

# Soybeans That Generate Growth

**2018  
Western Canada  
Seed Guide**



**Prograin<sup>®</sup>**

*A world of Soybean*

# Working together

to bring the best there is  
in soybeans



Prograin and Quarry Seed are working hand in hand to offer you the best varieties for your fields. We are dedicated to providing the best genetics, technologies and trialing to our fellow Canadian growers. As Canadian companies, we are ideally positioned to know what is needed to maximize profitability on your farm.

When Prograin launches a variety, we have full confidence in the Quarry Seed team taking over the next steps of promotion and distribution. Working closely together is what will continue to make us stronger year after year. Our goal is simple, to continue to offer the best soybeans for Western Canada.



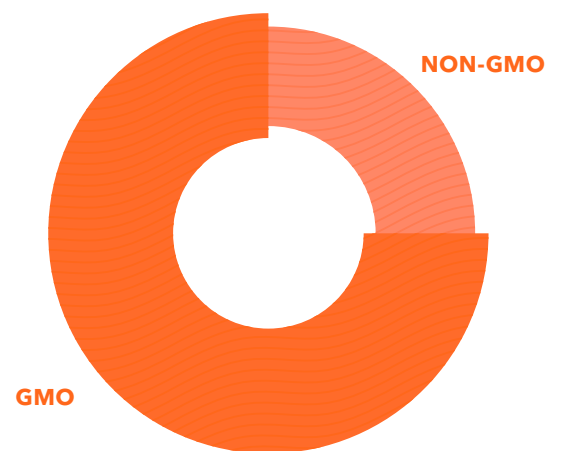
## 3 things you should know about our research program

**1** Our research program's main focus is the creation and observation of GMO varieties. In fact, 75% of the research team's efforts are geared towards offering Canadian farmers GMO varieties that will exceed performance expectations in their fields.

**2** Prograin has been observing and evaluating its varieties in Western Canada for several years, but this year, we have gone a step further. We have extended our research program to Western Canada and are now selecting varieties directly in the region where these varieties are to be sold.

This allows us to select varieties that properly meet the challenges that Western Canadian farmers face.

**3** We evaluate thousands of new varieties every year with our research program. This enables us to have access to new cultivars faster than our competitors. By having the biggest crossbreeding program in Canada, Prograin ensures that it controls its product portfolio. In the event the variety does not perform to our specifications, we are able to react and change quickly.



75% GMO and 25% NON-GMO





Growth chamber with LED lighting

# The ambition of constant innovation

Our all-new growth chamber was added to the facilities this year, with LED lighting technology that more closely replicates the sun's rays. The goal is to produce plants that look as if they are field grown.

Our researchers can work on multiple projects at the same time, to develop numerous agronomic features, introduce new technological platforms or propagate specific soybean features for human or animal consumption.

This enables year-round breeding efforts, allowing us to bring you new varieties more rapidly.

Sylvain Legay, assistant breeder






# PROGRAIN IS OFFERING YOU THE CHANCE TO ATTEND THE GRAND PRIX DE MONTREAL!



**BE AMONG THE 8 LUCKY PRODUCERS WHO WILL GET TO SPEND 4 DAYS IN MONTRÉAL, ALL EXPENSES PAID, AND EXPERIENCE FORMULA 1 FEVER.**

**BUY SEED IN EITHER THE ROUNDUP READY 2 XTEND® OR GENUITY® ROUNDUP READY 2 YIELD® PRODUCT LINES AND RECEIVE 1 ENTRY FOR EVERY 100 UNITS OF SEED PURCHASED.**

 Get all of the contest rules and details on the [prograin.ca/contest](http://prograin.ca/contest) web page or from your local dealer.



# Leading- edge genetics

More flexibility for  
your weed control



High performing soybeans



Varieties developed and tested in our  
labs and research test plots to give you  
new options and better performance

**This is what the Prograin  
Roundup Ready 2 Xtend®  
soybean line offers.**

## Maximum yields in your fields



### Dario R2X

2275 CHU (RM 000.8)

**New Roundup Ready 2 Xtend® variety that will be valued for its quick start in spring**

Standability: 7

Sclerotinia tolerance: 7

Stability – adaptability: 8

Vigour for no-till: 8

Adaptability to 30": 6

IDC: 8

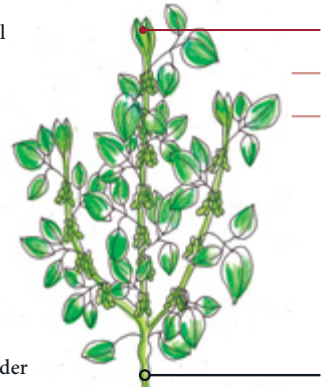
#### Characteristics

- Very good yield potential for its maturity group
- Among the earliest maturing varieties on the market, well adapted to short-season regions
- Outstanding in minimum tillage
- Good bushing capacity and excellent vigour

#### Management pointers

- Best with 15" spacing or less
- Adapted to no-till

medium-tall



slightly slender



### Dylano R2X

2425 CHU (RM 00.4)

**A new variety with good performance, well adapted to early-maturing zones.**

Standability: 8

Sclerotinia tolerance: 8

Stability – adaptability: 8

Vigour for no-till: 7

Adaptability to 30": 7

IDC: 9

#### New

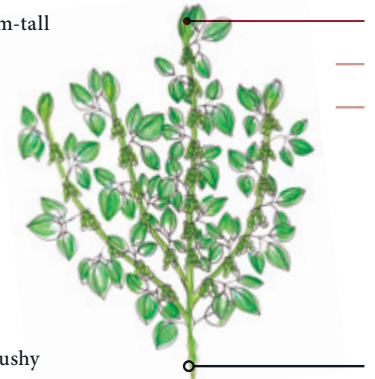
#### Characteristics

- Very high yield potential
- Unsurpassed standability in all growing conditions
- Great white mold tolerance
- Excellent pod clearance to make harvesting a breeze

#### Management pointers

- Well adapted to 15" (or less) row spacing
- Adapted to all soil types

medium-tall



semi-bushy



### Dugaldo R2X

2450 CHU (RM 00.6)

**A brand new mid-season soybean that the Manitoba market has been waiting for!**

Standability: 8

Sclerotinia tolerance: 8

Stability – adaptability: 8

Vigour for no-till: 7

Adaptability to 30": 7

IDC: 9

#### New

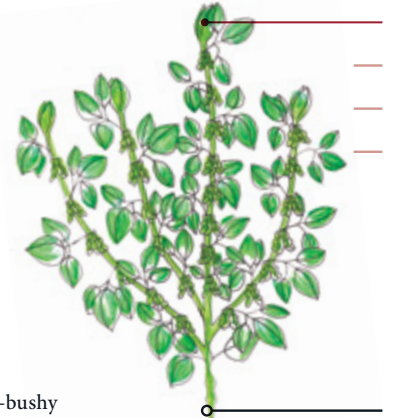
#### Characteristics

- Great yield potential
- Unsurpassed standability in all growing conditions
- Great white mold tolerance
- Excellent plant adaptability to all row spacings

#### Management pointers

- Best adapted to 15" to 30" row spacing
- Adapted to all soil types

tall



semi-bushy



### Domingo R2X

2500 CHU (RM 00.8)

**The Roundup Ready 2 Xtend® variety that performs consistently in different environments**

Standability: 8

Sclerotinia tolerance: 8

Stability – adaptability: 7

Vigour for no-till: 7

Adaptability to 30": 8

IDC: 7

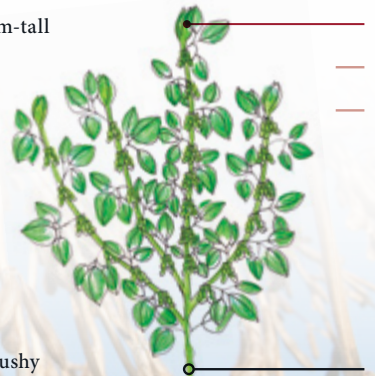
#### Characteristics

- Very good vigour at the start of the season and excellent standability
- Excellent yield potential
- Good-looking plant with above-average height
- Very good sclerotinia tolerance

#### Management pointers

- Performs well in all soil types
- Well adapted to 7" and 15" spacing with good bushing capacity to fill a 30" row

medium-tall



semi-bushy



# Performance and simplicity

Varieties proven in the fields



High performing soybeans



Prograin Genuity® Roundup Ready 2 Yield® soybean seeds are the result of a combination of high-tech features that produce a yield that meets your objectives.





GENRR2Y 2300 CHU (RM 00.1)

### Torro R2

A very robust soybean that will provide exceptional yield

- Standability: 7
- Sclerotinia tolerance: 8
- Stability – adaptability: 7
- Vigour for no-till: 8
- Adaptability to 30": 4
- IDC: 9

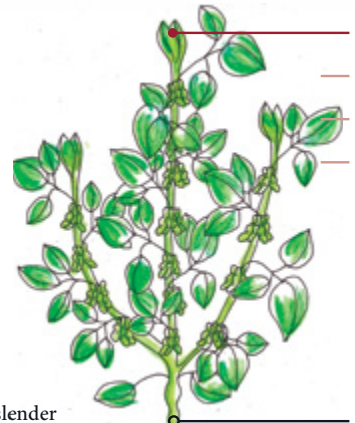
#### Characteristics

- Medium-sized plant with dark green foliage
- Excellent yield potential for its maturity
- Above-average standability
- Slender soybean type with narrow leaves

#### Management pointers

- Responds well to high population
- Better suited to planting in narrow rows

tall



slightly slender



GENRR2Y 2400 CHU (RM 00.3)

### Kosmo R2

The variety to choose to obtain good yield in early maturity areas

- Standability: 7
- Sclerotinia tolerance: 8
- Stability – adaptability: 8
- Vigour for no-till: 7
- Adaptability to 30": 5
- IDC: 8

#### Characteristics

- Very good vigour at the start of the season, perfect for short season areas
- Good ability to branch for an early soybean variety
- Plant taller than average with good standability
- Good flower fertility that ensures good yields

#### Management pointers

- Offers better results in narrow rows

tall



slightly slender



# The right population: key to optimal profitability

Soybean cultivars do not all respond in the same way to different populations; that's why it's important to plant the recommended density of each variety. At Prograin Research Centre, we conduct rigorous population testing on our different varieties every year. The table below lists the recommended populations for 7", 14" and 30" row spacings in order to obtain an optimal yield.

With a targeted number of seeds/ac, you can determine the sowing rate in kg/ac using the number of seeds or the bag's weight as indicated on the seeds bag. Here is a sample calculation.

Data	Torro R2	Your variety
Target population by row spacing: see tables below	Row spacing: 22 in	Row spacing: _____ in
Grain size: indicated on the bag	Target population: 180,000 seeds/ac	Target population: _____ seeds/ac
Number of seeds per bag: see tables below	Grain size: 5900 seeds/kg	Grain size: _____ seeds/kg
	Number of seeds: 140,000/unit	Number of seeds: 140,000 /unit

## Calculation of seeding rate

<b>Method #1</b>	$\frac{180,000 \text{ seeds/ac}}{140,000 \text{ seeds/unit}} = 1.29 \text{ unit/ac}$	$\frac{\text{seeds/ac}}{\text{seeds/unit}} = \text{_____ unit/ac}$
<b>Method #2</b>	$\frac{180,000 \text{ seeds/ac}}{5900 \text{ seeds/kg}} = 30.5 \text{ kg/ac}$	$\frac{\text{seeds/ac}}{\text{seeds/kg}} = \text{_____ kg/ac}$
<b>Method #3</b> Bag weight (by calculation or the number indicated on the bag):	$\frac{140,000 \text{ seeds/unit}}{5900 \text{ seeds/kg}} = 23.73 \text{ kg/unit}$	$\frac{\text{seeds/unit}}{\text{seeds/kg}} = \text{_____ kg/unit}$

1.29 unit/ac X 23.73 kg/unit = 30.6 kg/ac  
 or  
 30.6 kg/ac X 2.2 = 67.32 lb/acre

\_\_\_\_\_ unit/ac X \_\_\_\_\_ kg/unit = \_\_\_\_\_ kg/ac  
 \_\_\_\_\_ kg/ac X 2.2 = \_\_\_\_\_ lb/acre

## Roundup Ready 2 Xtend® varieties

GMO soybean, pages 6-7



VARIETY	CHU (RM)	SEEDS/KG (MIN/MAX)	ROW Δ (INCHES)	SEEDS PLANTED/AC	SEEDING RATE (BAGS/AC)	TOLERANCE TO PHYTOPHTORA	PUBESCENCE COLOUR	HILUM COLOR	PROTEIN %
DARIO R2X	2275 (000.8)	5000/5400	7 15	210,000 180,000	1.50 1.29	none	Brown	Brown	n/a
DYLANO R2X	2425 (00.4)	5300/5500	7 15	210,000 170,000	1.50 1.21	none	Brown	Brown	n/a
DUGALDO R2X	2450 (00.6)	5300/5900	7 15	210,000 170,000	1.50 1.21	none	Light brown	Black	n/a
DOMINGO R2X	2500 (00.8)	5300/5900	15 30	170,000 140,000	1.21 1.00	n/d	Light brown	Imperfect yellow	n/a

## Genuity® Roundup Ready 2 Yield® varieties

GMO soybean, pages 8-9



VARIETY	CHU (RM)	SEEDS/KG (MIN/MAX)	ROW Δ (INCHES)	SEEDS PLANTED/AC	SEEDING RATE (BAGS/AC)	TOLERANCE TO PHYTOPHTORA	PUBESCENCE COLOUR	HILUM COLOR	PROTEIN %
TORRO R2	2300 (00.1)	5700/6100	7 22	210,000 180,000	1.50 1.29	none	Tawny	Black	n/a
KOSMO R2	2400 (00.3)	4900/5300	7 22	210,000 170,000	1.50 1.21	none	Tawny	Imperfect yellow	n/a

All RR2Y and XTend® varieties: 1 unit = 140,000 seeds



# A new IP Program for Western Canada!



Prograin is proud to offer its IP program to Western Canadian producers. An incomparable opportunity to increase your profitability.

Many producers are already enjoying the benefits of this program. Here is how the Prograin IP program stands out:

- 100% guaranteed crop buyback program.
- We offer a fixed variety premium all year long.
- A production agreement that guarantees 100% buyback of your crop. Regardless of your yields, Prograin commits to buying back all of your harvest with your variety premium.
- Certified early and top-performing Canadian varieties.
- A grain marketing service that provides you with assistance for answering your questions and for maximizing your contracts.
- An interactive platform so you can track the commercialization of your crops at any time.

**To learn more,  
visit the IP Seeds  
section of our  
Web site.**



# Soybean varieties with incomparable performances

Conventional soybean



**The IP soybean line provides all of the advantages sought by producers:**

Competitive premiums

Excellent agronomic performance

100% guaranteed crop buyback program\*

A transport logistics service tailored to your needs.

\* Obligation to sign an agreement

\*\* Prograin confirms it will buy back all of your harvest, regardless of the actual yield.





**High protein**  
2425 CHU (RM 00.3)

## Maxus

**All around positive results**

Standability: 9

Sclerotinia tolerance: 8

Stability – adaptability: 9

Vigour for no-till: 6

Adaptability to 30": 4

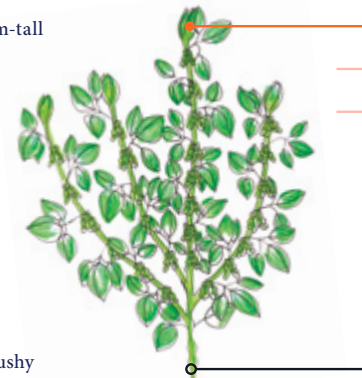
### Characteristics

- Stable performance in short-season areas
- Good yield potential
- Very good standability and excellent vigour in the spring

### Management pointers

- Best results if seeded at 7 or 15 inches spacing
- Well adapted to all soil types

medium-tall



semi-bushy



**High protein**  
2475 CHU (RM 00.6)

## OPUS

**Variety combining plant performance and health**

Standability: 8

Sclerotinia tolerance: 8

Stability – adaptability: 8

Vigour for no-till: 7

Adaptability to 30": 4

### New

### Characteristics

- Variety selected for its potential high yield
- Bushy variety well adapted to 30" spacing
- Strong plant with good standability
- Offers constant yields

### Management pointers

- Sow in narrow rows : 7" and 15"
- Well adapted to all soil types

tall



semi-bushy



# The right population: key to optimal profitability

Soybean cultivars do not all respond in the same way to different populations; that's why it's important to plant the recommended density of each variety. At Prograin Research Centre, we conduct rigorous population testing on our different varieties every year. The table below lists the recommended populations for 7", 14" and 30" row spacings in order to obtain an optimal yield.

With a targeted number of seeds/ac, you can determine the sowing rate in kg/ac using the number of seeds or the bag's weight as indicated on the seeds bag. Here is a sample calculation.

## Data

Target population by row spacing: see table below  
 Grain size: indicated on the bag:  
 Number of seeds per bag: see table below

## Maxus

Row spacing: 14 in  
 Target population: 190,000 seeds/ac  
 Seed size: 5750 seeds/kg  
 Number of seeds: 110,000/unit

## Your variety

Row spacing: ..... in  
 Target population: ..... seeds/ac  
 Seed size: ..... seeds/kg  
 Number of seeds: 110,000 /unit

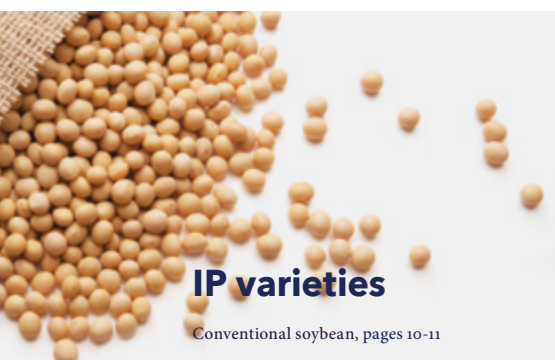
## Calculation of seeding rate

<b>Method #1</b>	$\frac{190,000 \text{ seeds/ac}}{110,000 \text{ seeds/unit}} = 1.73 \text{ unit/ac}$	$\frac{\text{seeds/ac}}{\text{seeds/unit}} = \text{..... bags/ac}$
<b>Method #2</b>	$\frac{190,000 \text{ seeds/ac}}{5750 \text{ seeds/kg}} = 33 \text{ kg/ac}$	$\frac{\text{seeds/ac}}{\text{seeds/kg}} = \text{..... kg/ac}$
<b>Method #3</b>	$\frac{110,000 \text{ seeds/unit}}{5750 \text{ seeds/kg}} = 19.13 \text{ kg/unit}$	$\frac{\text{seeds/unit}}{\text{seeds/kg}} = \text{..... kg/unit}$

Bag weight (by calculation or the number indicated on the bag):

1.73 unit/ac X 19.13 kg/unit = 33 kg/ac  
**or**  
 33 kg/ac x 2.2 = 72.6 lb/acre

..... unit/ac X ..... kg/unit = ..... kg/ac  
 ..... kg/ac X 2.2 = ..... lb/acre



## IP varieties

Conventional soybean, pages 10-11



VARIETY	CHU (RM)	SEEDS/KG (MIN/MAX)	ROW Δ (INCHES)	SEEDS PLANTED/AC	SEEDING RATE (BAGS/AC)	TOLERANCE TO PHYTOPHTORA	PUBESCENCE COLOUR	HILUM COLOR	PROTEIN %
MAXUS	2425 (00.3)	5500/6000	7	210,000	1.50	n/a	Brown	Imperfect yellow	40
			14	170,000	1.21				
OPUS	2475 (00.6)	5500/6000	7	210,000	1.50	n/a	Brown	Imperfect yellow	40
			14	170,000	1.21				





### Japan

"Silken tofu"



### Worldwide

Various Uses: soya flour, protein isolates



### Vietnam

Deep fried tofu



### China

Do fu pi



### Europe

Soy milk, dessert



## Your harvest: World renowned

Many ask us: "What do you do with the soybean varieties that are grown on our land?"

Your harvests delivered to our facilities help feed over 14 million people on the planet, through a variety of products.

Prograin has commercialized your soybeans in a variety of highly specialized markets for over 30 years. Our efforts are now concentrated on developing new markets like Taiwan, China, South Korea, Thailand and Indonesia.

More than ever, we need your soybean production to meet market needs. Tofu is the product most frequently associated with soya, but there are many uses derived from your harvests.

Pictured here, are just a few examples.

# Key factors

## for producing conventional identity-preserved soybeans



There are some important points to follow to obtain the best profitability from your conventional soybean production.

### Here are the key success factors:

#### Cleaning of equipment:

- Essential to avoiding contamination between varieties and with GMOs; seeder, thresher, grain cars and trucks, storage silos, etc.

#### Harvest:

- Check the moisture content, make sure you have favourable weather conditions and make the necessary adjustments to the thresher

#### Crop histories:

- Soybeans should be grown in rotation with a different species.

#### Maintaining isolation strips:

- There should be a distance of 3 metres separating two varieties.

#### Controlling weeds and voluntary crops:

- Use herbicides certified in Canada for exportation.

#### And remember:

- You must sign the production agreement before you seed your fields.
- You must keep all seed labels until the following year.



For more details and tips, visit [prograin.ca/IP Seeds](http://prograin.ca/IPSeeds)



# Storing your harvest

Advice from our expert!

**The preservation of your harvest is critical in order to maximize its quality. Here are the key points to remember:**

## Preservation of the grain:

### Cleanliness of the silo

- The space between the product and the silo roof (there must be enough space to be able to enter the silo)
- The moisture content of the grain must be between 10% and 13% for optimal quality

## Ventilation\*:

### In the fall:

- As soon as harvest begins: Cool the grain mass quickly to a uniform temperature and ensure maintenance aeration thereafter.
- In spring: Ventilate to warm the mass, so as to maintain a temperature variation of no more than 10°C with the outside air and ensure maintenance aeration.

## Inspection\*:

### In fall:

- Clean silo thoroughly before filling, and make necessary repairs

### In winter:

- Inspect once or twice a month to check temperature, the general condition of the grain, and to watch for water infiltration

### In spring:

- Before removing grain the first time, inspect the top of the silo carefully for signs of moisture, soybeans with pink discoloration, or any other problem. If necessary, use suction (or other means) to remove the top layer of grain to avoid contaminating the grain mass.

Martyn Laramée,  
Storage coordinator

\*Reference: St-Pierre, N., V. Bélanger et A. Brégard. 2014.

Ventilation et conservation des grains à la ferme. Réseau Innovagrains et Centre de référence en agriculture et agroalimentaire du Québec (CRAAQ). 58 p.



Philippe Lemaitre, agr.  
Technical director  
for seed production





If you grow  
conventional soybeans

# Our customer center is for you

## PRICE INFO

### BASE PRICE

COMMERCIAL SOYBEAN PRICE (DELIVERED)	BASIC PREMIUMS	FUTURES CONTRACTS	COMMERCIAL SOYBEAN PRICE (DELIVERED)
NON GMO HARVEST 2015 (Immediate delivery 2016)	+1.35 /bu	Sep 16 10.21 /bu	425 /mt
NON GMO HARVEST 2016 (Fall delivery 2016)	+2.60 /bu	Nov 16 10.09 /bu	466 /mt
NON GMO HARVEST 2016 (Winter delivery 2017)	+2.85 /bu	Mar 17 10.00 /bu	472 /mt

SOYBEAN SEEDS PRICE (DELIVERED)	BASIC PREMIUMS	FUTURES CONTRACTS	SOYBEAN SEEDS PRICE (DELIVERED)
NON GMO HARVEST 2015 (Delivery on request 2016)	+1.35 /bu	Sep 16 10.21 /bu	425 /mt
NON GMO HARVEST 2016 (Delivery on request 2016)	+2.80 /bu	Jan 17 10.08 /bu	473 /mt

### SOYBEANS CBOT

MONTH	HIGH	LOW	CLÔTURE PREVIOUS CLOSING	CHANGE
Soybeans Sep 16	10.2850	10.1225	10.2050	-0.32%
Soybeans Nov 16	10.1575	10.0100	10.0875	-0.05%
Soybeans Jan 17	10.1500	10.0075	10.0825	-0.02%
Soybeans Mar 17	10.0675	9.9300	10.0000	-0.17%
Soybeans May 17	10.0350	9.9100	9.9675	-0.23%
Soybeans Jul 17	10.0375	9.9175	9.9700	-0.20%
Soybeans Aug 17	9.9675	9.8825	9.9100	-0.15%
Soybeans Sep 17	9.6750	9.6050	9.6050	-0.65%
Soybeans Nov 17	9.4700	9.3675	9.3750	-0.69%
Soybeans May 18	0.0000	0.0000	8.9825	-0.61%



**TO LOG IN**

Email

Password

[Lost your Password](#)

Remember me

**LOG IN**

Welcome to the new CUSTOMER CENTER Prograin  
Please use your email address as username .  
Your password remains the same as before.  
If you have forgotten your password, click Forgot Password.



**The Customer Center, where marketing your harvest begins! The Customer Center is an interactive platform where you can read and sign all of the documents associated with conventional soybean production with Prograin.**

**It is also a place where you can view, at any time:**

- The premiums offered by Prograin for each conventional variety
- The market price for soybeans, along with an impressive history of soybean prices over time.

**The Customer Center also allows you to:**

- Sign and view your production agreements
- Sign and view your buyback contracts
- View your weigh slips reports
- View the field inspections lists



# Prograin®

*A world of Soybean*

#### MONSANTO COMPANY IS A MEMBER OF EXCELLENCE THROUGH STEWARDSHIP™ (ETS).

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

#### ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS.

Roundup Ready 2 Xtend® soybean varieties contain genes that confer tolerance to glyphosate and dicamba. Agricultural herbicides that contain glyphosate will destroy crops that do not tolerate glyphosate and those that contain dicamba will destroy crops that do not tolerate dicamba. Contact your Monsanto dealer or call Monsanto Technical Support at 1-800-667-4944 for recommended Roundup Ready Xtend® crop system weed control programs. Roundup Ready® technology contains genes that confer tolerance to glyphosate, an active ingredient in Roundup® brand agricultural herbicides. Agricultural herbicides containing glyphosate will kill crops that are not tolerant to glyphosate. Genuity and Design®, Roundup Ready 2 Xtend®, Roundup Ready 2 Yield®, Roundup Ready®, Roundup® are registered trademarks of Monsanto Technology LLC, Monsanto Canada, Inc. licensee.

### Semences Prograin inc.

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prograin@prograin.qc.ca

### Certified seeds are synonymous with success. Certified seeds open the door to new opportunities.

- Access to new and improved varieties
- Efficient use of inputs
- Quality assurance
- Access to new markets
- Support for future development of new varieties

**It all starts with certified seeds.**



Prograin® is a registered trademark of Semences Prograin inc. The Prograin® and Quali-Pro® logos are registered trademarks of Semences Prograin inc. Turbo-N2™ is a registered trademark of Semences Prograin inc.

The agronomic content of the 2018 Seed Guide was prepared and verified by agronomists Maxime Gratton, Philippe Lemaître, Miguel Provost and Marc Saumure.

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LITHO CANADA