



**SNOBELEN FARMS**  
QUALITY WITHOUT COMPROMISE



**2021**

**SOYBEAN GUIDE**

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## Lucknow



- Head Office
- Food grade soybean facility
- Receiving facility
- Cleaning, processing, and packaging seed
- Seed treating

## Palmerston



- Receiving facility
- Cleaning, processing, and packaging pedigreed seed
- Seed treating



Insert: Troy Snobelen, Tayna Leppington, and Sam Snobelen

## THE SNOBELN FARMS DIFFERENCE

Snobelen Farms Ltd. is an independent, family owned company that was founded in 1971, specializing in commercial grains and pedigreed seed for markets across Canada and Internationally, and the production, processing and sales of food grade soybeans. We take pride in combining years of experience with attentive customer service to complement the premium quality of our agricultural products. With eight locations we are able to serve the needs of growers across Ontario.

### Family

From the beginning, Snobelen Farms has been a family business. We treat all our customers, employees & communities as part of the family as well.

### Customer Service

Unsurpassed service to customers before, during and after your visit to Snobelen Farms.

### Quality & Development

Continuously improving the Snobelen Farms experience.



We are CIPRS + HACCP,  
FEMAS Certified

### We Specialize in:

- Multiplying, processing, and selling the best genetics for our area.
- Testing and growing the varieties that work for the farmer and the end users
- Selling certified seed to farmers and retailers across Ontario

With our state-of-the-art seed treating facilities we are able to offer the best seed treatment offerings on the market, providing solid agronomic choices and returns to the farmer.

**Lucknow** 1-800-582-5669 **Palmerston** 1-877-343-3630



# OUR SEED TEAM



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# Soybean

## VARIETY DESCRIPTIONS

Food Grade				
Yellow Hilum			Dark Hilum	
<b>OAC Bounty</b> <ul style="list-style-type: none"><li>● High yielding, stable performance across most environments</li><li>● Excellent tolerance to Phytophthora root rot, good on tough soil types</li></ul>		<b>AAC Invest</b> <ul style="list-style-type: none"><li>● Semi-bushy</li><li>● Ideally suited for 7" to 15" rows</li><li>● Good on all soil types</li><li>● High protein soybean</li></ul>		<b>OAC Wallace</b> <ul style="list-style-type: none"><li>● High yielding variety in both wet and dry areas</li><li>● Adapted for all soil types in Ontario</li><li>● Performs well in conventional and no-till operations</li></ul>
<b>OAC Bruton</b> <ul style="list-style-type: none"><li>● Tall plant height and Phytophthora root rot resistance</li><li>● Well suited for clay soils</li><li>● SCN resistant</li></ul>		<b>OAC Strive</b> <ul style="list-style-type: none"><li>● Impressive emergence and early season growth</li><li>● Ideally suited for 7" to 15" rows</li><li>● Good on all soil types</li></ul>		<b>OAC Drayton</b> <ul style="list-style-type: none"><li>● Well adapted to many environmental conditions</li><li>● Performs well in conventional and no-till operations</li></ul>
<b>OAC Malory</b> <ul style="list-style-type: none"><li>● New for 2020/2021</li><li>● SCN resistant</li><li>● Projected yield index of 102</li><li>● Excellent Field appearance</li></ul>		<b>OAC Lakeview</b> <ul style="list-style-type: none"><li>● Medium plant height, works well on 7" to 15" rows</li><li>● Solid agronomic package</li></ul>		
Technology Traited RR + R2X + Enlist				
<b>Altitude R2</b> <ul style="list-style-type: none"><li>● Top yield potential</li><li>● Good Podding height and no pod shatter</li></ul>	<b>Excursion R2X</b> <ul style="list-style-type: none"><li>● Excellent agronomic package</li><li>● Fit for heavier soils and minimum tillage</li><li>● SCN resistant</li></ul>	<b>Extent R2X</b> <ul style="list-style-type: none"><li>● Excellent lodging resistance</li><li>● Good emergence and early spring vigour</li><li>● SCN resistant</li></ul>	<b>Beliveau R2X</b> <ul style="list-style-type: none"><li>● Attractive agronomic characteristics</li><li>● SCN Resistant</li><li>● Rapid emergence &amp; canopy closure</li></ul>	<b>CP0529E</b> <ul style="list-style-type: none"><li>● SCN resistant</li><li>● Enlist variety</li><li>● Excellent root rot resistance</li><li>● Branches very well for early sunlight interception</li></ul>

## Food Grade-Yellow Hilum CHARACTERISTICS

	AAC Invest	OAC Strive	OAC Lakeview
CHU Rating	2500	2650	2700
Maturity Group	0.2	0.4	0.5
Hilum Colour	Yellow	Imperfect Yellow	Yellow
Plant Height	Medium	Medium-Tall	Medium
Plant Canopy Type	Semi-bushy	Semi-bushy	Medium
Lodging*	2.3	1.8	1.7
Row Width Recommendation	7" - 15"	7" - 15"	7" - 15"
Soil Type Recommendation	All	All	All
Protein (%)	45.8	44.0	39.9
White Mould Rating	N/A	Above Average	Average
SCN	No	No	No
Seed Size (Seeds / lb)	2450	1900	2150

Lodging\*: 1=excellent, 5=poor

## Food Grade– Yellow Hilum

# CHARACTERISTICS

	OAC Bruton	OAC Malory	OAC Bounty
CHU Rating	2975	2800	2725
Maturity Group	2.0	1.2	0.7
Hilum Colour	Yellow	Yellow	Yellow
Plant Height	Medium	Medium-Tall	Medium
Plant Canopy Type	Medium	Medium	Semi-bushy
Lodging*	1.3	1.6	1.4
Row Width Recommendation	7" - 30"	7"-30"	7" - 15"
Soil Type Recommendation	Clay	All	All
Protein (%)	42.5	42.6	40.7
White Mould Rating	N/A	N/A	Average
SCN	Yes	Yes	No
Seed Size (Seeds / lb)	1800	2119	2000

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## Food Grade– Dark Hilum

# CHARACTERISTICS

	OAC Drayton	OAC Wallace
CHU Rating	2750	2750
Maturity Group	0.8	0.7
Hilum Colour	Light Brown	Brown
Plant Height	Medium-Tall	Medium-Tall
Plant Canopy Type	Medium	Semi-bushy
Lodging*	1.6	1.7
Row Width Recommendation	7" - 15"	7" - 15"
Soil Type Recommendation	All	All
Protein (%)	38.5	38.2
White Mould Rating	Average	Above Average
SCN	No	No
Seed Size (Seeds / lb)	2250	2150

Lodging\*: 1=excellent, 5=poor



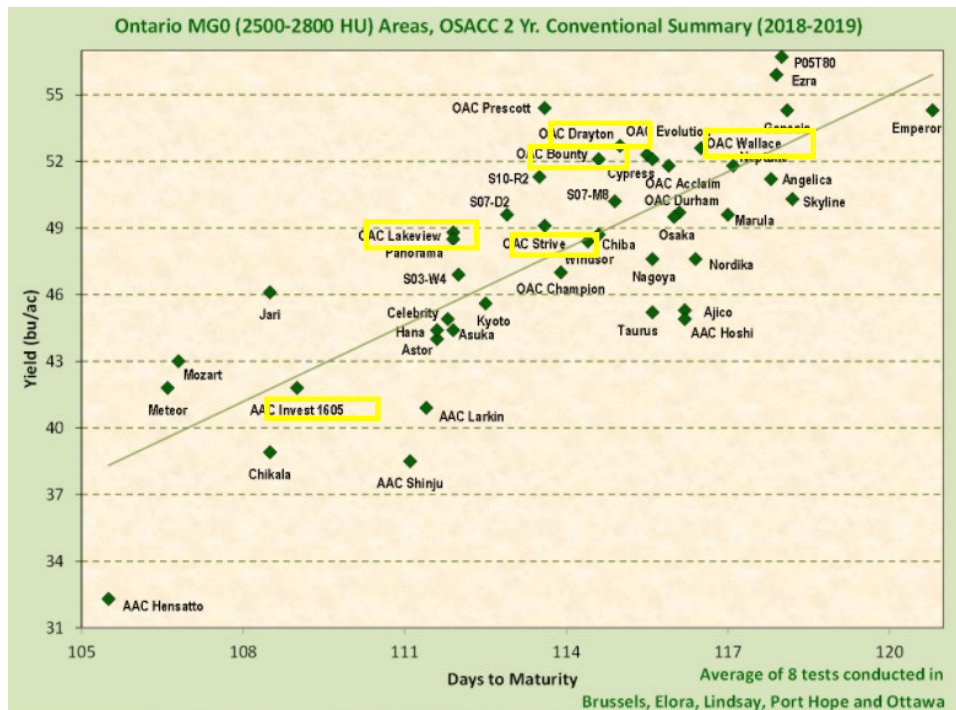
# Technology Trained CHARACTERISTICS

	Excursion R2X	Altitude R2	Extent R2X	Beliveau R2X	CP0529E
CHU Rating	2650	2725	2725	2775	2675
Maturity Group	0.4	0.6	0.7	0.9	0.5
Hilum Colour	Black	Brown	Black	Black	Light Brown
Plant Height	Tall	Short	Medium	Medium	Medium
Plant Canopy Type	Medium	Semi- bushy	Bushy	Medium	Bushy
Lodging*	2.5	1.3	1.5	1.5	1.5
Row Width Recommendation	7" - 30"	7" - 30"	7" - 30"	7" - 30"	7"-30"
Soil Type Recommendation	All	All	All	All	All
White Mould Rating	Above Average	Above Average	Average	Average	Average
SCN	Yes	No	Yes	Yes	Yes
Seed Size (Seeds / lb)	2400	2150	2550	2525	2525

Lodging\*: 1=excellent, 5=poor

# Ontario Soybean PERFORMANCE TRIAL DATA

## Food Grade



### Agronomic Tip

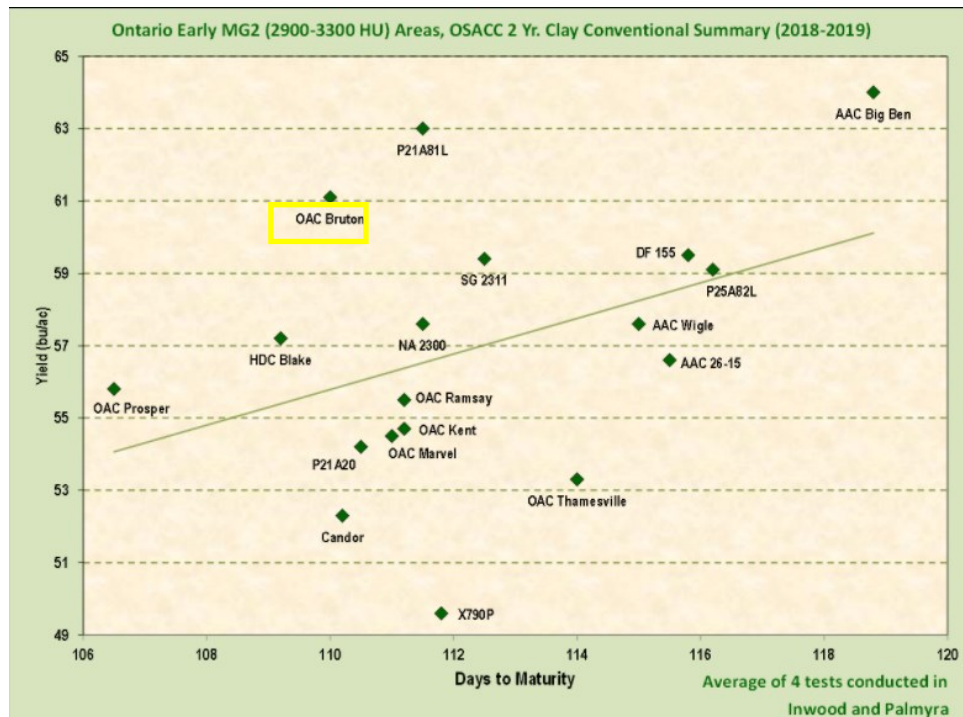
A 50 bu/a crop of soybeans removes over 180 lbs of nitrogen per acre. 60 - 70 % will come from biological nitrogen fixation (nodules).

### Agronomic Tip

A 3-day delay in planting date generally results in a 1-day delay of maturity.



## Food Grade



Source: Ontario Soybean and Canola Committee, 2019

### Agronomic Tip

Full yield potential is achieved in Ontario with final plant stands between 125,000–150,000 plants/acre

### Agronomic Tip

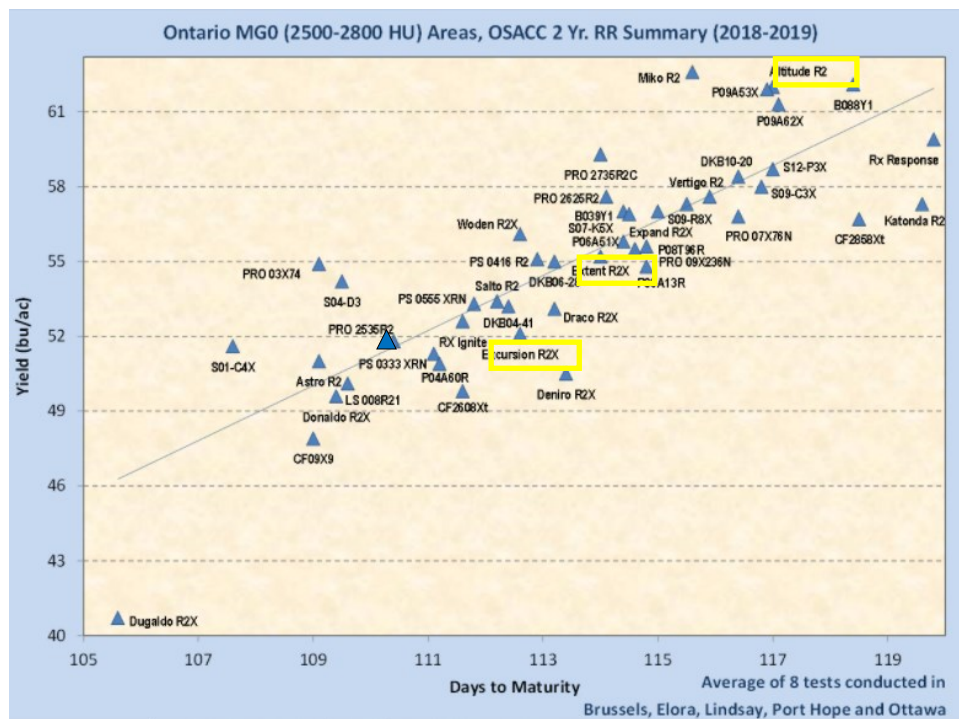
When planted at the optimal time, soybeans will develop 5–7 trifoliates before flowering begins.

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# Ontario Soybean PERFORMANCE TRIAL DATA

## Technology Traited



Source: Ontario Soybean and Canola Committee, 2019

### Agronomic Tip

Flowering is triggered mainly by day length and temperature changes.

### Agronomic Tip

Germination begins with the seed absorbing soil moisture until it reaches a moisture content of about 50%.

# SEEDING RATES

Number of Seeds/lb	7.5" Row 194,000 seeds/acre (2.8 seeds/ft. row)	15" Row 177,000 seeds/acre (5.1 seeds/ft. row)	22" Row 172,000 seeds/acre (7.2 seeds/ft. row)	30" Row 162,000 seeds/acre (9.3 seeds/ft. row)
1800	108	98	96	90
2000	97	89	86	81
2200	88	80	79	74
2400	81	74	72	68
2600	75	68	66	63
2800	69	63	62	58
3000	65	59	58	54
	157,000 plants/ acre (2.3 plants/ ft. row)	143,000 plants/ acre (4.1 plants/ ft. row)	139,000 plants/ acre (5.9 plants/ ft. row)	131,000 plants/ acre (7.5 plants/ ft. row)

Seeding Rate in pounds/acre for each common row spacing and recommended seeds/acre (seeds/ft. of row)

Seeding rates are based on having a germination of 90% and an emergence of 85-90% (plant stand of 76-81% of seeding rate)

Derived from: PUB 811, Table 2-11

# OPTIMUM PLANTING DATE

Planting Date	Yield	Percent of Full Yield (%)
April 15-May 5	63.8 bu/acre	100%
May 6-May 20	63.3 bu/acre	99%
May 21-June 5	58.3 bu/acre	92%

Derived from: OMAFRA, PUB 811, Table 2-6



# SEEDS PER FOOT ROW

Row Spacing (inches)	Linear Feet of Row Per Acre	Desired Plant Population per Acre						
		105,000	110,000	130,000	150,000	175,000	200,000	225,000
		Seeds per Foot Row						
30	17,424	6.0	6.3	7.5	8.6	10	11.5	12.9
22	23,760	4.4	4.6	5.5	6.3	7.4	8.4	9.5
15	34,848	3.0	3.2	3.7	4.3	5.0	5.7	6.5
10	52,272	2.0	2.1	2.5	2.9	3.3	3.8	4.3
7.5	69,696	1.5	1.6	1.9	2.2	2.5	2.9	3.2

Derived from: Mississippi State University Extension Service

## SEEDING DEPTH

Soybean seed is very sensitive to planting depth. Under most conditions, soybeans should be planted around 1.5 inches deep. However, since soybean seed has a high water demand for germination, it is important to plant ½ inch into moisture. It is also important to achieve good seed-to-soil contact and to close the seed slot.

**As a general rule you can plant more shallow when:**

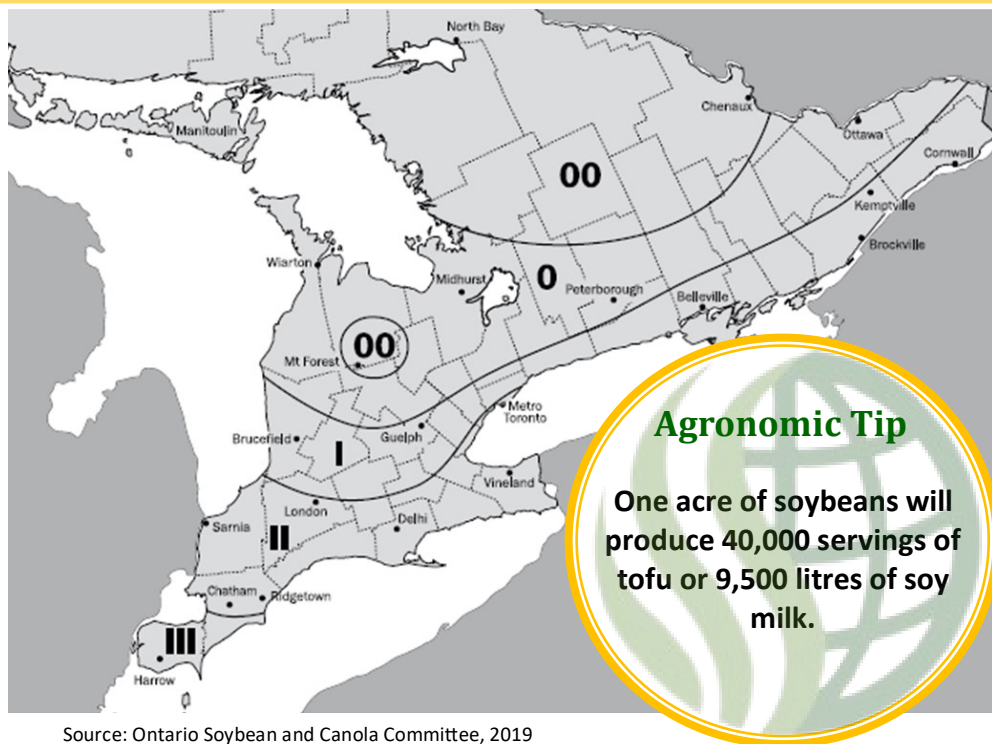
- Early planting
- High residue conditions
- Fine textured soils
- Moist soils

**You may have to plant deeper when:**

- Late planting
- Coarse textured soils
- Dry soils

The range of planting depth, depending on the conditions, is 1" – 2.5".

# ONTARIO SOYBEAN MATURITY MAP



Source: Ontario Soybean and Canola Committee, 2019

## POPULATION REDUCTION/YIELD POTENTIAL RELATIONSHIP

Plants per Acre	Optimum Stand	Optimum Yield
157,000	100%	100%
118,000	75%	98%
78,000	50%	90%
39,000	25%	75%

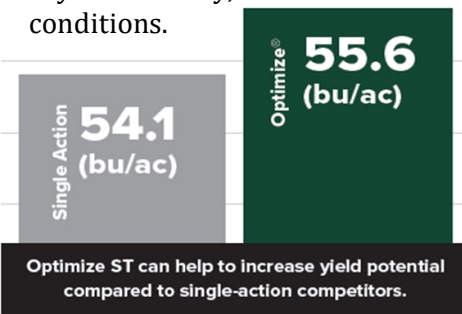
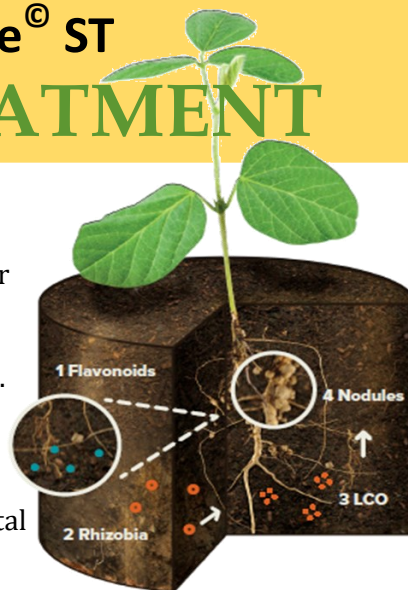
Derived from: University of Minnesota Extension Service

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# Optimize<sup>®</sup> ST SEED TREATMENT

## Product Overview

- Optimize ST inoculant is a retail-applied dual-action inoculant for soybeans that combines a Bradyrhizobium japonicum with LCO (lipochitooligosaccharide) technology.
- When present at seeding, this LCO molecule allows for the nodulation process to begin independently of soybean variety, soil and environmental conditions.



Source: Summary of 29 large-plot independent research trials with Optimize versus single-action inoculant in Eastern Canada from 2010–2011. Individual results may vary.

## How it Works

- 1 Needing nitrogen, the plant releases flavonoids to signal rhizobia.
- 2 Sensing the flavonoids to signal rhizobia signal LCO back to the plant.
- 3 The plant can respond to the LCO allowing the rhizobia to infect its roots.
- 4 This symbiotic relationship creates nodules, which can help fix atmospheric nitrogen.

## Product Details Two Component Product

- 1 **Bladder:** Active ingredient LCO (lipochitooligosaccharide), formulated in inoculant carrier (Bradyrhizobium japonicum).
- 2 **Plastic jug:** Liquid additive to enhance B. japonicum survival on-seed.



Courtesy of Bayer Crop Science



# Fortenza Vibrance® Maxx

## SEED TREATMENT

Protect your soybean seeds and seedlings from below ground insect feeding and seed–and soil-borne diseases.

Fortenza Vibrance® Maxx is a new non-neonicotinoid soybean seed treatment that can be applied as a commercial seed treatment. Four active ingredients deliver control of European chafer, June beetle, wireworm and seed corn maggot, while protecting growing soybean seedlings from the following diseases:

- Seed rot, damping off and seedling blight cause by *Fusarium spp.*, *Pythium spp.* and *Rhizoctonia spp.*
- Seeding root rot caused by *Fusarium spp.*
- Seed rot and seedling blight caused by *Phomopsis spp.*
- Early season root rot caused by *Phytophthora megasperma var. sojae*<sup>1</sup>

Even under heavy insect and disease pressure, Fortenza Vibrance®Maxx helps producers build a strong soybean stand with faster, more uniform growth.

In seed corn maggot trials conducted at the Honeywood Research Farm in Plattsville, Ontario, soybean stands treated with Fortenza fared better than infested checks treated with a fungicide base.



Fungicide base (infested check)



Fortenza @ 50g + Fungicide base

Photos taken at the Honeywood Research Farm in Plattsville, Ontario, in July 2016.

N=12

Performance evaluations are based on field observations and public information. Data from multiple locations and years should be consulted whenever possible. Individual results may vary depending on local growing, soil and weather conditions.

1 Vibrance Maxx RFC provides early season protection against *Phytophthora* root rot for tolerant varieties of soybeans.

Courtesy of Syngenta Canada

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# Vibrance® Maxx

## SEED TREATMENT

### Combat early-season disease with best-in-class Rhizoctonia control

Applied by a commercial treater or on-farm, Vibrance® Maxx seed treatment protects against seed-and soil-borne diseases by providing both systemic and contact fungicide activity on soybeans. Vibrance® Maxx is part of an effective and responsible disease management plan. Vibrance Maxx RFC is now available in a pre-mix formulation to improve application simplicity.

For control of:

- Pre-and post-emergent damping off—caused by *Fusarium* spp., *Pythium* spp., *Rhizoctonia* spp.
- Seeding blight—caused by *Fusarium* spp., *Pythium* spp., *Rhizoctonia* spp.
- Seed rot—caused by *Phomopsis* infected seed
- Early-season root rot caused by *Phytophthora sojae*\*

\* Early -season protection against *Phytophthora* root rot on tolerant soybean varieties. If target fields have a history of high *Phytophthora* pressure, or more susceptible varieties are to be treated, tank mix 100mL of Apron Maxx® RFC seed treatment with 31 mL of Apron XL LS seed treatment per 100kg of seed.

**Soybean seed infected  
with *Rhizoctonia*\***



Untreated      Vibrance® Maxx  
Source: Syngenta Canada Inc

**Soybean seed infected  
with *Fusarium*\*\***



Untreated      Vibrance® Maxx

\*Vibrance Maxx treated seeds reduced the growth of *Rhizoctonia* by 53% over untreated in 10 days of challenge by the pathogen (initial inoculum = 7mm agar plug) in a Petri dish. Pathogens grown on water agar. (n=4).

\*\*Vibrance Maxx treated seeds reduced the growth of *Fusarium* by 66% over untreated in 10 days of challenge by the pathogen (initial inoculum = 7mm agar plug) in a Petri dish. Pathogens grown on the water agar. (n=4).

Courtesy of Syngenta Canada



## DISEASES



**Rhizoctonia Seedling Blight**



**Soybean Cyst Nematode (SCN)**

Rhizoctonia seedling blight is caused by the fungus *Rhizoctonia solani*. The characteristic symptom of this seedling blight is reddish brown lesions on the seedling's lower stem or hypocotyl, usually at the soil level. Lesions on the diseased stem appear sunken and dry.

Symptoms initially begin with slow canopy closure often mistaken as a herbicide failure early in the season. Plant height is affected, resulting in short plants next to tall plants. Poor fertility can enhance above-ground symptoms and are similar to potassium deficiency and sometimes nitrogen deficiency. Poor stands and death are possible. Young female SCN can be found on plant roots in the field most readily when plants begin to flower. There is a common interaction with Sudden Death Syndrome.

**Agronomic Tip**  
Soybeans remove a tremendous amount of potassium (approximately 70 lb/acre for a 50 bu/acre crop).



## DISEASES



### Pythium Seedling Blight

Many Pythium species can cause soybean seedling blight and appears similar to Phytophthora root rot. Pythium seedling blight symptoms include rotten, mushy seeds or seedlings with poorly developed roots. Water-soaked lesions may be present on the hypocotyl or cotyledons. Pythium seedling blight can occur across a range of temperatures, but high soil moisture increases disease severity. Consequently, symptoms are most severe in poorly drained soils and areas prone to flooding.



### Phytophthora Root Rot

Phytophthora root rot is caused by the oomycete *Phytophthora sojae*. Infected plants appear alone or in patches. The disease causes a stem rot characterized by chocolate brown stem lesions, but the symptoms of the seedling phase resemble the symptoms of many other seedling diseases. Phytophthora infected seedling stems are soft and water-soaked. Overall, infected seedlings will wilt and be stunted. Phytophthora root rot occurs across many environments, but is most common in warm (15 degrees Celsius) and in wet conditions.





### **Frog Eye Leaf Spot**

Typical symptoms are leaf lesions that are circular with a purple margin around an ashy-white/gray centre. Lesions begin as dark, water-soaked spots on the younger leaves. As the lesions age, the centres become ash-gray or light brown. Lesions often coalesce to form larger, irregular spots. Timely fungicide applications, when thresholds have been observed, will control frog eye leaf spot.

Diseases derived from: Crop Protection Network, University of Tennessee Extension, Cornell University, North Dakota State University, Mississippi State University Extension, University of Nebraska-Lincoln, OMAFRA Pub. 811



### **Sudden Death Syndrome (SDS)**

This is a disease that is starting to show up in Huron County. Symptoms usually begin during the flowering stage and get progressively worse by the R6 grow stage. Small yellow spots first appear on the upper leaves and progress into yellow streaks and eventually become necrotic with only the veins remaining green. Roots of infected plants are usually rotted, and plants can be easily pulled out of the soil. The pith tissue will remain white, while the water-conducting tissue (xylem) will have a gray to brown colour. Many times SDS symptoms will be more severe in the presence of soybean cyst nematodes and may be worse after a rotation with corn that had severe stalk rot the previous year.

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# DISEASES



## White Mould

White mould is caused by the fungus *Sclerotinia sclerotiorum*. The fungus is easily recognized by the presence of fluffy white mycelium (the vegetative body of the fungus) that is the source of the name white mould. Each year, the occurrence of white mould is heavily dependent on weather conditions during soybean flowering and early pod development. Rain, cool temperatures (less than 28° C), high relative humidity and moist soil favor the growth of the fungus if it is present.

Sclerotia germinates to form mushroom-like structures called apothecia. Apothecia are tan coloured, have a sponge-like texture and are 1/4 to 1/2 inch wide at maturity. They are found on the soil surface and form from sclerotia when the soil is moist and dim light is filtered through the crop canopy. Under the cap of the apothecia, microscopic spores (ascospores) are produced and forcibly ejected. The disease cycle of white mold begins when ascospores germinate and colonize on senescing flower petals that adhere to emerging pods. Infection eventually progresses from pods to other nodes and stems, resulting in a premature death of stems. If adjacent plants come into contact with an infected plant, they may also become infected, but plant to plant spread of the pathogen is minimal and not as important as infection of blossoms.

Sclerotia are formed from the white mold fungus growing on and inside stems and pods. Sclerotia that are formed on stems and pods eventually fall to the soil surface. Those formed inside stems and pods are released when plants pass through the combine at harvest and are deposited on the soil surface.



# INSECTS



**Seed Corn Maggot**

The seed corn maggot is a pale, yellowish-white larva found burrowing into soybean seeds. Full grown maggots are legless, about 6 mm long, cylindrical, narrow, and tapered. The maggot lacks a defined head and legs, but has a small black mouth hooks at the front of its body. Fields in which animal or green manure crops have been used have a greater potential for seed corn maggot attack than fields not using these manures. However, non-manured fields are also at risk from seed corn maggot damage. Plant injury is especially prevalent during cool and wet springs.



**Wireworm**

Wireworms are slender, hard-bodied, wire-like beetle larvae that can damage young soybean plants. They are shiny yellow to brown in color and range in size from 1/2 to 1-1/2 inches long. Wireworms can feed on and damage one or more portions of a soybean seed or can completely hollow it out, leaving only the seed coat. Wireworms may also cut off small roots or tunnel into the underground portions of young soybean plants. These plants will appear stunted or wilted. Damage to either the seed or seedling can result in gaps in the rows. Soybean fields likely to be attacked by wireworms are those in which sod or small grains were grown the previous year(s), or which have a history of wireworm damage.





# INSECTS



## Bean Leaf Beetle

Bean leaf beetles vary in colour, but are usually reddish to yellowish-tan. They are about 5-8 mm long and commonly have two to four black spots and a black border on the outside of each wing cover. These spots may be missing, but in all cases there is a small black triangle at the base of the wings near the thorax. The BLB overwinters in the adult stage, and resumes activity in the spring. It will be found feeding on soybean foliage soon after soybean emergence.



## Soybean Aphid

Soybean aphids are small, yellowish-green, soft-bodied insects with 2 distinctive appendages (cornicles) on the tip of their abdomen. They may be winged or wingless. If present, aphids can easily be found on newly unfolding leaves and the under surface of the uppermost leaves. In high populations soybean aphids can also be found on stems, petioles, pods and the under surface of lower leaves. Indications of a soybean aphid infestation can include stunting of plants, yellowing and miss-shaped or contorted leaves, an obvious presence of natural enemies such as lady bird beetles or ants in the uppermost canopy, and a charcoal gray discolouration of leaves indicating presence of sooty mould. Yield loss is greatest when soybeans are in the early R stages.



## Two-Spotted Spider Mite

The adults are very small, about 1/60 of an inch, and can be white, green, orange or red. They have four pairs of legs, which is a characteristic that distinguishes them from insects that have three sets. A set of reddish to brownish spots on their back give the species its common name. The larva and nymph look similar to the adult but are smaller. The larvae have only three sets of legs. Early symptoms of spider mite injury appear as leaves with a yellow stippled look along the field margins. As the populations continue to build and injury increases, the yellowing spreads across the field and the area of yellow leaves expands and may turn red. The underside of leaves will have significant silk webbing and small, white spots that are the cast skins of the mite. If the population is not controlled, the yellow leaves will turn brown as the leaf loses moisture and dries up. Continued dry conditions and increasing mite populations can result in the significant loss of leaf area and death of plants.

Insects derived from: University of Minnesota Extension, University of Nebraska-Lincoln, University of Wisconsin Extension, Iowa Soybean Association, and Iowa State University Extension.



## METRIC & IMPERIAL CONVERSION CHARTS

Length	
1 millimetre (mm)	0.04in
1 centimetre (cm)	0.39in
1 metre (m)	3.28ft : 1.09yd
1 kilometre (km)	0.62mi
1 inch (in)	25.4mm : 2.54cm
1 foot (ft)	0.30m : 0.33 yd
1 yard (yd)	3 ft : 0.91m
1 mile (mi)	1.6km
Area	
1 sq cm (cm <sup>2</sup> )	0.16in <sup>2</sup>
1 sq metre (m <sup>2</sup> )	10.76ft <sup>2</sup> : 1.2yd
1 hectare (ha)	2.47ac : 10,000m <sup>2</sup>
1 sq km (km <sup>2</sup> )	0.39mi <sup>2</sup> : 247.11ac
1 sq inch (in <sup>2</sup> )	6.45cm <sup>2</sup>
1 sq foot (ft <sup>2</sup> )	0.09m <sup>2</sup> : 929cm <sup>2</sup>
1 sq yard (yd <sup>2</sup> )	0.84m <sup>2</sup> : 8361cm <sup>2</sup>
1 acre (ac)	0.40 ha
1 sq mile (mi <sup>2</sup> )	2.59 kms <sup>2</sup> : 258.9ha
Weight	
1 gram (g)	0.035oz
1 kilogram (kg)	2.205lbs
1 metric ton (1,000kg)	2,205lbs
1 US ounce (oz)	28.35g
1 pound (lb)	0.454kgs
1 ton (2,000 lbs)	907kgs

Volume		
1 cubic cm (cu cm)	0.06cu in	
1 cubic decimetre (cu dm)	61.02 cu in : 0.04 cu ft	
1 cubic metre (cu m)	35.32 cu ft : 1.31 cu yd	
1 litre (1 L)	0.26 U.S. gal : 1.06 U.S. qt	
	0.22 imp gal : 0.88 imp qt	
	61.02 cu in : 1,000 cm3	
1 cu in (cu in)	16.29 cu cm	
1 cu foot (cu ft)	28.32L	
1 cubic yard (cu yd)	0.76 cu m : 764 L	
1 quart (U.S.)	0.95L	
1 quart (British)	1.14L	
1 gallon (U.S.)	3.79L	
1 gallon (British)	4.55L	
Product Conversion Factors		
	Bu/Tonne	Lbs./Bu
Wheat	36.74	60
Oats	64.84	34
Barley	45.93	48
Rye	39.37	56
Canola	44.09	50
Soybeans	36.74	60
Buckwheat	45.93	48
Corn	39.37	56

## NOTES

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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