hybrids spread over 100-200 CHU differences

### **Grazing Management & Monitoring**

Take a whole-plant representative feed sample and have a feed test analysis completed

#### **Initial Feed Introduction**

- Gradually introduce corn feed, especially for naive cows
- Full rumen entry recommended
- Supplemental feed recommended based on feed analysis
- Limit to small grazing paddock (2-3 hours of grazing)

### **General Needs for Beef Cows When Winter Grazing Corn**

- Ensure good, clean, adequate water supply and shelter source
- Ensure a proper mineral package is provided, based on your feed analysis
- Limit grazing the animals on a 2-3 day rotation for proper nutrition
- Document the crop stage at first killing frost and manage accordingly e.g. if corn was at blacklayer, add supplemental roughage to minimize risk of acidosis

### FAQ's

### How many acres do I need to graze my cows?

• Expect between 150 - 300 cow-days per acre e.g. 200 cows grazing for 30 days will need: 30 days X 200 cows = 6000 cow grazing days required. Based on 200 cow-days per acre, you would require: 6000 cow grazing days ÷ 200 cow-days per acre = 30 acres of corn

### What will my feed cost be?

- Range from \$0.70 \$1.40 per cow per day including yardage
- Corn produces more tons of feed per acre
- Fewer acres are required to feed the same amount of animals

### **Approximate Economics of Swath Grazing Barley vs. Corn Grazing**

Grazing 100 – 1000 lb cows for 30 days							
Silage	e Yield						
Barley wet weight yield (Ton/acre)	Corn wet weight yield (Ton/acre)  12						
Input Costs							
Approx. Barley Input Costs \$180 / acre	Approx. Corn Input Costs <b>\$260 / acre</b>						
Grazing Expenses (cost/cow/day)							
Barley Feed \$1.21	Corn Feed <b>\$1.12</b>						

Our corn silage products provide excellent early starch production for high energy feed and an early silage harvest. They also feature excellent stay green characteristics for green harvest and high tonnage.

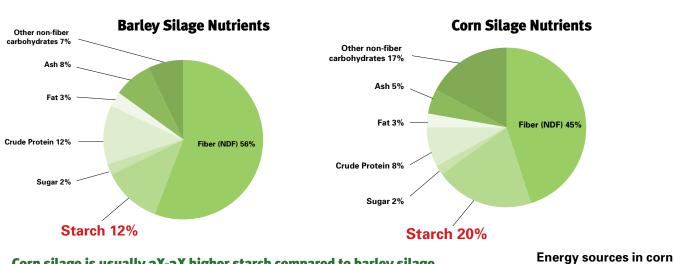
### **Key Benefits of Planting Corn for Silage**

- Corn has lower starch digestion rates per hour in rumen than barley, which means possibly lower incidence of acidosis, and better balance between rumen fermentation and intestinal digestion
- When considering the best silage option for your operation, look first at the importance of starch in the animal diet.
- Corn produces almost 2X the tons of wet silage harvested per acre than barley
- Corn also has better water use efficiency compared to wheat, barley or oats (Teutsch, 2013)

### Things to Keep in Mind About Corn Silage

- When considering the best silage option for your operation, remember the importance of starch as an energy source in the diet
- At silage maturity, the corn plant is still producing starch the longer it stays in the field, the more starch is produced
- To ensure silage success adhere to proper silage whole plant moisture when determining harvest timing
- When comparing costs of barley silage versus corn silage, use a per ton basis while per acre costs are higher for corn silage, production costs on a per ton basis favour corn silage

### **How Nutrient Composition Compares for Barley and Corn Silages**



Corn silage is usually 2X-3X higher starch compared to barley silage Barley silage is usually 3-4% points higher crude protein compared to corn silage

**Barley vs Corn: Average Tons of Wet Silage Harvested/Acre** Acres required to produce 10,000 tons/acre of silage:

- Average barley silage yield 6.75 tons (wet)/acre = 1481 barley acres needed
- Average corn silage yield 12.5 tons (wet)/acre = 800 corn acres needed
- Corn silage can free up 680 acres available for alternative crops on your farm

### Corn silage on a per ton basis is more cost effective than barley silage

65% grain

10% cell contents

24

25% NDF (fiber)

# Characteristics

* New Brand Product	Technology Segment (2)	Western Canadian Corn Heat Units	CRM	Sik CRM	Phy. CRM	GDUsto Silk	GDUs to Phy. Maturity	Stalk Strength	Mid-Season Brittle Stalk	Root Strength	Stress Emergence	Drought Tolerance	Staygreen	High Residue Suitability	Grain Drydown	Ear Flex	Test Weight	Plant Height	Ear Height	Husk Cover	Goss's Wilt	Northern Leaf Blight	Silage CRM	Silage Yield	Starch and Sugar, %	Fiber Digestibility	Whole-Plant Digestibility	Silage Crude Protein	Milk Per Acre	Milk Per Ton	Beef Per Acre	Beef Per Ton
Product	- Springer					c Rating			_	_	_				_																	
Р7005ам™	AcreMax LIBERTY & 😂	2000	70	74	77		1810	3	4	7	5	_		NS	7	3	9	3	4	6	2	3	68									
Р7202ам™	AcreMax UBERTY LIBERTY LIBERTY	2050	72	69	76		1790	5	7	6	4	6		NS	8	2	8	3	4	5	3	3	71									
Р7211нг	UBERTY 🏊	2050		70	74	890		6	5	5	4	8	3	NS	6	2	7	3	4	4	3	5	71									
P7213 <sub>R</sub>	CONTRACTOR	2050		75	74	950		4	6	7	5	5	3	NS	3	6	7	3	4	3	3	3	71	6	8	8	8	9	6	9	6	9
P7227 <sub>R</sub> ·		2125	72	78	77		1810	5	6	5	5	8		NS	7		5	3	4		5	5	73	9	8	9	9	8	9	9	9	9
39F44		2000		70	72		1680	4	6	4	7	5	3	HS	6	2	7	3	4	3	3	3	80	5	8	9	8	8	7	8	5	8
P7332r		2050	73	77	81		1910	5	5	8	5	6		NS	5	1	5	3	4	8	4	5	74									
Р7527ам™	AcreMax LIBERTY & LEERTY	2150	75	78	77		1810	5	6	5	5	8		NS	7		5	3	4		5	5	75	9	8	9	9	8	9	9	9	9
Р7632ам™	AcreMax LIBERTY & GE	2225	76	77	81		1910	5	5	8	5	6		NS	5	1	5	3	4	8	4	5	74									
39B90		2200	79	82	79	1030		6	4	6	4	6	6	Χ	6	7	7	6	6	3	4	4	78	8	8	5	5	5	8	5	8	5
Р7958ам™	AcreMax W LINK W & G	2275	79	84	83	1060	1960	6	4	7	5	7	6	NS	4	4	6	5	5	3	5	3	75									
39V05		2250	80	84	85	1060	2020	4	6	6	5	7	4	S	6	6	5	5	6	7	6	4	80	7	5	8	9	7	7	9	7	9
39V09ам™	AcreMax UBERTY & G	2275	80	84	85	1060	2020	4	6	6	5	7	4	S	6	6	5	5	6	7	6	4	80	7	5	8	9	7	7	9	7	9
P8210	_	2425	82	80	81	1010	1910	7	6	6	5	7	5	NS	4	6	4	4	5	4	3	5	81									
Р8210нг	UBERTY LINK W	2475	82	80	81	1010	1910	7	6	6	5	7	5	NS	4	6	4	4	5	4	3	5	81									
Р8387ам™	AcreMax UNK LINK LINK	2500	83	85	86	1070	2040	5	6	5	4	7	5	NS	4	3	5	5	6	3	6	5	84	8	8	8	8	9	8	8	8	8
Р8542ам™	AcreMax LIBERTY & GE	2550	85	86	87	1080	2070	4	5	7	5	7		NS	6	5	5	7	5		5	6	83	9	5	7	5	8	8	6	8	6
P8581 <sub>R</sub>	- Auto-	2575	85	88	87	1100	2070	8	5	7	5	7	5	S	7	7	5	7	7	4	7	5	89	8	6	5	6	9	7	7	7	7
P8673xr	LINK W	2550	86	86	84	1080	1990	5	6	8	5	7	4	NS	7	5	5	6	7	7	4	3	86	8	9	9	9	6	8	9	8	9
Р8700ам™	AcreMax LIBERTY &	2600	87	85	87	1070	2070	4	6	7	5	8		NS	5		5	3	4		6	7	83	8	8	8	8	7	9	8	9	8
Р8906ам™	AcreMax UNK LINK LINK LINK	2650	89	89	89	1120	2120	6	5	8	6	7	7	S	5	8	5	8	6	5	4	4	84	8	8	7	8	8	8	8	8	8
P9188*		2600	91	89	91	1120	2170	6	5	8	4	7	4	NS	4	5	6	4	4	6	5	7	85	6	8	7	7	6	7	7	7	7
Р9188ам™	AcreMax LIBERTY & C	2650	91	89	91	1120	2170	6	5	8	4	7	4	NS	4	5	6	4	4	6	5	7	85	6	8	7	7	6	7	7	7	7
Р9330ам™	AcreMax LIBERTY &	2700	93	95	94	1190	2240	6	5	7	6	7	3	NS	6		6	7	6		7	6	97	9	5	6	5	8	8	5	8	5
Р9411нг	UBERTY LINK W	2800	94	93	93	1160	2220	5	4	8	6	6	5	S	3	6	5	3	6	5	2	5	97	7	9	7	9	9	8	9	8	9
Р9526амхт™	AcreMax Liberty Link &	2825	95	91	94	1140	2240	4	6	5	6	9	3	NS	6	5	5	6	5	3	5	5	90	7	9	8	9	8	8	9	8	9
P9675 <sub>R</sub>	Against Control of the Control of th	2850	96	93	96	1160	2300	5	7	4	6	7	5	S	3	6	5	4	5	8	6	6	94	8	8	8	8	9	8	9	8	9

### **Pioneer® brand Optimum® AcreMax® and Herculex® Products**

### **Maximized yields and simplified refuge compliance**

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

	HERCULEX I	AcreMax*	AcreMax XTreme
Technologies	Herculex® I (HX1) (HX1, LL, RR2)	YieldGard® Corn Borer (YGCB) x Herculex® I (HX1) + herbicide tolerant refuge (LL, RR2) (AM, LL, RR2)	Agrisure® RW (RW) x Herculex® XTra (HXX) x YieldGard® Corn Borer (YGCB) + herbicide tolerant refuge (LL, RR2) (AMXT, LL, RR2)
Pests Controlled or Suppressed	European Corn Borer Corn Earworm Fall Armyworm Black Cutworm	European Corn Borer Corn Earworm Fall Armyworm Black Cutworm	European Corn Borer Corn Earworm Fall Armyworm Black Cutworm Western Corn Rootworm Northern Corn Rootworm
Description	Broad spectrum, above-ground insect protection	Single bag product with integrated corn borer refuge	Single bag product with integrated corn borer and corn rootworm refuge
Benefits	Above-ground protection from corn borer and black cutworm	<ul> <li>Ultimate simplicity</li> <li>Maximized farm yields</li> <li>Technology preservation</li> </ul>	Simplifies refuge     Reduced refuge,     maximum yields     Technology preservation     Proven performance     Multiple modes of insect protection
Refuge	20% refuge up to 1/4 mile or 400m away	Integrated refuge; no separate refuge required	Integrated refuge; no separate refuge required
Refuge Examples	the in-	AcreMax  # Acressor    Acressor   Marketin behave tal. 1927	ACTEMAX ACTEMAX  Springer Action Times  The incident Insense (14, 402) with Practor 129

## **Technology Segments**

SEED

uthern Cornstalk Bor talk Borer (Common)

		ш	ت	>	ᅲ	8	Š	ت	S	Š	S	>	Z	2		
Technology Segment Identifiers	Corn Technology Traits*				Ins	ect	t Eff	ica	cy I	Leve	els					icide tance
RR2	Roundup Ready® Corn 2														E	
ш	LibertyLink®															E
YXR, LL, RR2	Optimum® Intrasect® Xtra, LibertyLink, Roundup Ready Corn 2 (Corn Borer/Rootworm)	E	G	М	E	V	E	v	E	E	G				E	E
AM, LL, RR2	Optimum® AcreMax®, LibertyLink, Roundup Ready Corn 2 (Corn Borer)	E	G	М	E	V	E	V	E	E	G				E	E
AMX, LL, RR2	Optimum® AcreMax® Xtra, LibertyLink, Roundup Ready Corn 2 (Corn Borer/Rootworm)	E	G	М	E	V	E	V	E	E	G				E	E
AMXT, LL, RR2	Optimum® AcreMax® XTreme, LibertyLink, Roundup Ready Corn 2 (Corn Borer/Rootworm)**	E	G	м	E	V	E	v	E	E	G	E	E	E	E	E
HX1, LL, RR2	Herculex® I, LibertyLink, Roundup Ready Corn 2 (Corn Borer)	E	M	М	E	v	E	v	E	E	G				E	E
HXX, LL, RR2	Herculex® XTRA, LibertyLink, Roundup Ready Corn 2 (Corn Borer/Rootworm)	E	М	М	E	v	E	v	E	E		E	V	E	E	E
YGCB, RR2	YieldGard® Corn Borer, Roundup Ready Corn 2	E	M		G		E		E	E					E	

### **E** = Excellent **V** = Very Good **G** = Good **M** = Moderate **Blank** = Not Labeled

Efficacy levels based on DuPont Pioneer and/or independent university entomologist results against susceptible insect populations. Product responses can vary by location, pest

population, environmental conditions, and agricultural practices.

\* All scores of integrated refuge products are based upon the major component.

\*\* Contains Agrisure® RW trait.

<sup>#</sup> With these pests, a decrease of susceptibility to certain technology traits in corn has been observed in some insect populations, which may result in lower efficacy than depicted in this chart. Please contact your authorized Pioneer 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 insect resistance documented in your area. WH (white) and WX (waxy) hybrids are also available in some of the trait combinations listed above.

Herculex® Insect Protection technology by Dow AgroSciences and Pioneer Hi-Bred. Herculex® and the HX logo are registered trademarks of Dow AgroSciences LLC.

Liberty®, LibertyLink® and the Water Droplet Design are trademarks of Bayer.

Agrisure® is a registrated trademark of, and used under license from, a Syngenta Group Company. Agrisure® technology incorporated into these seeds is commercialized under a license from Syngenta Crop Protection AG.





### Put your field data to work to help maximize your yields

Keep your fields at your fingertips and capture important information with this GPS-powered field documentation tool that lets you put your data to work to help make decisions that boost profits. With Encirca<sup>SM</sup> services you can manage from field planning through harvest to ensure a successful growing year. During the season, monitor crop health and field weather with satellite imagery. After harvest, working with your Pioneer Hi-Bred sales representative, you can gain valuable insights on field productivity and management practices to support decisions for next season.

#### **Grower Data**



- Product placement plans
- As-planted and as-applied
- Management practices
- Yield data

#### Our Science and Service



Advanced science and analytics with soils, weather and agronomy to deliver:

- Field planning
- Harvest insights

### More Profit

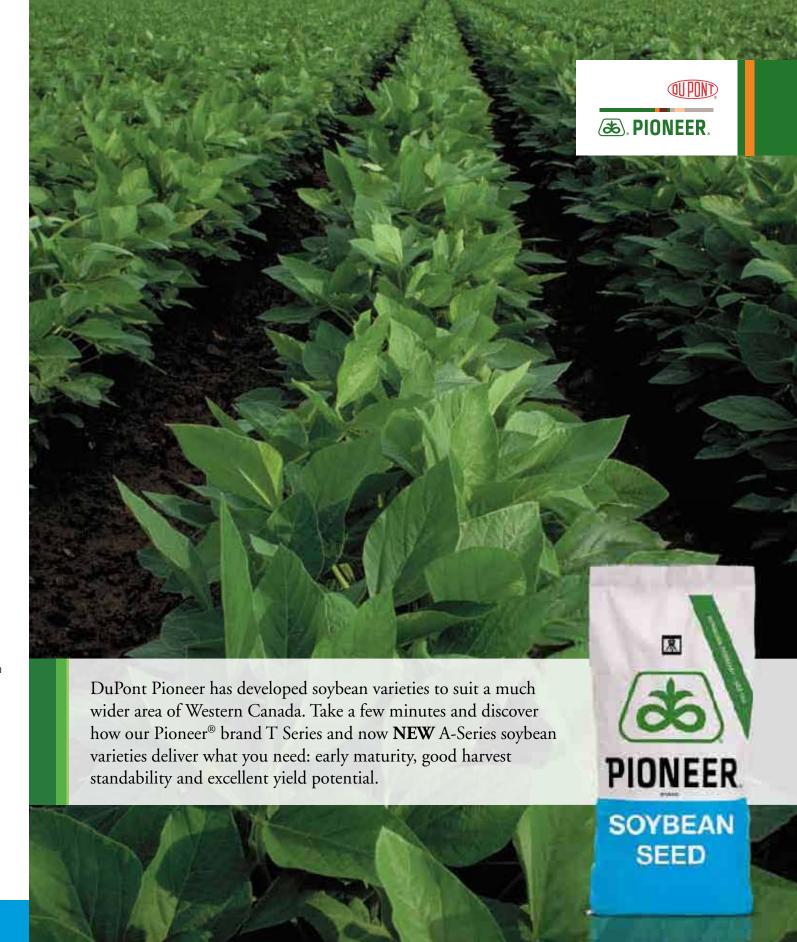


Allows for year round contact between you and your Pioneer Hi-Bred sales representative, helping to:

- Manage risk
- Produce higher yields
- Reduce costs per bushel



Encirca<sup>™</sup> services app is available for iOS and Android devices. Talk to your Pioneer Hi-Bred sales representative or your DuPont Pioneer Area Agronomist to see how Encirca<sup>™</sup> services can benefit your farming operation.





# Pioneer® brand A-Series Soybeans Developing Higher-Yielding Soybeans, Faster

### GO ON. KICK SOME GRASS!

DuPont™ Assure® II

herbicide

**NEW** Pioneer® brand A-Series soybeans are based on Accelerated Yield Technology (AYT) 4.0, a game-changing advancement over current competitive soybean varieties.



### The Next Big Improvement In Yield Technology

Accelerated Yield Technology (AYT) 4.0 has transformed how DuPont Pioneer develops new soybean varieties. AYT more than doubles the annual rate of genetic gain of the DuPont Pioneer soybean research pipeline, and effectively cuts one year from the product development process.

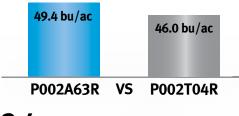
### **What Pioneer® brand A-Series Soybean Varieties Can Do For You:**

- · Maximize yield and profitability on your soybean acres
- Provide varieties suited to all environments in Western Canada
- · Additional herbicide-tolerant trait option for hard-to-kill weeds like kochia and wild buckwheat

### **A-Series Yield Results**

In 2016, Pioneer® brand A-Series soybeans delivered higher yields than current Pioneer® brand T Series soybean varieties.

54.0 bu/ac









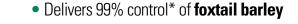
P007A90R



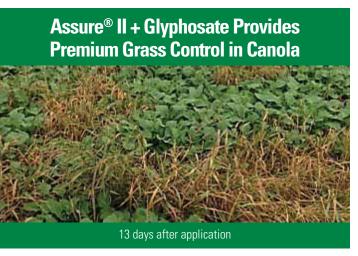
51.4 bu/ac

VS P008T70R

stated, and within +/- 03 RM of the Pioneer® brand comparison varieties. Product responses are variable and subject to any number of environmental, disease and pest pressures, Individual results may vary. Multi-year and multi-location data are a better predictor of future performance. DO NOT USE THIS OR ANY OTHER DATA FROM A LIMITED NUMBER OF TRIALS AS A SIGNIFICANT FACTOR IN PRODUCT SELECTION. Refer to https://ca.pioneer.com/west/en/products/ or contact a Pioneer Hi-Bred sales representative for the latest and complete listing of traits and scores for each Pioneer® brand soybean variety.



- Controls both **Japanese brome** and **downy brome**
- Controls volunteer wheat, volunteer barley, wild oats, green foxtail and a number of other grassy weeds
- For high performing grass control, add Assure<sup>®</sup> II to glyphosate in Genuity<sup>®</sup> Roundup Ready<sup>®</sup> canola and in glyphosate tolerant soybeans
- Excellent crop safety and wide window of application



Assure® II Provides Premium Control of Volunteer Corn

Source: Athabasca, AB, 2013

Source: Carman, MB, 2015

\*Research conducted by Agriculture and Agri-Food Canada at Lethbridge for in-crop control for oilseeds and pulses (Source: Direct Seeding fact sheet, Lethbridge Research Centre; Revised October 2007, Agdex 519-15)

### Crops:

- Brassica carinata
- Canola
- Camelina
- Chickpeas
- Crambe
- Creeping red fescue for seed production, dry common beans
- Dry faba beans (dry broad beans)
- Flax
- Lentils
- Mustard (condiment and oilseed oriental including canola quality brassica juncea)
- Yellow and brown mustard
- Narrow-leaf lupin

- Peas (field and processing)
- Seed alfalfa
- Seedling legumes (seed production)
- Snap beans
- Soybeans
- Sugar beets
- Sunflowers

Application Information											
Rates	200 mL/ac to 300 mL/ac.										
Packaging	One (1) case contains 8 L of Assure® II + 8 L jug Sure-Mix™. Assure® II is also available in 500 L Mega Totes or 96 L Drums.										
Surfactant	Add Sure-Mix <sup>™</sup> (included in the box) at 5 L per 1000 L of spray solution (0.5% v/v). Use Merge <sup>®</sup> at 5 L to 10 L per 1000 L of spray solution (0.5% v/v to 1% v/v) if Sure-Mix <sup>™</sup> is not available.										
Water Volume	40 L/ac (9 imp. gal/ac).										
Rainfastness	One (1) hour.										
<b>Aerial Application</b>	Assure® II is registered for aerial application only when applied alone.										

# Soybeans



### Feature Products

### P002T04R Glyphosate

- Ultra early maturity
- Very good early growth and excellent harvest standability
- Average canopy width
- Built-in phytophthora resistance (phytophthora gene 1K)

### P005T13R Glyphosate

- Very good early emergence
- Very good standability and lodging scores
- Built-in (1C) phytophthora resistance

### P006T78R Glyphosate

- Very good early emergence
- Excellent lodging reduction scores
- Above average white mold tolerance
- Built-in (1C) phytophthora resistance



### P006T46R Glyphosate

- Very consistent, high yielding soybean
- Handles heavier soils well
- Above average early emergence
- Very good lodging score
- Built-in (1C) phytophthora resistance

### P008T22R2

- Genuity<sup>®</sup> Roundup Ready 2 Yield<sup>®</sup> soybean variety
- Very good plant height for maturity
- Excellent harvest standability
- Built-in phytophthora resistance (phytophthora gene 1C)
- Very good tolerance to iron chlorosis



### **Soybean Numbering System** Example: P006T46R

- P Denotes a Pioneer® brand product
- **006** Relative Maturity
- T/A Denotes "T Series/A-Series"
- **46** Random Number (0-99)
- R Segment Identifier:
  - R = Glyphosate Tolerant



### **New A-Series Soybean Varieties**

### P0007A43R Glyphosate

- **NEW** ultra early soybean
- Excellent yield potential
- Strong field emergence
- Excellent harvest standability
- Very good anti-shattering score

### P002A19x ROUNDLY READY 2



- NEW early maturity soybean with RR2X technology for improved control of some key weeds
- Very good field emergence
- Built-in (1k) phytophthora resistance
- Very good harvest standability
- Additional option for weed control

### POOOA87R Glyphosate

- **NEW** ultra early soybean
- Very good field emergence
- Narrow canopy soybean
- Excellent harvest standability
- Good anti-shattering score

### P005A27X ROUNDUP READY 2 TEND SOYBEANS

- **NEW** variety with RR2X technology that offers excellent field emergence
- Strong harvest standability
- Very good anti-shattering score
- Additional option for weed control

### P002A63R Glyphosate

- **NEW** soybean with exceptional yield potential
- Excellent field emergence
- Narrow canopy soybean
- Excellent harvest standability
- Very good anti-shattering score

### P007A90R Glyphosate

- **NEW** high yielding 007 maturity group soybean variety with excellent harvestability
- Excellent field emergence
- Taller plant with moderate canopy width
- Built-in (1c) phytophthora resistance

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 and hard-to-kill weeds (kochia and wild buckwheat) are present.



# Soybeans



### Characteristics

* Ne	S Variety/Brand	Relative Maturity <sup>1</sup>	Technology Segment²	Canadian Heat Units	Harvest Standability	Field Emergence <sup>3</sup>	Phytophthora Gene⁴	Phytophthora Field Tolerance <sup>5</sup>	Brown Stem Rot Marker Predicte	Iron Chlorosis	Downy Mildew	White Mold <sup>7</sup>	Canopy Width 15	Shattering <sup>16</sup>	Plant Height for Maturity <sup>17</sup>	Seed Size Range <sup>22</sup>	Flower Color <sup>23</sup>	Pubescence Color <sup>24</sup>	Hila Color <sup>25</sup>	Pod Color <sup>26</sup>	
	Product								Chara	acter	istic l	Ratin	gs								
	P0007A43R*	000	Glyphosate	2200	8	7	1a	4	MS	7	4**	5**	5**	7**	3		Р	Т	BR	BR	
	P000A87R*	000	Glyphosate	2275	8	7	1k	5	MS	7	5**	5**	4**	6**	4		Р	T	TN	BR	-
	P001T34R	001	Glyphosate	2300	9	7	1a	5	MS	6	5	5	3	5**	3	2800-3200	W	T	BR	BR	9
	P002A19X*	002	ROUNDUP READY 2 TEND SOYBEANS	2325	7	7	1k	3	MS	5	6**	5**	6**	5**	5		Р	Т	TN	BR	
	P002A63R*	002	Glyphosate	2325	8	8	1c	5	MS	5	6**	4**	6**	7**	5		Р	T	TN	TN	-
	P002T04R	002	Glyphosate	2325	8	7	1k	3	MS	6	6	5	5	5**	5	2850-3250	Р	Т	TN	BR	
	P005A27X*	005	ROUNDUP READY 2 TEND SOYBEANS	2400	7	8	1c	4	MS	6	8**	6**	6**	7**	4		Р	L	BR	TN	
	P005T13R	005	Glyphosate	2400	8	7	1c	5	MS	7	4	4	5	8**	4	2950-3350	Р	L	BR	BR	
	P006T46R	006	Glyphosate	2425	8	6	1c	6	MS	6	7	4	5	7**	6	2600-3000	Р	T	BR	BR	-
	P006T78R	006	Glyphosate	2425	9	7	1c	5	MS	6	8	6	6	7	4	2400-2800	Р	L	BR	TN	
	P007A90R*	007	Glyphosate	2450	8	8	1c	5	MS	7	5**	5**	5**	8**	6		Р	T	BL	BR	1
	P008T22R2	800	ROUNDUP READY 2 YIELD SOYBEANS	2475	9	7	1c	4	НТ	7	5	4	4	7	7	2500-2900	Р	Т	BL	BR	
	P008T70R	800	Glyphosate	2475	7	7	1k	4	MS	6	5	6	5	6**	5	2450-2850	Р	L	TN	BR	
													We						A.A.		1

<sup>\*\*</sup> Ratings denoted with a double asterisk (\*\*) reflect preliminary data subject to change when additional data becomes available.

### **High-performing soybeans**

### P002T04R

2325 heat units

### **Glyphosate**

Ultra early variety for Western Canada

### P005T13R

2400 heat units

### **Glyphosate**

High performing soybean with very good standability scores

### P006T46R

2425 heat units

### **Glyphosate**

Very consistent, high yielding soybean that handles heavier soils well

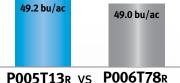
### P008T70R

2475 heat units

### **Glyphosate**

High yielding soybean with excellent early emergence and lodging reduction scores



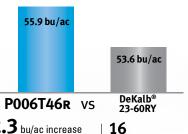


0.2 bu/ac increase 48% WINS 50 Proving Ground™ Comparisons

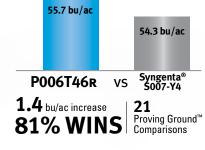
Proving Ground™ Comparisons

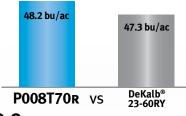


Product responses are variable and subject to any number of environmental, disease and pest pressures. Individual results may vary. Multi-year and multi-location data is a better predictor of future performance. Refer to www.pioneer.com/vield or contact a Pioneer Hi-Bred sales representative for the latest and complete listing of traits and scores for each Pioneer® brand product.

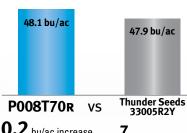


2.3 bu/ac increase **75%WINS** 





**0.9** bu/ac increase 67% WINS Proving Ground™ Comparisons



0.2 bu/ac increase 7
43% WINS Proving Ground™ Comparisons

# Sunflowers



# Alfalfa



### Feature Products

### P63NE70 DuPont ExpressSun\* NuSun\*



### Mid-Oleic / NuSun® Oil

- Built-in tolerance to Express® herbicide
- Outstanding yield potential
- Solid agronomic package

### P63ME80 DuPont ExpressSun NUSUN





### Mid-Oleic / NuSun® Oil

### Excellent yield potential

• Outstanding oil content

P63ME70

**P63ME80** 

63A21

Very good stalk and root strength

### 63A21

### Linoleic

- Early maturity short stature hybrid
- Excellent emergence
- Very good drydown
- Shorter plant height

# Characteristics

Product

Plant Height Percent Oil

Stalk Strength Neck Strength

29 7 8 7 4 8 8 7 8 9 7 1 4 4 3 3 1 6 4

Characteristic Ratings Mid-Oleic (NuSun® Oil) DuPont" | 37 | 8 | 6 | 6 | 7 | 9 | 6 | 8 | 8 | 7 | 7 7 6 6 1-4 5 5 DuPont ExpressSun 38 8 6 6 7 8 6 7 7 7 5 6 6 6 1-4 7 5 Linoleic (Conventional Oil)

### Feature Products

### 55**V**50

### **New Leader Variety In The** Muscle Segment

- High resistance ratings for phytophthora and aphanomyces race 1 and 2
- High overall root rot resistance

### **54Q14**

### **New Lodging Resistant Variety**

- Combines high forage quality with agronomic lodging resistance
- Improved standability with more upright stems
- Very good winterhardiness

### **55Q27**

### **High Forage Quality**

- Top yielding variety with aggressive regrowth adapted for dairy quality forage production
- Very good winterhardiness and excellent disease resistance
- High suitability for heavy soils where root rots are a concern
- Holds high fiber digestibility for a longer period of time, good for an extended harvest window

### Characteristics \* New **Muscle/High Yield Varieties** 54Q29\* HR HR HR **55Q27** HR R HR 55V50 **Forage Quality Varieties** 54Q14<sup>†</sup> **Premium Dormant Blend**

All Pioneer® brand alfalfa seed products listed above are non-Roundup Ready® resistant

# Sila-Bac<sup>®</sup>brand Forage Inoculants



# Introducing Sila-Bac<sup>®</sup> brand Nutrivail<sup>™</sup> Feed Technology

### Fibre technology has a new name

New name, same impressive bottom-line-boosting technology.

Introducing Sila-Bac® brand Nutrivail™ feed technologies, formerly known as Fibre Technology (FT) products. Nutrivail™ feed technologies — 11CFT, 11GFT and 11AFT — are now a part of this growing family that improves the value of your homegrown feed by increasing nutrient availability of forages while aiding fermentation and reducing heating at feeding.

### Enhance fibre digestibility Sila-Bac® brand Nutrivail™ Feed Technology



### SILA-BAC® BRAND FORAGE ADDITIVES: CROP-SPECIFIC OPTIONS USING PATENTED, PROPRIETARY BACTERIAL STRAINS

		Sila-Ba	c® brand I		Sila-Bac® brand Nutrivail Feed Technology					
	1174	11H50	11C33	11B91	11G22	11CFT	11AFT	11GFT		
	Multi-Crop	Alfalfa	Corn Silage	нмс	Alfalfa/Grass/ Cereals	Corn Silage	Alfalfa	Grass/Cereals		
			Contains fast-acting* L. buchneri†	Contains fast-acting* L. buchneri†	Contains fast-acting* L. buchneri †	Contains L. buchneri †	Contains L. buchneri †	Contains L. buchneri †		
Improves fermentation and reduces dry matter loss	x	x	x	x	x	x	x	x		
Improves nutrient conservation	x	х	x	x	x	x	x	x		
Significantly reduces heating on bunker/pile face			x	x	x	x	x	x		
Helps reduce heating in entire TMR			x	x	x	x	x	x		
Improves fibre digestibility						x	x	x		

<sup>\*</sup>New Rapid React™ aerobic stability† technolog

# **Staying Connected With DuPont Pioneer**

Whether you're in the field, the office or on the road, you have year-round access to the crop management resources you need at **pioneer.com/Canada** 



### Pioneer® Seed Guide App

(Available for iPhone®, iPad® and iPod® touch. Requires iOS 8.0 or later)

Everything you need to know about Pioneer® brand seed products, right at your fingertips.



### **Canola Seed Rate Calculator**

#### (Available for iPad® and iPhone®. Requires iOS 6.0 or later)

The Pioneer® Canola Seed Rate Calculator can easily estimate canola seeding rates and final stand. It will help you calculate your target seeding rate in pounds per acre, adjusting for seed size, germination, survivability and row spacing.



### **Planting Rate Estimator**

### (Available for iPhone®. Requires iOS 5.0 or later)

The Pioneer® Planting Rate Estimator allows users to examine historical yield response curves to help estimate an optimum planting rate for Pioneer® brand corn products.



### Pioneer® Field360™ Plantability

#### (Available for iPhone®, iPod® touch and iPad®. Requires iOS 7.0 or later)

Easily scan a seed tag to indicate the planter type, maximize planter performance and seed-drop accuracy.



### Inoculant Value Calculator (Available for iPad®. Requires iOS 7.0 or later)

The Pioneer® Inoculant Value Calculator will assist you with estimating the value of Pioneer® brand inoculants for your farm. The Inoculant Value Calculator (IVC) will help you to evaluate the benefits of reduced shrink, improved bunklife, reduced feed inputs, feed cost savings/cow/day and total added value from investment.



### **Pioneer® GrowingPoint™ Agronomy App**

#### (Available for iPhone®, iPad®, and iPod® touch. Requires iOS 7.1 or later)

The new Pioneer® GrowingPoint® agronomy app gives you access to hundreds of agronomy insights, articles and photos on your mobile device. Get answers about weed and pest control, best practices for crop management and much more.



### Snapchat

### Follow us on Snapchat at PioneerWCanada

Follow our Snapchat account for the latest in-field agronomics and Pioneer® brand seed product updates in Western Canada.



<sup>†</sup> Improved aerobic stability and reduced heating is relative to untreated silage. Actual results may vary. The effect of any silage inoculant is dependent upon management at harvest, storage and feedout Factors such as moisture, maturity, chop length and compaction will determine inoculant efficacy.

#### GENERAL FOOTNOTES: For chart scores on all Pioneer® brand seed products

Trait ratings provide key information useful in selection and management of Pioneer® brand products in your area. Scores are based on period-of-years testing through 2016 harvest and were the latest available at time of printing. Some scores may change after the 2017 harvest. Contact your Pioneer Hi-Bred sales professional before planting for the latest trait rating information. Scores represent an average of performance data cross rases and sadpation, multiple growing conditions, and a write range of both climate and soil types, and may not predict future results. All products within a hybrid or product family receive the same score unless observations inclinite as a significant difference. Individual product responses are variable and sobject or variety of environmental, disease and pest pressures. Please use this information as only one component of your product positioning decision. Refer to pioneer.com/Canada or contact a Pioneer Hi-Bred sales professional for the latest and most complete listing of traits and scores for each Pioneer® brand product and for product placement and management suggestions specific to your peration and local conditions.

#### CANOLA FOOTNOTES

#### \*NEW

IMPORTANT: Information and ratings are based on comparisons with other Pioneer® brand products, not competitive products. Information and ratings are assigned by DuPort Pioneer Agranomists and Research Managers, based on average performance across area of adaptation under normal conditions, over avoider range of both climate and soil types, and may not prefict future results. Product responses are variable and subject on any number of arrowmental, disease and pest pressures. Please use this information as only part of your product positioning decision. Refer to pioneer.com/Canada or contact a Pioneer sales professional for the latest and most complete listing of traits and scores for each Pioneer® brand product and for product placement and management suppositions are for the product placement and management suppositions specified to vary overaction and local conditions.

RATINGS: 9 = Excellent; 1 = Poor; Blank = Insufficient Data.

MATURITY: 9 = Late; 6 = Medium; 5 = Medium-Early; 3 = Early; 1 = Very Early.

#### HERBICIDE TOLERANT TRA

Hybrids and varieties with the Roundup Ready® gene (RR) are tolerant to labeled rates of Roundup® branded herbicides. This technology allows for past-emergent applications of Roundup® without crops july or stress (see herbicide label). Labeled Roundup® herbicide should only be used over the top of those hybrids and varieties that carry the Roundup Ready® designation.

Roundup Ready® and Roundup® are registered trademarks used under license from Monsanto Company.

Genuity®, Roundup Ready®, Roundup Ready® gene, and Roundup® are registered trademarks used under license from Monsanto Company.

Hybrids and varieties with the CLEARFIELO® trait (CL) are tolerant to labeled rates of Beyond®, Odyssey® or Absolute® betricides. This technology allows for past-emergent applications of these behicides without crop injury or stress (see berbicide label). Labeled herbicides should only be used over the top of those hybrids and varieties that contain the CLEARFIELD trait.

The unique Clearfield symbol and Clearfield® are registered trademarks of BASF

BLACKLEG: R = Resistant; MR = Moderately Resistant; MS = Moderately Susceptible; S = Susceptible BLACKLEG: 9 = Resistant; 1 = Susceptible.

SCLEROTINIA: 9 = Highly Tolerant; 5 = Moderately Tolerant; 1 = Susceptible.

CLURROOT: R = Resistant S = Suscentible

CLUBROOT - 9 = Highly Resistant; 1 = Susceptible

FUSARIUM WILT: R = Resistant; S = Susceptible. Current Fusarium rating is provisional and based on limited data.

EARLY GROWTH: 9 = Excellent, 1 = Poor. Early growth is recorded when plants are at 4-6 leaf stage. It is a subjective evaluation of healthiness of plants and the soil area covered by their leaves.

GREEN SEED CONTENT: 9 = Very low count (desired); 1 = Very high count.

STANDABILITY: 9 = upright (desired) while 1 = Severely lodged.

 ${\tt STRAIGHT\,CUT:}\, E = {\tt Excellent}, \, {\tt VG} = {\tt Very\,Good}, \, {\tt G} = {\tt Good}, \, {\tt A} = {\tt Average}.$ 

 $\label{eq:plantheight: 9 = Tall; 1 = Short (desired).}$ 

OIL CONTENT: Oil content is compared to the common long term check Pioneer® hybrid 45H29. A change of one score represents approximately one percent difference in oil content

#### **CORN FOOTNOTES**

#### \*NEW

\*\*All scores of integrated refuge products are based upon the major component

\*\*\*All Pioneer products are hybrids unless designated with AM1, AM, AMRW, AMT, AMX and AMXT, in which case they are brands.

† New Product. Not Available for sale until 2018 orders and invoicing are available. Quantities may be limited.

Product performance in water-limited environments is variable and depends on many factors such as the severity and timing of moisture deficiency, heat stress, sail type, management practices and environmental stress as well as disease and pest pressures. All products may exhibit reduced yield under water and heat stress. Individual results may yary.

RATINGS: 9 = Outstanding; 1 = Poor; Blank = Insufficient Data

WHITE AND WAXY CORN RATINGS: Based on comparisons with other Pioneer brand products, not competitive products. Trait ratings for white and waxy products reflect comparison with non-modified yellow products of a similar maturity.

HYBRID FAMILY: Hybrid family identifies products that have the same base genetics. Manage products within the same family similarly.

TECHNOLOGY SEGMENT: An - Optimum® AcreMax® Insect Protection system with YGCB, HX1, LL, RR2. Contains a single-bag integrated refinge solution for above-ground insects. In EPA-designated cutton growing counties, a 20% separate can bener refuge must be planted with Optimum AcreMax products. AMXT (Optimum@ AcreMax® XTender—Octatina single—bag integrated reflects gottoin for above-and below-ground insects. The major component contains the Agrisure® RW trait, the YieldGard® Corn Borre gene, and the Herculex® XTRA genes. HX1 - Contains the Herculex® Dissect Protection gene which provides protection against Europea can borre, such vestment more, label cuttown, fall armyovern, weter the acc activent, sees corn stalk bores, southern corn stalk borre, and supportane borer; and supportsess corn earworm. RXX- Herculex® XTRA contains the Merculex RW genes. YGCB — The YieldGard® Corn Borre gene offers a high level of resistance to European cum borre, southwestern corn borre and southern cornstalk borre; medicant resistance to corn earworm at Common stalk borre; and above average resistance to fall armyovern. L1 - Contains the Unertylink® gene for resistance to European corn borre, southwestern corn borre and southern cornstalk borre; medicant resistance to European corn borre, southwestern corn borre and southern cornstalk borre; medicant resistance to fall armyovern. L1 - Contains the Unertylink® gene for resistance to European corn for the bedief glybbasste herbicides when applied according to label directions.

Herculex® Insect Protection technology by Dow AgroSciences and Pioneer Hi-Bred. Herculex® and the HX logo are registered trademarks of Dow AgroSciences LLC.

Yield Gard \$, the Yield Gard Corn Borer Design and Roundup Ready \$ are registered trademarks used under license from Monsanto Company.

Liberty®, LibertyLink® and the Water Droplet Design are trademarks of Bayer.

Agrisure® is a registrated trademark of, and used under license from, a Syngenta Group Company. Agrisure® technology incorporated into these seeds is commercialized under a license from Syngenta Crop Protection AG.

MARKET SEGMENT: Designations indicate product is also suitable for the following market: HAE — High Available Energy (Pork & Poultry Feed): HTF — High Total Fermentables (Dry-Grind Ethanel): HES — High Extractable Starch (Wet Milling): WX — Waxy; WH — White food corn; YFE — Yellow food corn; AQ — Optimum® AQUIANAS® ordout: BMN — Pown Midfils Con

CRM (Comparative Relative Maturity): There is not an industry standard for maturity ratings so comparing product maturity and harvest moisture ratings between companies is usually difficult. Use the CRM rating to compane Pioneer® hard products with competitive products of a similar maturity and harvest moisture. CRM ratings, and harvest moisture, for products within a family may vary slightly, depending upon the level of insect (CEB and CRW) infestation.

Conventional and straight products with the RR2 gene within a family will usually be 1-2 CRMs earlier than indicated, when insect infestations are moderate to heavy. One CRM difference is about ½ point of moisture difference at harvest.

PHYSIOLOGICAL CRM: Measures differences in maturity to zero milkline stage. To help decide if a new product fits your area's growing season, compare its physiological CRM to a product that you plant or one that is successfully used in your area.

GDUs TO PHYSIOLOGICAL MATURITY: Measures differences in growing degree units (GDUs) required to zero milkline stage. To help decide if a new product fits your area's growing season, compare its GDUs to physiological maturity to a groduct that you plant or one that is successfully used in your area.

MID-SEASON BRITTLE STAKK: Ratings determined by frequency and severity of stalk snappage at lower to middle stalk internodes from conditions usually favored by rapid or optimum growth. Relative responses of products can be affected by planting date, stage of growth, rate of growth, wind severity and other variables. Scores derived from both natural observations and artificial evaluation immediately prior to tasseling. NIDE: Scores date of these tappage enhanced by or due to herbicide interaction. The use of growth regulator herbicides such as 2.4.0 and discamba can increase the brittle snap potential of corn products. Products with hower hittle stalk artings of least and herbicides such as 2.4.0 and discamba can increase the brittle snap potential herbicides. Early application, proper rates and application methods, along with both product and herbicide selection can help reduce this risk. BRITTLE STAK PRECAUTION: In a races with higher potential for brittle stalk breakage, growers must halance the risk of planting products with brittle stalk breakage. The content of the product of the security of the product of th

STRESS EMERGENCE: All products are expected to establish normal stands under average soil conditions. Stress emergence is a measure of the genetic ability or potential to emerge in the stressful environmental conditions of cold, wet soils or short periods of severe low temperatures, relative to other Priomer brand products. Realings of 7-8 indicates very good potential to establish normal stands under such conditions, a rating of 5-1 dividicates average potential nestablish normal stands under modernal extress conditions; and ratings of 1-4 indicate the product has below average potential to establish normal stands under stress and should not be used if severe cold conditions are expected immediately after planting. Stress emergence is not a rating for seedling disease susceptibility, and/y urn with a stread of emergence.

DROUGHT TOLERANCE: Drought tolerance is a complex trait, determined by a platform's ability to maintain yield in limited-moisture environments. A higher score indicates the potential for higher yields vs. other platforms of similar maturity in limited-moisture environments.

HIGH RESIDUE SUITABILITY: HS - Highly Suitable; S - Suitable; MA - Manage Appropriately; X - Poorty Suited; INS - Not Scored. Suitability rating based on field observations and a weighted calculation of gray leaf spot, stress emergence, anthracnose stalk rot, northern corn leaf blight, and Diplodia ear rot scores. High Residue Suitability ratings may very be environment and geography.

GRAIN DRYDOWN: Compares products of similar maturity for rate of moisture loss during grain drydown. A higher score indicates faster drydown. A lower score indicates slower drydown. or a wider opportunity for silage and high-moisture corn harvest.

EAR FLEX: Score reflects the ability of a product to flex ear size as plant density is reduced, or as growing conditions improve.

TEST WEIGHT: Higher score indicates heavier test weight.

PLANT HEIGHT: 9 = Very Tall: 1 = Short.

EAR HEIGHT: 9 = High: 1 = Low.

DISEASE PRECAUTION: Grower should balance product yield potential, product maturity and cultural practice selection against their anticipated risk of a specific disease and need for resistance. In high disease-risk conditions, consider planting products with at least moderate resistance ratings of 4 or higher to help reduce risk. When susceptible products with disease ratings of 1 to 3 are planted in conditions of high disease pressure, the grower assumes a highe level of risk. It conditions are severe, even products rated as resistant can be adversely affected. Independent of yield reduction, diseases under such late Int. Its internal is individual field and orduct conditions for stalk stability man timely havest when varranted.

DISEASE & PEST RATINGS: 8-9 = Highly Resistant; 6-7 = Resistant; 4-5 = Moderately Resistant; 1-3 = Susceptible; Blank = Insufficient Data.

GRAY LEAF SPOT PRECAUTION: Avoid planting products with a lower gray leaf spot (GLS) rating in continuous corn fields that have a history of GLS infection, unless tillage operations that bury significant amounts of corn residue and inoculum are practiced.

FOLIAR FUNGICIDE RESPONSE — GLS: Probability of positive yield response to foliar fungicide applications when significant levels of Gray Leaf Spot (GLS) leaf disease is present. HP — High Probability. MP — Moderate Probability: LP — Low Probability. Probabilities based upon product disease scores. Because of the unlimited number of growing environments, cropping practices, and foliar fungicide active ingredients combinations possible, DuPont Pioneer makes no warranty regarding this foliar fungicide crop response information.

NORTHERN LEAF BLIGHT CAUTION: In conditions where northern leaf blight (NLB) risk is high, growers should consider planting only products with at least moderate NLB resistance ratings of 4 or higher.

FOLIAR FUNGICIDE RESPONSE — NLB: Probability of positive yield response to foliar fungicide applications when significant levels of Northern Leaf Blight (NLB) leaf disease is present. IRP — High Probability: NP — Moderate Probability: LP — Low Probability. Probabilities based upon product disease scores. Because of the unlimited number of growing environments, cropping practices, and foliar fungicide active ingredients combinations possible, DuPont Pioneer makes no warranty reparding this foliar fungicide crop response information.

FUSARIUM EAR ROT CAUTION: Ratings based upon visual symptoms at harvest. If Fusarium ear rot has caused significant damage in the past, growers should consider planting only products with at least moderate Fusarium ear rot ratings of 5 or higher.

GIBBERELLA EAR ROT CAUTION: Ratings based upon visual symptoms at harvest. If Gibberella ear rot has caused significant damage in the past, growers should consider planting only products with at least moderate Gibberella ear rot ratings of 5 or higher.

DIPLODIA EAR ROT CAUTION: Ratings based upon visual symptoms at harvest. If Diplodia ear rot has caused significant damage in the past, growers should consider planting only products with a Diplodia ear rot rating of 4 or higher.

 ${\tt RATINGS: 9 = Outstanding; 1 = Poor; Blank = Insufficient \, Data}$ 

MARKET SEGMENT: Designation indicates product is also suitable for the following market: BMR — Brown MidRib Corn; AQ — Optimum® AQUAmax® product.

SILAGE CRM (Silage Comparative Relative Maturity): With no industry standard for silage maturity, comparing maturity and harvest moisture across various companies' cont-fior-silage by brids can be difficult. Pioneer silage CRM ratings provide a relative comparison among Pioneer® brand products of rates at which products reach harvestable whole plant moistures. It is on the same scale as the CRM rating provided for grain corn products and does not represent actual davs from planting or emergence to harvest moisture or half milkline.

SILAGE YIELD: Based on whole-plant yield per acre (adjusted to 35% dry matter) from multi-year comparison with other products within a maturity range not exceeding 5 silane CRM units.

STARCH AND SUGAR, %: Percent starch and soluble sugars (DM basis) in the whole-plant sample predicted by NIRS.

FIBER DIGESTIBILITY: Based on 24-hour enzymatic estimate of percent degradable neutral detergent fiber (NDF) as a percent of total NDF in whole-plant sample, predicted by NIRS.

WHOLE-PLANT DIGESTIBILITY: Based on estimated 24-hour in vitro whole-plant digestibility percentage (dry matter basis), as predicted by Near Infrared Reflectance Spectroscopy (NIRS).

SILAGE CRUDE PROTEIN: Based on the amount of crude protein in the whole plant, predicted by NIRS.

MILK PER ACRE: 9 = Outstanding; 1 = Poor, based on University of Wisconsin MILK2006 utilizing silage yield, nutrient content and digestibility.

 $\label{eq:milk} \textbf{MILK PER TON: 9} = \textbf{Outstanding; 1} = \textbf{Poor, based on University of Wisconsin MILK2006 utilizing silage nutrient content and digestibility.}$ 

 $BEEF\,PER\,ACRE: 9 = Outstanding; 1 = Poor, based on \,University\,of\,Wisconsin\,MILK 2006\,utilizing\,silage\,yield, nutrient\,content\,and\,digestibility.$ 

BEEF PER TON: 9 = Outstanding; 1 = Poor, based on University of Wisconsin MILK2006 utilizing silage nutrient content and digestibility.

MID-SEASON BRITTLE STALK: Ratings determined by frequency and severity of stalk snappage at lower to middle stalk internodes from conditions usually favored by rapid or optimum growth. Relative response of products can be affected by planting date, stage of growth, rate of growth, wind severity and other variables. Scores derived from both natural observations and artificial evaluation immediately prior to tasseling. NIDTE: Scores do not reflect snappage enhanced by or due to herbicide interaction. The use of growth regulator berbicides such as 2.4-D and dicamba can increase the brittle snap potential of corn products. Products with bower brittle stalk ratings will require more caution and have a higher risk stasociated with the use of growth regulator herbicides. Early application, proper rates and application methods, along with both product and herbicide selection can help reduce this risk. BRITTLE STALK PRECAUTION: In areas with higher potential for brittle stalk breakage, growers must balance the risk of planting products with brittle stalk ratings of less

than 4 against the overall performance of more resistant products with higher ratings. All products have a period of susceptibility to brittle stalk. Products with below average ratings may have a longer period of susceptibility, or may experience more severe breakage relative to products with higher scores during meriod of suscendibility.

STRESS EMERGENCE: All products are expected to establish normal stands under average soil conditions. Stress emergence is a measure of the genetic ability or potential to emerge in the stressful environmental conditions of cold, wet soils or short periods of severe low temperatures, relative to other Pioneer brand products. Ratings of 7-9 indicate very oppotential to establish normal stands under such conditions; a rating of 5- discincts average potential to establish normal stands under moderate stress conditions; and ratings of 1-4 indicate the product has below average potential to establish normal stands under stress and should not be used if severe cold conditions are expected immediately after planting. Stress emergence is not a rating for seedling disease susceptibility, early vorowth or seed of emergence.

DROUGHT TOLERANCE: Drought tolerance is a complex trait, determined by a platform's ability to maintain yield in limited moisture environments. A higher score indicates the potential for higher yields vs. other platforms of similar maturity in limited-moisture environments.

HIGH RESIDUE SUITABILITY: HS - Highly Suitable; S - Suitable; MA - Manage Appropriately; X - Poorly Suited. Suitability rating based on field observations and a weighted calculation of gray leaf spot, stress emergence, anthracnose stalk rot, northern corn leaf blight, and Diplodia ear rot scores. High Residue Suitability ratings wavery by environment and engenaring.

PLANT HEIGHT: 9 = Very Tall; 1 = Short.

EAR HEIGHT: 9 = High; 1 = Low.

PLANT STAYGREEN: Indicator of late-season plant health. A higher score indicates ability to survive farther into the growing season. Scores are taken near grain physiological maturity (zero kernel milkline) stage.

#### SOYBEAN FOOTNOTES

NUMERIC RATINGS: 9 = Excellent; 1 = Poor; Blank = Insufficient Data or variety not tested for that particular trait.

RELATIVE MATURITY: Shows the relative maturity group rating, with the first digit representing the general maturity group, and the second digit showing relative maturity within the group on a scale of 0 to 9, with 0 early and 9 late. For example, a soybean product with a relative maturity rating of 17 would be a mid-late models in forour Installative.

TECHNOLOGY SEGMENT: Always follow grain marketing, stewardship practices and pesticide label directions. Varieties with the Glyphosate Tolerant trait (including those designated by the letter 'B' in the product number) contain genes that confer tolerance to glyphosate herbicides. Glyphosate herbicides will kild cross that are not learnant of plays and the product number) contain genes that confer tolerance to glyphosate herbicides.

Always follow grain marketing, stewardship practices and pesticide label directions. Varieties with the Genuity® Roundup Ready 2 Yield® (RR2Y) trait contain gees that confer tolerance to plyphosate, the active ingredient in Roundup® barand agricultural berbicides will kill crops that are not tolerant tolyphosate. Genuity®, Roundup® and Roundup Ready 2 Yield® are registered trainmarks of Mossator Echandopy LLC used under license. Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Soybeans with Roundup Ready 2 Xtend® technology contain genes that confer tolerance to glyphosate and dicamba. Glyphosate herbicides will kill crops that are not tolerant to glyphosate. Dicamba will kill crops that are not tolerant to

Roundup Ready 2 Xtend® is a trademark of Monsanto Technology LLC used under license.

Pioneer is a member of Excellence Through Stewardship® (ETS). Pioneer products are commercialized in accordance with ETS Product Launch Stewardship Guidance and in compliance with the Pioneer policies reparding stewardship of thase products. Copys and materials containing biotech traits may only be exported to or used, processed, or sold in jurisdictions where all necessary regulatory approvals have been granted for those crops and materials. It is a violation of national and international laws to move materials containing biotech traits across burders into jurisdictions where their import is not permitted. Growers should discuss these issues with their purchaser or grain handler to confirm the purchaser or handler's position on products being purchased. For further information on the approval status of biotech traits, please visit www.biotradestatus.com Excellence Through Stewardship® is a registered trademark of Excellence Through Stewardship® is a registered

(-) = Variety does not contain a herbicide resistant gene.

FIELD EMERGENCE: Rating based on speed and strength of emergence in sub-optimal temperatures. 1-3 = Below Average; 4-6 = Average; 7-9 = Excellent. PHYTOPHTHORA RESISTANCE GENE:

(-) = No specific gene for resistance.

 $\label{eq:Rps1} \textit{Rps1}^{\wedge} = \textit{Contains Rps1c or Rps1k Phytophthora resistance}.$ 

Rps 1a = Provides resistance to races 1, 2, 10, 11, 13-18, 24, 26, 27, 31, 32 & 36.

 ${\sf Rps\ 1c = Provides\ resistance\ to\ races\ 1-3,\ 6-11,\ 13,\ 15,\ 17,\ 21,\ 23,\ 24,\ 26,\ 28-30,\ 32,\ 34,\ 36.}$ 

 $Rps\ 1k = Provides\ resistance\ to\ races\ 1-11,\ 13-15,\ 17,\ 18,\ 21-24,\ 26,\ 36,\ 37.$ 

Rps 6 = Provides resistance to races 1-4, 10, 12, 14-16, 18-21, 25, 28, 33-35.

Ros 3a = Resistant to races 1-5, 8-9, 11, 13-14, 16, 18, 23, 25, 28-29, 31-35, 39-41, 43-45, 47-52, 54,

Rps 3c = Resistant to races 1-4, 10-16, 18-36, 38-54

PHYTOPHTORA FIELD TOLERANCE: Products with high tolerance scores have demonstrated an ability to thrive in the presence of Phytophthora races to which they lack specific resistance. In some products, tolerance is expressed only after the early seedling growth stage, making such products susceptible to damping off during energence and early seed growth.

BROWN STEM ROT MARKER PREDICTED: HT = Highly Tolerant; MT = Moderately Tolerant; MS = Moderately Susceptible

WHITE MOLD: Scores based on DuPont Pioneer research observations of comparative white mold tolerance among various soybean products across multiple locations and years. All products are capable of developing white mold symptoms under severe infestations. To our knowledge, there are no totally resistant products in the industry. However, differences exist in the ability of products to tolerate white mold (i.e., the rate at which the infection develops and the extent of damage it causes). These scores reflect those differences.

ANOPY WIDTH: 9 = Extremely bushy; 1 = Very narrow.

 $SHATTERING: 9 = Excellent \ tolerance \ to \ shattering; \ 1 = Poor \ tolerance \ to \ shattering.$ 

PLANT HEIGHT FOR MATURITY: 9 = Tall; 1 = Short

PLANT HABIT: NIO = INDETERMINATE-type soybeans grown in Group 00-4 regions. These plants typically continue to grow as they flower, resulting in a longer pof lil time. You may find nearly matter seeds at the buttom of a plant that is still blowering at the top. DETERMINATE suybeans grown in Group 5 and later materialse. These plants typically stop growing once they begin to flower, and all flowering occur within a more defined timeframe.

% PROTEIN AT 13% MOISTURE: Compare data within table only. Values can vary widely by growing season and region

 $\% \ OIL \ AT \ 13\% \ MOISTURE: Compare \ data \ within \ table \ only. \ Values \ can \ vary \ widely \ by \ growing \ season \ and \ region.$ 

SEED SIZE RANGE: Expressed in seeds per pound under normal growing conditions. Range is calculated over multiple years and locations. Since seed size may vary by growing season and region, check the "seeds/pound" information printed on the bag.

 $\label{eq:FLOWER COLOR: P = Purple; W = White.} FLOWER COLOR: P = Purple; W = White.$ 

 $PUBESCENCE\ COLOR:\ T=Tawny;\ G=Gray;\ L=Light\ tawny;\ M=Mixed.$ 

 $HILA\ COLOR;\ BL=Black;\ BR=Brown;\ TN=Tan;\ G=Gray;\ IB=Imperfect\ black;\ BF=Buff;\ Y=Yellow\ (Clear);\ M=Mixed.$ 

 ${\tt POD\,COLOR:\,BR=Brown;\,TN=Tan.}$ 

SEED COAT LUSTER: S = Shiny; D = Dull; I = Intermediate.

#### SUNFLOWERS FOOTNOTES

RATINGS: 9 = Excellent: 1 = Poor: Blank = Insufficient Data

DISEASE PRECAUTIONS: Grower should belance by hird yield patential. Mynid maturity and cultural practice against anticipated risk of a specific disease and need for resistance, In high disease risk conditions, consider planting hybrids with at least a rating of 8 or higher to help reduce risk. When hybrids with disease ratings of 1 to 5 are planted in conditions of high disease pressure, the grower assumes a higher level of risk. It Conditions are severe, even hybrids rated as resistant can be adversely affected. Independent of yield reduction, diseases can predispase plants to secondary diseases such as stalk rots. This requires individual field and hybrid monthring for stalk stalking and timely havest when warranted.

DISEASE RATINGS: 9-8 = Highly Resistant; 7-6 = Resistant; 5-4 = Moderately Resistant; 3-1 = Susceptible; Blank = Insufficient Data

HERDICIDE SYSTEM: Pinneer® brand sunflower hybrids with the DuPont™ ExpressSun® trait for tolerance to DuPont™ EXPRESS® herbicide with TotalSA® soluble granules. This unique sunflower system from DuPont and Pinneer is designed to maximize weed control in sunflower crops, enhancing ease of production and yield. This system provides improved weed control over conventional hybrids with traditional herbicides. For the best results, always use Express® herbicide with TotalSa® soluble granules with the ExpressSun Brothicide with TotalSa® soluble granules with the ExpressSun Brothicide with TotalSa® soluble granules with the ExpressSun® trait system.

DuPont™, ExpressSun®, EXPRESS® and TotalSol® are trademarks or registered trademarks of DuPont or its affiliates

RM (RELATIVE MATURITY): With no industry standard for maturity ratings, comparing hybrid maturity and harvest moisture ratings between companies is usually difficult. Use the RM rating to compare Pioneer brand hybrids of a similar maturity and harvest moisture.

EMERGENCE: Ratings taken when first true leaf is visible.

MID-OLFIC SCORF: 9 = Consistently meets aleic level specifications for NuSun® ail.

HIGH-OLEIC SCORE: 9 = Consistently meets high-oleic specifications for high-oleic oil profile of 85%.

PLANT HEIGHT: Short stature is desirable, 9 = Short: 1 = Tall.

STEM CURVATURE: 9 = Erect; 8 = Semi-Erect (preferred); 7 = Semi-Pendulous (preferred); 6 = Pendulous; 5 = Fully Pendulous.

MIDGE SCORE: To our knowledge, there are no fully resistant hybrids in this industry. However, differences exist in the ability to tolerate insect pressure. These scores reflect those differences. Heavy midge pressure can cause extensive damage to any hybrid.

DOWNY MILDEW RACE RESISTANCE: Indicates downy mildew resistance to the races identified

HULL SCORE: A relative expression of hullability and kernel chipping. 9 = completely hulled, high percentage of whole kernels; 1 = poor hulling, many broken kernels.

PCT OVER 13: Using a 13/64th screen, oilseed types are divided by kernel size. 9 = high percentage over 13/64; 1 = low percentage

Most Pioneer® brand sunflower seed is treated with Apron® to help protect against pythium and non-resistant strains of downy mildew. Apron® is a registered trademark of a Syngenta Group Company.

NuSun® is a registered certification mark of the National Sunflower Association.

#### ALFALFA FOOTNOTES

\*\*All Pioneer products are varieties unless designated with Brand, in which case it is comprised of more than one Pioneer® brand variety.

^ Scores taken in moderate to heavy leafhopper infestation, with no insecticide applied.

RATINGS: 9 = Outstanding: 1 = Poor: Blank = Insufficient Data.

 $\ \, \text{$\uparrow$ Scores reflect the yield increase compared to conventional alfalfa types under one or more lodging events at harvest.} \,$ 

 $DISEASE/PEST \ RESISTANCE \ KEY: HR = Highly \ Resistant; R = Resistant; MR = Moderately \ Resistant; LR = Low \ Resistance; S = Susceptible; Blank = Insufficient \ Data.$ 

WINITERHARDINESS: EH = Extremely Hardy; VH = Very Hardy; H = Hardy; MH = Moderately Hardy; NH = Non-hardy; VNH = Very Hon-hardy.

STAND PERSISTENCE: Rating based on scores taken at the end of stand life and represent overall plant appearance and stand integrity after at least three

STANDABILITY/LODGING RESISTANCE: Score based on plant lodging observations (% of stems > 45% angle) averaged across numerous areas of adaptation

including Midwest and Western environments.

RELATIVE FORAGE QUALITY (RFQ): Relative Feed Quality (RFQ) based on measurements of fiber digestibility.

MILK YIELD PER ACRE: Estimated milk yield per acre based on Wisconsin Milk2000 formula representing the combined impact of forage yield, nutrient content

OISEASE RESISTANCE INDEX: DRI is a disease index based on the following pests: Bacterial wilt, Verticillium wilt, Fusarium wilt, Anthracnose, Phytophthora and Aphanomyces (Race 1) and Aphanomyces (Race 2). HR = 5 points; R = 4 points; IR = 2 points; S = 1 point. Highest possible DRI = 35 points.

### INOCULANT FOOTNOTES

\*New Rapid React™ aerobic stability† technology

† Improved aerobic stability and reduced heating is relative to untreated slage. Actual results may vary. The effect of any silage inoculant is dependent upon management at harvest, storage and feedout. Factors such as moisture, maturity, chop length and compaction will determine inoculant efficacy.

IMPORTANT: Information and ratings are based on relative comparisons with other Pioneer® brand forage additives within each specific crop, not competitive products. Information and ratings are assigned by DuPont Pioneer Forage Additive Research, based on average performance across area of use under normal conditions, over a wide range of both environment and management conditions, and may not predict future results. Product responses are variable and subject to any number of environmental and management conditions. Please use this information as only part of your product positioning decision. Refer to www.pioneec.com/products or contact a Pioneer sales professional for the latest and most complete listing of traits and scores for each Pioneer hand product and for norduct ladecental and management suspections senselic to vour overaint and local conditions.

Fermentation — Rate and extent of pH decline and the composition of fermentation acids occurring in silage. Nutrient conservation — Retaining more sugar/ starch and reducing protein degradation by rapidly reducing silage pH. Finer digestibility — The digestibility of acutal detergent fiber (NDF) by the runninant animal expressed as a percentage of the total NDF. Bonklife — Relative heat development compared to ambient temperature. Bonklife considers both how quickly silage begins to heat and the amount of heat generated while remaining above ambient temperature.

### **Sales Contact Information**





### **Pioneer Hi-Bred Sales Representatives - Western Canada**

Our local sales representative network is committed to helping you grow a successful crop under your local conditions. **Contact your Pioneer Hi-Bred sales representative today!** 

### **Alberta**

### **Craig Schmidt**

Barrhead (780) 674-0224

#### **Brian Olfert**

Bezanson (780) 402-1355

### Jill Feniak-Splane

Boyle/Smoky Lake (780) 689-9332

### GWG Frank Ag Inc.

Brooks (403) 793-0255

### You1st Enterprises Ltd.

Calgary (403) 701-3927

### Herb Dehoog

Camrose (780) 608-5662

#### Ian Berwick

Clyde/Westlock (780) 307-7136

#### AJM Seeds Ltd.

Coalhurst (403) 308-6685

#### **Consort Agro Services Ltd.**

Consort (403) 575-1275

### Maureen Black

Coronation (403) 578-8185

#### **Greg Reese**

Didsbury (403) 507-9860

#### Cova Agrology

Drumheller (403) 820-0181

### **Agro Plus Solutions**

Dunmore (403) 866-6797

#### ReNew Ag

Fairview (780) 835-0114

### Cronkhite Ag Consulting Ltd.

Foremost (403) 647-7825

### BBK Farms Ltd.

Forestburg (780) 608-5448

### Sanford Farms Inc.

Fort Saskatchewan/Vegreville (780) 632-9699

#### Ron Wieler

Fort Vermilion (780) 841-7854

#### Marc Brochu

Girouxville (780) 837-1636

### Sammons Land and Cattle Company Ltd

Gleichen (403) 734-3200

### 4GC Farms Ltd.

Grimshaw (780) 618-5220

### Smoky Seed Company Ltd.

Guy (780) 837-1334

### Kelsey Solick

Halkirk (403) 323-0315

### **Brianne Brault**

High (780) 536-7199

#### **South Peace Distributors**

Hythe (780) 831-5662

#### All In Farm Services Ltd.

Kitscoty (780) 871-1581

### AgVise Ltd.

Lacombe (403) 506-1741

#### **Taylor Sarafinchan**

Leduc (780) 293-6529

#### **Looks Custom Spraying Ltd.**

Lloydminster (780) 205-4068

### Platinum Farm Services Ltd.

Mallaig (780) 650-0040

#### **Exclusive Seeds**

Manning (780) 836-0140

### Sand's Seed Farm Ltd.

McLaughlin (780) 205-7999

### Land Seed & Agro Services Ltd.

Minburn (780) 632-5526

### Luc Seguin

Morinville (780) 318-2445

### Kerry Sharpe Farms Ltd.

Munson (403) 820-1691

### Diadem Ag Enterprises

Nanton (403) 603-0797

### **Taylor Groenenboom**

Nobleford (403) 915-1035

#### **Dennis Haw**

Olds (403) 586-0055

### E & A Land and Cattle Ltd.

Provost (780) 753-4098

#### Accur Ag Ltd.

Rimbey (403) 588-4689

#### **Koester Aq Ventures**

Rockyford (403) 901-3560

#### **Cory Lohr**

Rosalind/Killam (780) 878-4148

### Schoorlemmer Seeds Ltd.

Rycroft (780) 864-5949

### **Zolton Yaremie**

Ryley (780) 886-0772

### Crop Care Ag Consulting Ltd.

Sexsmith (780) 518-9868

#### Myron Zabolotniuk

St. Albert (780) 915-6920

### **Gerald Fodchuk**

St. Brides (780) 614-8610

### St. Paul Seed Cleaning Assoc.

St. Paul (780) 645-0215

### North Point Agronomy Ltd.

Star (780) 691-2981

### Lee Van Ringen

Stettler (403) 741-9067

### **Taber Home and Farm Centre**

Taber (403) 308-9866

### Drader's Edge Ltd.

Tangent (780) 837-6155

### Double Bumps Seed & Agron Ltd.

Vegreville/Two Hills (780) 208-4808

### JSK Sales & Service Ltd.

Vermilion (780) 853-1725

### Jenna Waltz

Vermilion (780) 853-3873

### Kittle Farms Ltd.

Viking (780) 385-4900

### Susan Heather

Vulcan (403) 485-3660

#### Tower Farms Ltd.

Waskatenau/Thorhild (780) 656-6333

### **British Columbia**

#### Ritchie Smith Feeds Inc.

Abbotsford (604) 859-7128

### Interior Seed and Fertilizer Ltd. Cranbrook (250) 426-5347

### LH Willms Inc.

Fort St. John (250) 264-8242

### **Sure Crop Feeds**

Grindrod (250) 833-6976

### S & S Seed Corp.

Rolla (250) 219-1778

### **Manitoba**

### Flovd Farms Inc.

Arborg (204) 797-7554

### Intermountain Ag Supply Ltd.

Ashville (204) 648-3089

### Bangert Farms Ltd.

Beausejour (204) 268-8047

### **Stoney Ridge Ag Services** Binscarth (306) 292-6165

SGB Agronomics Ltd.

### Brandon (204) 573-0455

### Bud McKnight Seeds Ltd.

Adam McKnight Carman (204) 745-2310

### Sloane Agriventures Ltd.

Clearwater (204) 825-8443

### Winchester Seeds Ltd.

Deloraine (204) 747-4165

#### DB Farms Ltd.

Durban (204) 281-1157

#### Ridder Farms Ltd.

Gladstone (204) 856-3282

### Jefferies Seeds Ltd.

Glenboro (204) 720-7282

### Chappell Ag Ventures Inc. Hamiota (204) 365-7571

### Sample Agri

Killarney (204) 523-0240

### Backwoods Ag Ltd.

Laurier (204) 647-0634

### B.B.F. Enterprises Ltd.

Letellier (204) 324-7721

### Keen Seeds Ltd. Manitou (204) 242-4074

Pateman Ag McAuley (204) 722-2222

### Scott Sambrook

Medora (204) 264-0076

### Minnedosa (204) 868-5961

Southern Seed Minto (204) 534-0988

Cardy Crop Solutions Ltd.

### Valleyfield Enterprises Ltd.

Morden (204) 362-0322

Red River Seeds Ltd.

### Morris (204) 746-4779

Kulbacki Seeds Neepawa (204) 476-6449

### Derek Erb

Oak Bluff (204) 792-6744

### Intel Seed Ltd.

Oakville (204) 999-4025

### Payette Seeds Ltd.

Rathwell (204) 526-0978

#### **Hillview Crop Solutions**

Reston (204) 264-0135

### Andres Stock & Seed Ltd.

Roblin (204) 937-0998

### Creekland Ag Ltd.

Russell (204) 773-3161

### Ronceray Seeds Ltd.

Somerset (204) 825-7345

### Fraser Ag Services

Souris (204) 483-7333

Marc Hutlet Seeds Ltd.

### Steinbach (204) 326-7104

**Growth Science Potential Services Ltd.**Swan River (204) 734-4672

### Parkland Agrophysics Toutes Aides (204) 732-2825

Barry Hutchison Virden (204) 851-6157

### **Greg Trewin**

C M Agra Limited
Winnipeg (204) 981-7258

Waskada (204) 522-5044

### **Sales Contact Information**





### Saskatchewan

Ridgeline Agriservices Inc. Arcola (306) 577-3230

Travis Holland

Avonlea (306) 868-7710

**Beyond the Seed Ag Marketing** 

Biggar (306) 951-7490

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Delmas (306) 893-7186

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Estevan (306) 421-2099

**Tracey Lievaart** 

Estevan (306) 421-2662

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Gainsborough (306) 482-7975

**Jeffery Kuntz** 

Gerald (306) 745-9170

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Govan (306) 725-7544

Headland Farm Solutions Ltd.

Grenfell (306) 541-3213

**Murray Chutskoff** 

Kamsack (306) 542-7205

**Irondeal Ag Services** 

Kamsack West (306) 542-8670

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Kelliher (306) 795-7510

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Lake Lenore (306) 231-9364

**Andrew Monchuk** 

Lanigan (306) 365-7404

KenDen Aq

Maidstone (306) 903-7333

**Christopher Lincoln** 

Maryfield (306) 646-7661

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Meadow Lake (306) 236-7797

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Meath Park (306) 940-7547

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Philip Mansiere Enterprises Ltd.

Meskanaw (306) 921-7901

Ryan Mansiere Enterprises Ltd.

Meskanaw (306) 229-8588

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Milestone (306) 540-5858

**Chad Nicholas** 

Milestone (306) 436-7300

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Troy Moroz

Pelly (306) 594-7679

Scott Klemp

Pense (306) 529-6658

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Prince Albert (306) 981-6734

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Ruthilda (306) 291-8744

**Adam Littman** 

Saltcoats (306) 744-7708

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Colin Mastrachuk

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St. Walburg (306) 248-1267

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**Mahussier Ag Ventures** Tisdale (306) 813-7799

KD Aa

Tramping Lake/Handel (780) 522-2007

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Ardell Ag Corp.

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Watrous (306) 946-8108

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Watrous (306) 946-8151

**Quantum Agrology Services Inc.** Weyburn (306) 891-9757

**Agronomy 1st Seeds** 

**Rod Sveinbjornson** 

Wynyard (306) 554-0134

Weyburn (306) 861-6793

**DuPont Pioneer and DuPont Crop Protection** Commercial Unit Office - Western Canada #300-510 Cope Way Saskatoon, SK, S7T 0G3

Phone: (306) 385-3001



#### **DuPont Pioneer**

#300 - 510 Cope Way, Saskatoon, SK S7T 0G3 1-800-265-9435



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