# **EASTERN CANADA** 2019 SEED GUIDE



syngenta





2019 Pop Des Rou Ger Cor Syn Syn

Agr Des See Agr 201 Syn Syn

## <u>ST</u>

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#### **Variety characteristics**

SOYBEANS 💋



ROUNDUP READY 2 XTEND® 10 NEW VARIETIES

	PRODUCT	MAT	URITY			AGRONOMIC	PLANT CHAR	ACTERISTICS			GRAIN	QUALITY			DISEASE	ES/PESTS			G	ENERAL A	DAPTATIC	ри
				Θ										РНҮТОР	HTHORA							
	Variety	Relative maturity	CHU	Emergence score	Standability	Wide row	Plant height	Canopy index	Hilum colour	Seed size	Protein ratings	Oil ratings	Soybean cyst nematode	Gene resistance	Field tolerance	<i>Sclerotinia</i> white mould	Sudden death syndrome	Pod & stem blight	Drought prone soil	Highly productive soils	Variable environments	Poorly drained soils
	S006-M4X <b>NEW</b>	0.06	2375	3	2	3	Μ	3.6	IMY	S	Н	Н	S	Rps1c	4	3	-	3				
	S01-C4X	0.1	2525	3	3	2	MT	5.6	BL	Μ	Avg	VH	S	Rps1c	2	3	-	4		$\star$		
	S07-K5X	0.7	2700	1	3	2	Μ	4.6	GR	L	Н	Н	S	Rps3a	3	3	-	4				
	S09-C3X	0.9	2775	3	4	1	Μ	5.9	BL	L	VH	Avg	R3	Rps1c	3	5	-	4				
CHU	S09-R8X <b>NEW</b>	0.9	2775	3	4	2	MT	5.6	IMY	Μ	Avg	Н	R3	Rps1c	4	4	3	4	$\star$	$\star$	$\star$	
3000	S12-P3X <b>NEW</b>	1.2	2825	3	3	2	Μ	4.9	BR	Μ	Avg	VH	R3	Rps1k	2	2	3	3				
	S14-B2X	1.4	2850	4	2	2	Μ	4.6	BL	Μ	Avg	Н	R3,MR14	Rps1c	3	3	3	2			$\star$	$\star$
2000-	S14-T7X <b>NEW</b>	1.4	2875	2	3	3	Μ	4.6	BL	L	Avg	Н	R3,MR14	S	3	3	2	3				
	S18-G4X	1.8	2925	3	2	1	Μ	5.6	BL	L	Avg	Avg	R3,MR14	Rps1c	3	6	3	2				
	S18-H3X <b>NEW</b>	1.8	2925	2	2	2	Μ	4.9	BL	L	Avg	Н	R3,MR14	S	2	3	2	-				
	S19-T5X <b>NEW</b>	1.9	2950	2	3	2	Μ	5.6	BL	L	Avg	Н	R3	S	4	3	2	-	*			
	S20-L8X	2.0	3025	2	3	2	Μ	4.9	BL	L	Avg	Avg	R3,MR14	Rps1c	4	2	3	-				
	S22-J4X	2.2	3075	3	3	2	Μ	4.9	BL	L	Avg	Avg	R3,MR14	Rps1c	4	3	3	3				$\star$
	S25-B6X	2.5	3150	3	3	1	MT	7.2	BR	Μ	Avg	Avg	R3,MR14	Rps1c	4	3	4	-			$\star$	$\star$
	S27-M8X	2.7	3225	3	2	1	Μ	4.9	IMB	Μ	Avg	Н	R3,MR14	Rps1c	4	4	2	-	$\star$	$\star$	$\star$	$\star$
3000 CHU	S27-U2X <b>NEW</b>	2.7	3225	2	4	1	Μ	5.6	BL	L	Avg	Н	R3,MR14	Rps1k	2	4	2	-				
300	S27-C9X <b>NEW</b>	2.8	3225	2	2	1	Μ	5.9	BL	L	Avg	Н	R3,MR14	Rps1c	4	3	4	-	$\star$	$\star$	$\star$	$\star$
$\wedge$	S29-K3X	2.9	3275	2	3	1	Μ	5.6	BL	L	Avg	Н	R3,MR14	S	4	5	3	-		$\star$		
	S29-R5X <b>NEW</b>	2.9	3275	2	4	1	MT	6.6	BR	Μ	Avg	VH	R1,R3,R5	Rps1k	2	4	3	-	*	$\star$	$\star$	$\star$
	S31-M1X <b>NEW</b>	3.1	3300	3	3	1	Μ	6.2	BL	Μ	Avg	Avg	R3,MR14	S	2	3	2	-		$\star$	$\star$	
	S31-Y2X	3.1	3300	3	3	2	Μ	4.9	BL	L	Avg	Avg	R3,MR14	Rps1c	3	3	3	-				$\star$

# **SOYBEANS**

#### Soybean chart key

#### **Relative maturity**

First number indicates maturity group, second set of numbers indicates within-group maturity rating on a 0-9 scale (0 = Early, 9 = Late).

Canopy index

#### Agronomic and disease ratings

- 1 = Excellent
- 9 = Poor
- = Under Evaluation

#### Plant height

S = Short
MS = Medium Short
M = Medium
MT = Medium Tall
T = Tall

Index is calculated using plant height, width and branching characteristics. The larger the number, the larger the plant.

#### Seed size

VL = Very Large = <2000 seeds/lb or <4400 seeds/kg

L = Large = 2000-2275 seeds/lb or 4400-5000 seeds/kg

M = Medium = 2275-2725 seeds/lb or 5000-6000 seeds/kg

**Oil rating** 

S = Small = >2725 seeds/lb or >6000 seeds/kg

#### Protein rating

Protein values fluctuate from year to year and field to field

#### **Colour abbreviations**

BF = Buff, BR = Brown, BL = Black, GR = Grey, IMB = Imperfect Black, IMY = Imperfect Yellow

#### **Resistance rating system**

Indicates when a variety is resistant to a specific disease or pest. For varieties with soybean cyst nematode (SCN) resistance, it is specified which races of nematodes the line is resistant to. In the case of *Phytophthora*, it indicates the gene conveying the resistance.

#### Phytophthora race resistance

The following information correlates gene resistance to the actual races of *Phytophthora* the plant is protected from:

S = Susceptible Rps1a = Resistant to races 1, 2, 10, 11, 13–18, 24, 26, 27, 31, 32, 36, 38 Rps1c = Resistant to races 1–3, 6–11, 13, 15, 17, 21, 23, 24, 26, 28–30, 32, 34, 36, 38, 44 Rps1k = Resistant to races 1–11, 13–15, 17, 18, 21–24, 26, 36–38, 44 Rps3a = Resistant to races 1–5, 8, 9, 11, 13, 14, 16, 18, 23, 25, 28, 29, 31–35, 39, 44, 45 Rps6 = Resistant to races 1–4, 8, 9, 10, 12, 14–16, 18–21, 25, 28, 33–35, 38, 39, 44, 45

#### Phytophthora field tolerance

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

#### Soybean cyst nematode (SCN)

1, 3, 5 and/or 14 = specific race of soybean cyst nematode

R = Resistant, MR = Moderately Resistant, S = Susceptible

#### Adaptation and row width rating

- $\star$  Above average performance
- Average performance
- Variety may not perform consistently
- Xariety not recommended

## SOYBEANS 💋

#### **Discover your next top performer**

Explore how soybean varieties perform under local conditions with the Trial Results tool.

We know yield data is a key factor in your variety and hybrid selection process. That's why we created the Trial Results tool, giving you the performance insights you need to make the right choice for your farm.



#### Visit: syngenta.ca/trialresults

Select your crop and variety or hybrid, and confirm your location to find plots near you

Choose a plot to check yield results and plot information

## **Variety characteristics**



ROUNDUP READY 2 YIELD GENUITY® ROUNDUP READY 2 YIELD®

	PRODUCT	MAT	URITY			AGRONOMIC	PLANT CHAR	ACTERISTICS			
	Variety	Relative maturity	CHU	Emergence score	Standability	Wide row	Plant height	Canopy index	Hilum colour	Seed size	
	S0009-M2	0.009	2275	3	4	4	Μ	3.3	IMY	S	
CHC	S007-Y4	0.05	2350	3	2	2	MS	3.9	IMY	Μ	
2000–2700 CHU	S008-N2 <b>NEW</b>	0.08	2450	3	3	1	MT	6.2	IMY	Μ	
0-2.	S009-J1	0.09	2475	3	2	3	MS	3.6	BR	Μ	
200	S04-D3	0.4	2650	3	2	4	Μ	4.2	BL	Μ	
	S05-F9	0.5	2675	3	3	2	Μ	4.6	BL	Μ	
	S10-S1	1.0	2800	3	2	2	Μ	4.9	BR	Μ	
> 2800 CHU	S12-H2	1.2	2825	3	2	2	MS	4.9	BL	L	
	S14-A6	1.4	2850	1	2	3	MS	3.9	BL	Μ	



	PRODUCT	MAT	URITY			AGRONOMIC	PLANT CHAR	ACTERISTICS			
	Variety	Relative maturity	CHU	Emergence score	Standability	Wide row	Plant height	Canopy index	Hilum colour	Seed size	
	S03-W4	0.3	2650	2	2	3	Μ	2.6	IMY	L	
	S07-D2	0.7	2700	1	4	3	Т	4.2	Y	L	
2900 CHU	S07-M8	0.7	2725	2	1	3	MT	3.6	IMY	L	
-290	S10-R2	1.0	2800	3	5	1	Т	7.2	Y	L	
2650-	S14-H3	1.4	2850	3	2	4	Μ	4.9	IMY	VL	
2	S16-F5	1.6	2875	3	2	4	Μ	4.9	Y	L	
	S18-R6	1.8	2900	4	1	3	Т	3.9	Y	L	
> 3000	S20-G7	2.0	3000	2	3	2	MT	4.9	Y	L	
CHU	S21-C3	2.1	3050	2	3	1	MT	5.2	Y	Μ	



Turn page to see the soybean chart key

# **SOYBEANS**

GRAIN C	QUALITY			DISEASE	S/PESTS			G	ENERAL A	ADAPTATI	ON
			РНҮТОРІ	HTHORA							
Protein ratings	Oil ratings	Soybean cyst nematode	Gene resistance	Field tolerance	<i>Sclerotinia</i> white mould	Sudden death syndrome	Pod & stem blight	Drought prone soil	Highly productive soils	Variable environments	Poorly drained soils
Н	VH	S	Rps6	3	3	-	4		$\star$		
Avg	VH	S	Rps1c	3	2	-	5		$\star$	$\star$	
Avg	VH	S	S	4	4	-	5			$\star$	
Avg	VH	S	Rps3a	4	4	-	3		$\star$		
Н	Н	S	Rps1c	3	2	-	2		$\star$		
VH	Н	R3,MR14	S	2	4	-	2		$\star$		$\star$
Avg	Н	R3,R14	Rps1k,Rps3a	3	3	-	4		$\star$		
VH	VH	R3,R14	Rps1c	3	3	-	3	$\star$	$\star$		
Н	Н	R3,MR14	Rps1k	3	4	3	4		$\star$	$\star$	$\star$

GRAIN (	QUALITY			DISEASE	S/PESTS			G	GENERAL /	ADAPTATI	ON
			РНҮТОР	HTHORA							
Protein ratings	Oil ratings	Soybean cyst nematode	Gene resistance	Field tolerance	<i>Sclerotinia</i> white mould	Sudden death syndrome	Pod & stem blight	Drought prone soil	Highly productive soils	Variable environments	Poorly drained soils
Н	Н	S	Rps1c	2	3	-	4		$\star$		$\star$
VH	Avg	S	Rps3a	2	2	-	5		$\star$		
Н	Avg	S	Rps1c	3	2	-	3		$\star$		
Н	Avg	R3	S	3	5	-	5				$\star$
Н	Avg	MR3	S	3	3	-	4		$\star$		
VH	Avg	R3,MR14	Rps1c	3	4	3	4		$\star$		
Avg	Avg	R3,MR14	Rps1a	4	2	-	3	$\star$	$\star$		
Н	Avg	S	Rps1c	3	2	-	5		$\star$		
Avg	Avg	R3	Rps1c	4	4	3	5	$\star$	$\star$		

#### Soybean chart key

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Canopy index Index is calculated using plant height, width and branching characteristics. The larger the number, the larger the plant.

#### Seed size

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#### Protein rating Oil rating

Avg = <40% (Average) Avg = <19.0% (Average) H = 40-43% (High) H = 19-20.5% (High) VH = >43% (Very High) VH = >20.5% (Very High) Protein values fluctuate from year to year and field to field

#### **Colour abbreviations**

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#### Adaptation and row width rating

- $\star$  Above average performance
- Average performance
- Variety may not perform consistently
- Xariety not recommended

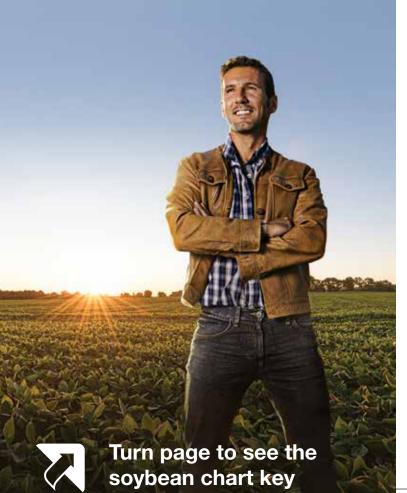
# SOYBEANS 🥠



## Choosing genetics is the first step to high soybean yields

There's no perfect soybean variety, but if growers choose the best genetics for their field environment, that management decision will help deliver yield.

## Learn more at: syngenta.ca/choosinggenetics



## Final population recommendations by management zone

	VARIETY PLANT TYPES	
<b>Thin</b> varieties have a row width of 15" or less	Between varieties can be managed to act either thin or branching	<b>Branching</b> varieties have a row width of 20" or greater
S0009-M2	S006-M4X	
	S007-Y4	S008-N2
S03-W4	S009-J1, S01-C4X	
S04-D3	S05-F9	
S07-D2	S07-K5X	
S07-M8	S09-R8X	S09-C3X
	S10-S1	S10-R2
	S12-P3X	S12-H2
	S14-B2X, S14-H3	
	S14-T7X, S14-A6	
	S16-F5	
S18-R6	S18-H3X	S18-G4X
	S20-G7	S19-T5X
	S20-L8X	S21-C3
	S22-J4X	
		S25-B6X
	S27-M8X	S27-U2X, S27-C9X
		S29-K3X, S29-R5X
	S31-Y2X	S31-M1X

	YIELD E	NVIRONMENT	(BU/AC)	
Soil type	Plant type	> 60	40–60	< 40
Sand	Thin	150,000	175,000	200,000
Sanu	Branching	120,000	150,000	180,000
Clay	Thin	180,000	200,000	225,000
Ulay	Branching	140,000	165,000	190,000
Loam	Thin	160,000	180,000	200,000
LUaiii	Branching	100,000	125,000	150,000

#### Increase population by 10% over recommendations above if:

• Field has poor drainage and history of early season establishment issues

• Field has history of soil crusting and early season establishment issues

• Planting soybeans later in the season (past June 15<sup>th</sup>)

#### Decrease population by 10–20% over recommendations above if:

• Field has a high risk or history of white mould

#### Row width considerations:

• Consider selecting branching type soybeans for rows 20" or greater to help ensure maximum canopy closure

## **Planting guide**

		PLANTING GUIDE		
Seeds (per acre)/Desired		Row wi	dth (in.)	
seeding rate (per acre)	7.5	15	20	30
		Seeds (per	foot of row)	
120,000	1.7	3.4	4.6	6.9
130,000	1.9	3.7	5.0	7.5
140,000	2.0	4.0	5.4	8.0
150,000	2.2	4.3	5.7	8.6
160,000	2.3	4.6	6.1	9.2
170,000	2.4	4.9	6.5	9.8
180,000	2.6	5.2	6.9	10.3
190,000	2.7	5.5	7.3	10.9
200,000	2.9	5.7	7.7	11.5
210,000	3.0	6.0	8.0	12.1
220,000	3.2	6.3	8.4	12.6
230,000	3.3	6.6	8.8	13.2
240,000	3.4	6.9	9.2	13.8

For seed count information, consult bag or tote placard.

## **Description key**

Ratings are based on field observations collected by Syngenta from multiple locations over multiple years. They represent comparisons with company products only.

**SOYBEANS** 

#### Relative maturity: 0.1: S01-C4X A relative maturity (RM) system is Rating 9 7 5 0.1 used to rank soybeans. Each variety is Emergence Excellent performance across soil types classified with a 0 to 9 decimal number Standabili Good plant height, even when moved following the group (or zone) number. Narrow Row south of zone For example, a variety with a 2.1 RM Wide Row • Rps1c with excellent field tolerance can be grown in the northern part of Phytophthora Tolerance 2525 to Phytophthora root rot the "II" relative maturity zone, while a 2.9 is a variety that can be grown in the southern part of that maturity zone. CHU: 2525: Specific crop Herbicide tolerance heat units for this product and other traits.

#### Soybean index



#### Roundup Ready 2 Xtend® soybeans

New to NK Soybeans, Roundup Ready 2 Xtend<sup>®</sup> trait technology provides tolerance to both glyphosate (Group 9) and dicamba (Group 4) herbicides, allowing growers to use multiple modes of action to help manage tough-to-control weeds, including glyphosateresistant giant ragweed, common ragweed, and Canada fleabane.



#### Genuity® Roundup Ready 2 Yield® soybeans

NK Soybean varieties bred with Syngenta genetics and the Genuity<sup>®</sup> Roundup Ready 2 Yield<sup>®</sup> trait technology are tolerant to glyphosate (Group 9) herbicides.



#### Soybean cyst nematode solutions

Exhibits some manner of resistance to a specific race of soybean cyst nematode solutions.



#### **Conventional soybeans**

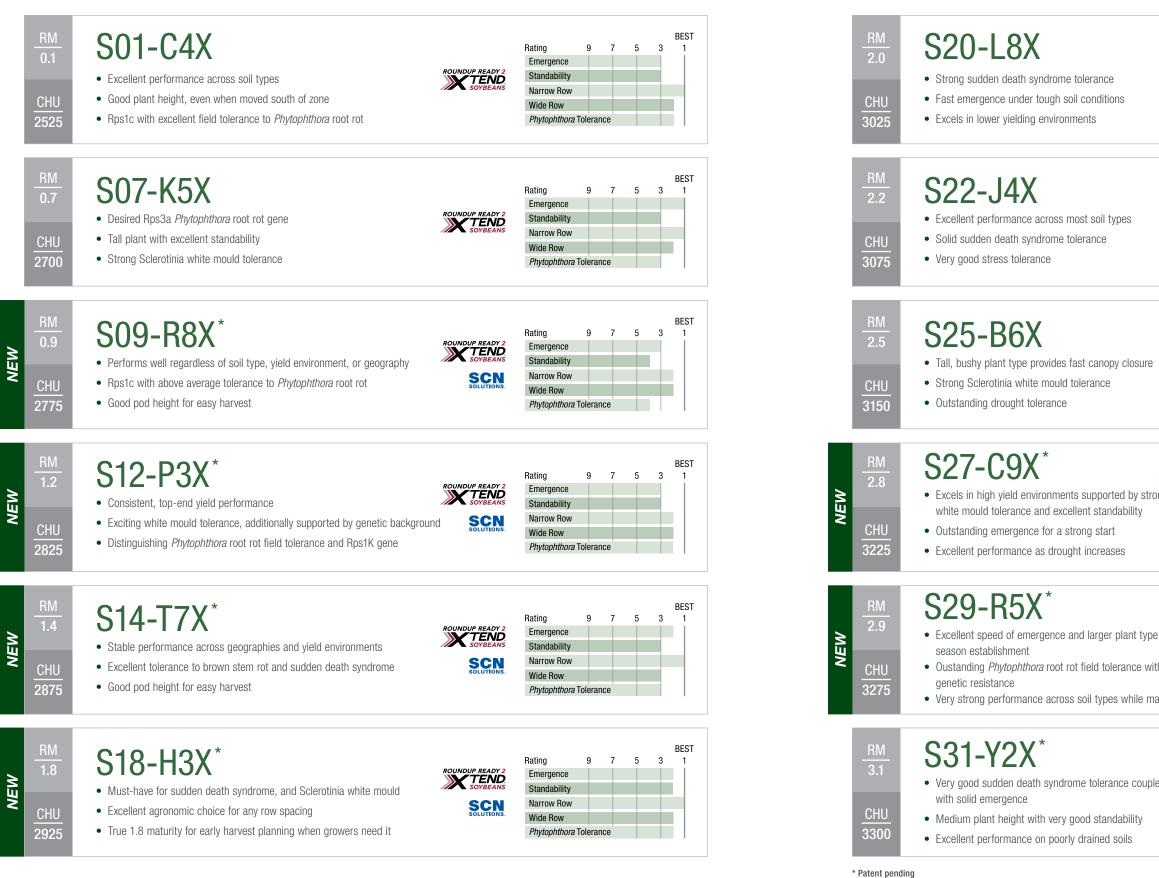
Conventional, identity-preserved soybean varieties from Syngenta have a reputation for quality, are trusted by processors, and give growers a competitive edge in Canadian and international markets.



ROUNDUP READY 2 XTEND®

CHU 2525-3300

CHU 2525-3300





							BES
		Rating	9	7	5	3	вез 1
	ROUNDUP READY 2	Emergence					
	SOYBEANS	Standability					
	SCN SOLUTIONS	Narrow Row Wide Row					
		Phytophthora	Tolerar	nce			
		, ny topinalora	lorora				1
							BES
	ROUNDUP READY 2	Rating	9	7	5	3	1
	<b>SOYBEANS</b>	Emergence Standability					
	SCN	Narrow Row					
	SOLUTIONS.	Wide Row					
		Phytophthora	Tolerar	nce			
		Rating	9	7	5	3	BES 1
	ROUNDUP READY 2	Emergence					
	SOYBEANS	Standability					
	SCN SOLUTIONS.	Narrow Row					
		Wide Row					
		Phytophthora	Tolerar	nce			
		Phytophthora					BES
ong soybean	ROUNDUP READY 2 SOVIDEANS SOUTIONS.	Phytophthora Rating Emergence Standability Narrow Row Wide Row Phytophthora	9	7	5	3	BES 1
ong soybean	SOYBEANS	Rating Emergence Standability Narrow Row Wide Row Phytophthora	9	7	5	3	1
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	SOLUTIONS.	Rating Emergence Standability Narrow Row Wide Row Phytophthora Rating Emergence Standability	9 Tolerar	7 ICE			BES
e for early	ROUNDUP READY 2 SOYBEANS	Rating Emergence Standability Narrow Row Wide Row Phytophthora Rating Emergence Standability Narrow Row	9 Tolerar	7 ICE			BES
e for early	ROUNDUP READY 2	Rating Emergence Standability Narrow Row Wide Row <i>Phytophthora</i> Rating Emergence Standability Narrow Row Wide Row	9 Tolerar	7 Ince			BES
e for early th Rps1K	ROUNDUP READY 2 SOYBEANS	Rating Emergence Standability Narrow Row Wide Row Phytophthora Rating Emergence Standability Narrow Row	9 Tolerar	7 Ince			BES
e for early th Rps1K	ROUNDUP READY 2 SOYBEANS	Rating Emergence Standability Narrow Row Wide Row <i>Phytophthora</i> Rating Emergence Standability Narrow Row Wide Row	9 Tolerar	7 Ince			BES
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e for early th Rps1K aintaining plant height	CUUNDUP READY 2 SOUTHONS SOUTHONS SOUTHONS SOUTHONS	Rating Emergence Standability Narrow Row Wide Row Phytophthora Emergence Standability Narrow Row Wide Row Phytophthora Rating Emergence Standability	9 Tolerar	7 Ince	5	3	BES
e for early th Rps1K	ROUNDUP READY 2 SOLUTIONS.	Rating Emergence Standability Narrow Row Wide Row Phytophthora Emergence Standability Narrow Row Wide Row Phytophthora	9 Tolerar	7 Ince	5	3	BES 1 BES





**GENUITY® ROUNDUP READY 2 YIELD®** 

CHU 2350-2850





S03-W4

Consistent performer in most soil types and tillage



- Unique plant type that is adapted to narrow rows
- · Strong agronomics including Sclerotinia white mot
- Rps3a with good field tolerance of Phytophthora re



• Developed with Sclerotinia white mould tolerance

S10-R2
Tall, bushy plant type that canopies quickly

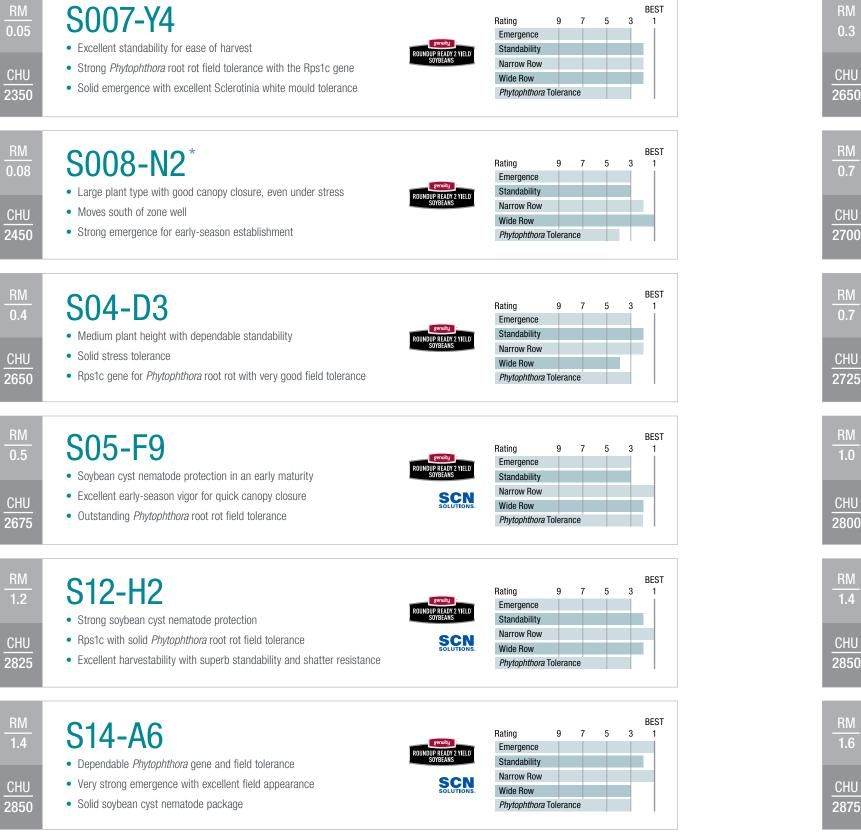
#### • Excellent yields on tough acres

Great root disease package for early-season start

1	S14-H3 <sup>*</sup>
	Soybean cyst nematode protection for critical matu
J	Attractive field appearance with excellent standabi
0	Well adapted across variable yield enviroments

S16-F5 1.6 · Responds to highly productive, well-drained soil ty CHU Very strong standability for ease of harvest • Medium plant height with a medium canopy 2875

\* Patent pending



For more information, contact your Syngenta Representative, our Customer Interaction Centre at 1-87-SYNGENTA (1-877-964-3682) or visit Syngenta.ca

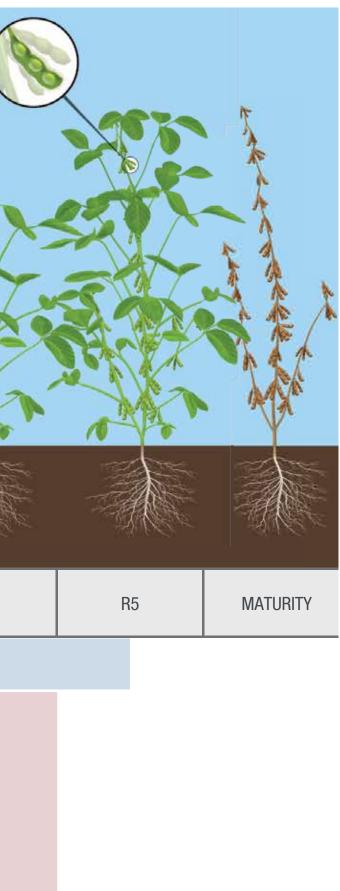
NEW

-2875 Ø		SOY	B	BE			15
			_	_	_	_	BEST
		Rating Emergence	9	7	5	3	1
nce		Standability					11
	(See	Narrow Row					1
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systems		Phytophthora T	oleran	ce			
							BEST
		Rating	9	7	5	3	1
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		Standability					
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					5	3	
	¢	Rating			5	3	
	SCN	Rating Emergence Standability Narrow Row			5	3	
	SOLUTIONS.	Rating Emergence Standability Narrow Row Wide Row	9	7	5	3	
	SOLUTIONS.	Rating Emergence Standability Narrow Row	9	7	5	3	
	SOLUTIONS.	Rating Emergence Standability Narrow Row Wide Row	9	7	5	3	
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	7	ł					
SEED	PE	VC	V1	V2	R1	R2	R3
					<b>O</b> Er	ndigo <sup>™</sup>	
			🕇 Flex	(star <sup>°</sup> GT <sup>°</sup>			
OR	Normal Boundary LQD		¥	Venture <sup>®</sup> L	🚵 Allegro	🗲 Triv	vapro™
Vibrance Maxx OR Clariva "pn 'Flexstar GT is for GT soybeans only.			2	Reflex®			

# SYNGENTA SOYBEAN PORTFOLIO SOYBEANS



## Protect your seed

Syngenta offers several seed treatment options to meet the needs of your farm while supporting sustainable practices that help preserve the environment.

	INSECTS CONTROLLED	DISEASES CONTROLLED	
<b>iv Fortenza Vibrance Maxx</b> *	<ul> <li>European chafer</li> <li>June beetle</li> <li>Seed corn maggot</li> <li>Wireworm</li> </ul>	<ul> <li>Seed rot</li> <li>Seedling blight</li> <li>Pre- and post-emergence damping-off</li> <li>Early-season root rot on <i>Phytophthora</i>-tolerant varieties</li> </ul>	
CruiserMaxx <sup>®</sup> Vibrance <sup>®</sup> Beans	<ul> <li>Bean leaf beetle</li> <li>European chafer</li> <li>Seed corn maggot</li> <li>Wireworm</li> <li>Soybean aphid</li> </ul>	<ul> <li>Seed rot</li> <li>Seedling blight</li> <li>Pre- and post-emergence damping-off</li> <li>Early-season root rot on <i>Phytophthora</i>-tolerant varieties</li> </ul>	Includes Vigor Trigg
		<ul> <li>Seed rot</li> <li>Seedling blight</li> <li>Pre- and post-emergence damping-off</li> <li>Early-season root rot on <i>Phytophthora</i>- tolerant varieties</li> </ul>	
Apron XL°		• Early-season root rot on <i>Phytophthora-</i> susceptible varieties	

#### NEW

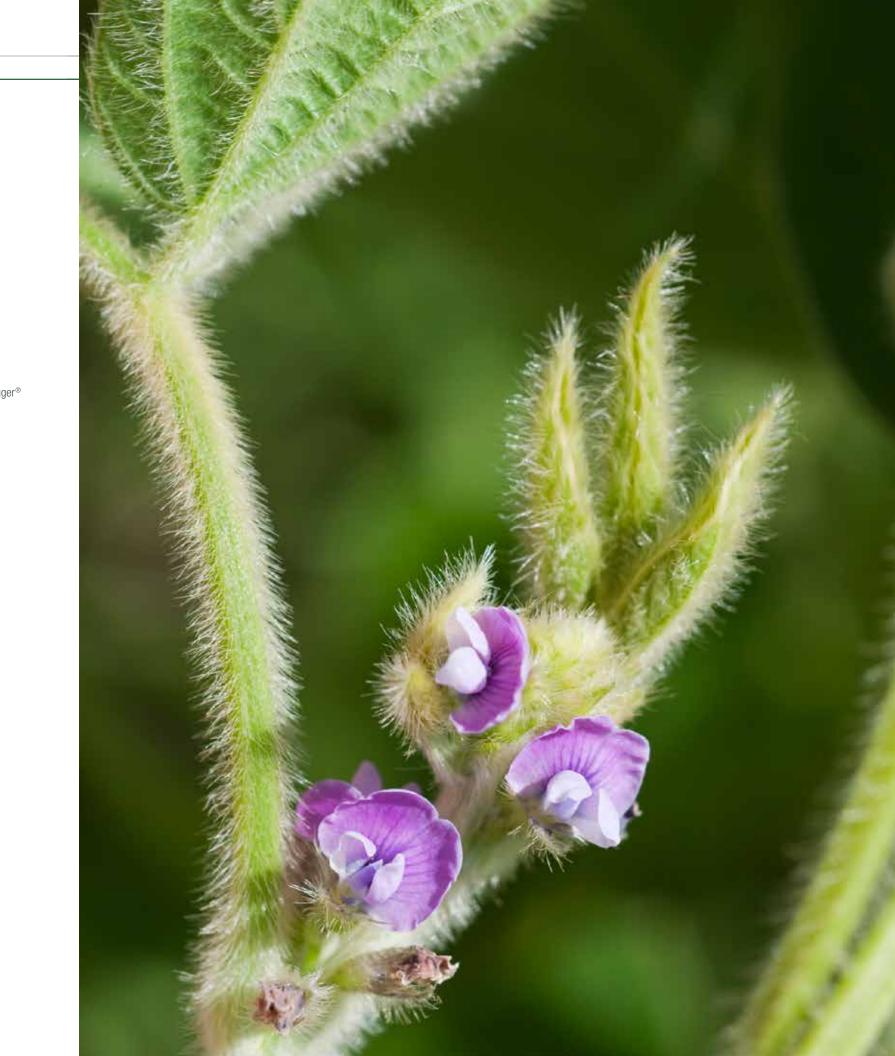


#### Protect your soybean seed from below-ground insect feeding and seed- and soil-borne diseases.

Fortenza<sup>®</sup> Vibrance<sup>®</sup> Maxx<sup>®</sup> is a new non-neonicotinoid soybean seed treatment. It delivers control of the following below-ground pests: European chafer, June beetle, wireworm and seed corn maggot. It also helps protect growing soybean seedlings from early season seed- and soil-borne disease. A Fortenza Vibrance Maxx seed treatment helps build a strong soybean stand, even under heavy insect and disease pressure, producing faster, more uniform growth.

Fortenza Vibrance Maxx can be used with most Rhizobium-based inoculants.

\* Pending registration



### **Corn trait index**

## 

Agrisure Viptera<sup>®</sup> is the first vegetative insecticidal protein in corn and offers the most comprehensive corn insect control in the industry. It is the only trait currently available that effectively controls western bean cutworm, and also protects the crop from key above-ground insects like corn earworm, cutworm and armyworm.

#### Western bean cutworm

**Corn rootworm control** 

genetic yield potential and increase profit opportunities.

than any current corn rootworm product on the market.<sup>1</sup>

Agrisure Viptera delivers the most comprehensive western bean cutworm control in the industry. Western bean cutworm is native to North America and has progressively spread through the Corn Belt. Masses of up to 200 eggs are laid on the plant leaves, so populations can grow quickly.

Agrisure Viptera relies on a unique vegetative insecticidal protein (VIP) that binds to a receptor site in the lining of the western bean cutworm's mid-gut. Because VIP targets this site, rather than the sites traditionally targeted by crystal (cry) proteins, Agrisure Viptera delivers a high dose kill, making it the most effective trait for control of western bean cutworm.

## Agrisure Artesian

Includes scientifically selected genes for water optimization and drought tolerance. It maximizes yield when it rains and increases yield up to 15% when it doesn't. Tolerant to glyphosate.

	DESCRIPTION	E-Z REFUGE®	TYPE OF INSECTS CONTROLLED*
Agrisure Viptera 3220 E-Z Refuge	Unsurpassed control of broad lepidopteran pests and corn borer with two modes of action and integrated E-Z Refuge <sup>®</sup> . Tolerant to glyphosate.	~	Above-ground insects
Agrisure Viptera	Excellent control of above-ground insects where corn rootworm is not a key problem. This trait stack provides tolerance to glyphosate and glufosinate.		Above-ground insects
Agrisure Artesian 3011A	Season-long water optimization combined with control of corn borer and rootworm. This trait stack provides tolerance to glyphosate and glufosinate.		Above- and below-ground insects
Agrisure 3120 E-Z Refuge	Hybrids containing Agrisure <sup>®</sup> 3120 feature a 5% blended refuge in the bag for the convenience of automatic refuge compliance. This trait provides two modes of action against above-ground pests and glyphosate tolerance.	~	Above-ground insects

\* Consult Syngenta.ca for a complete list of insects controlled.

# AVAILABLE 2019

## 🗡 AgrisureDuracade

Agrisure Duracade<sup>®</sup> is the newest rootworm trait and is always stacked with a second, proven mode of action. For 2019, Agrisure Duracade will be available in two trait stacks, each with dual modes of corn rootworm control and integrated E-Z Refuge in a bag.

Agrisure Duracade<sup>™</sup> expresses a protein with a unique binding site in the gut of the corn rootworm, helping hybrids develop a stronger, more robust root system that supplies your plants with optimal water and nutrient uptake. Stronger roots lead to healthier plants that stand all season long, helping to realize the crop's

Research from the United States Department of Agriculture shows Agrisure Duracade delivers a 99.79 percent reduction in adult beetle emergence – higher

<sup>1</sup>. Mortality impact of Bt Transgenic Maize roots expressing eCry3.1Ab, mCry3.1Ab plus mCry3A on Western Corn Rootworm Larvae in the Field. Bruce E. Hibbard, Daniel L. Rank, Ryan Kurtz, Eric Boudreau, Mark R. Ellersieck, and J. Frederick Odhiambo. Journal of Economic Entomology. 2011, 104(5). 1584-1591.

Agrisure Duracade, Ridgetown, ON, July 28th, 2017



Non-Agrisure Duracade, Ridgetown, ON, July 28th, 2017

		DESCRIPTION	E-Z REFUGE®	TYPE OF INSECTS CONTROLLED
AVAILABLE 2019	AgrisureDuracade 5222 E-Z Refuge*	The most advanced trait stack on the market, offering premium, broad-spectrum control. Agrisure Duracade controls 16 damaging insects - including corn rootworm. It also features the Agrisure Viptera trait – the only trait available today that effectively controls western bean cutworm.	~	Above- and below-ground insects
AVAI	AgrisureDuracade 5122 E-Z Refuge*	Effective, season-long control to protect your corn from above- and below-ground insects. The combination of Agrisure Duracade and Agrisure rootworm traits provide dual modes of action against corn rootworm.	~	Above- and below-ground insects

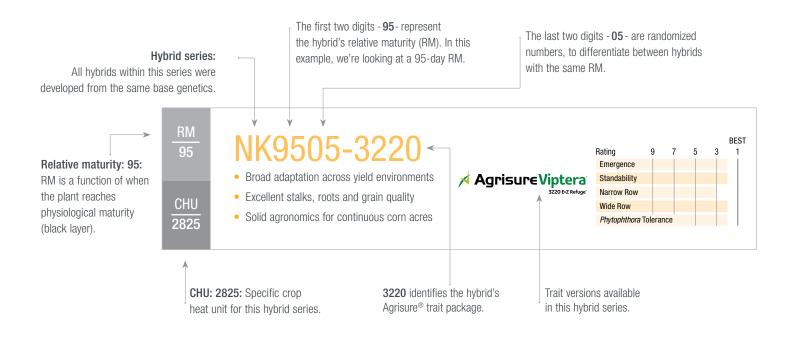
Hybrids will be announced as products are registered.

For me





## **Description key**



#### Seed counts and populations

METHO	O OF ESTIMATING PLANT POPULATION*
Row width (in.)	Length of row (in feet equal to 1/-
15	34' 10"
20	26' 2"
30	17' 5"

\*Count plants (not tillers) and multiply by 1,000 to estimate plants per acre.

		ROW SPACING (IN.)		
Seeds planted		Inches between seeds		Plant population
(per acre)	15	20	30	(per acre)*
26,000	16.1	12.1	8.0	22,100
28,000	14.9	11.2	7.5	23,800
30,000	13.9	10.5	7.0	25,500
32,000	13.1	9.8	6.5	27,200
34,000	12.3	9.2	6.1	28,900
36,000	11.9	8.7	5.8	30,600
38,000	11.0	8.3	5.5	32,300
40,000	10.5	7.8	5.2	34,000
42,000	10.0	7.5	5.0	35,700
44,000	9.5	7.1	4.8	37,400
				*Assuming 15% mortality

#### The Agrisure naming system

To convey the characteristics of the various Agrisure trait stacks, we've created a consistent, straightforward naming system.

#### Master brand: Agrisure

Brand suffix: Changes as new technologies are introduced

**Technology series:** The first number in the trait name indicates the technology series

**Insect control traits:** The next three numbers indicate how many modes of action are included in the trait stack to control each of the listed insects.

- 1) Broad lepidopteran
- 2) Corn borer
- 3) Rootworm control

Artesian: An "A" indicates the presence of the Agrisure Artesian technology.

**E-Z Refuge:** Indicates products that contain 5% hybrid seed without insect control traits, simplifying refuge compliance as specified by the CFIA for managing insect resistance.

**Example:** A corn hybrid with the Agrisure Viptera 3122A trait stack features one mode of action on broad lepidopterans, two modes of action on corn borer and two modes of action on corn rootworm. The name also tells you that this hybrid has Agrisure Artesian technology and integrated single-bag refuge.

Agrisure	Viptera	3	2	2	0	Α	E-Z Refuge
		Toobpology			Traits		
Master brand	Brand suffix	Technology series	Broad lepidopteran	Corn borer	Corn rootworm	Artesian	Integrated, single-bag refuge

NOTES:





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#### **Agronomic characteristics**

	PF	RODUCT			MATU	JRITY MATION	I	A	GRON	OMIC (	CHARA	ACTER	ISTIC	6	S	EEDIN	G RAT	E	POPUI Conside	ATION	ADA Y	PTATION 1 IELD ENVI	TO SOIL T Ronmei		CONTINUOUS Corn	DI	SEASE T	OLERAN	ICE				SILA	GE RATI	NGS			
	Brand name	Trait	E-Z-1 Refuge <sup>®</sup> Liberty Link <sup>®</sup>	Relative maturity	(RIM) CHU	RM to silk	RM to blacklayer	Emergence	Seedling vigour	Plant height	Ear height	Staygreen	Drydown	Test weight	Yield in 28-31K	Yield in 31-34K	Yield in 34-37K	Yield in >37K	Root strength	Stalk strength	Drought prone	Highly productive	Variable soils	Poorly drained	Continuous corn	Gray leaf spot	Northern corn leaf blight	Goss's wilt	Eyespot	Yield (ton/ac)	CP (% of DM)	Starch (% of DM)	TDN (% of DM)	NEL (Mcal/Ib)	Milk (Ibs/ton)	Milk (lbs/ac)	Beef (lbs/ton)	Beef (lbs/ac)
	NK7701	3110	1	77	2300	76	77	3	3	4	3	3	3	2		$\star$	$\star$	▼	4	2		$\star$				-	3	6	3	-	-	-	-	-	-	-	-	-
<2500 CHU	NK7837	3220	✓ ✓	78	3 2350	78	78	3	3	4	3	2	3	2					4	2		$\star$		$\star$		-	-	4	-	-	-	-	-	-	-	-	-	-
<250	NK7823 <b>NEW</b>	3110	$\checkmark$	78	3 2350	79	82	2	2	5	5	3	1	3	$\star$	$\star$	$\star$		2	3	$\star$	$\star$	$\star$			-	3	4	3	-	-	-	-	-	-	-	-	-
Ŷ	NK8005 <i>NEW</i>	3110A	$\checkmark$	80	2400	78	77	3	3	5	4	1	5	2	$\star$	$\star$			2	4	$\star$		$\star$			-	4	4	3	-	-	-	-	-	-	-	-	-
	NK8288	3110	$\checkmark$	82	2 2500	80	81	2	2	6	6	1	5	1					3	2		$\star$				-	2	6	4	-	-	-	-	-	-	-	-	-
	NK8519	3110 3220	\ \ \	85	5 2650	86	85	3	2	3	4	3	3	3	*	*	*		4	3	*	*	*	•	•	-	-	4	-	*	•	•	*	-	*	*	*	*
3000 CHU	NK8618	3011A 3120A GTA	J J J	86	6 2650	84	85	3	3	3	5	3	4	2	*	*	*	•	3	3	*	*	*	*	•	-	-	4	-	*	•	•	•	•	•	•	•	•
	NK8920	3120	✓ ✓	89	) 2725	89	88	2	2	3	5	2	3	3			$\star$	$\star$	3	3		$\star$			*	-	4	4	3	*				-				
2500	NK9227	3220A	<i>s s</i>	92	2 2750	90	89	2	3	2	2	3	3	2		$\star$	$\star$	$\star$	4	2	$\star$	$\star$	$\star$		*	-	3	4	-	*	$\star$					$\star$		$\star$
	NK9505 <b>NEW</b>	3220	✓ ✓	95	5 2825	95	95	2	2	3	4	2	3	2			$\star$	$\star$	2	2	$\star$	$\star$	$\star$	$\star$	*	-	3	4	-	-	-	-	-	-	-	-	-	-
	NK9535	3220	<i>✓ ✓</i>	95	5 2850	95	95	3	3	3	4	2	4	2	$\star$	$\star$	$\star$	$\star$	3	2	$\star$	$\star$	$\star$	$\star$	*	4	5	3	2	*		$\star$			$\star$	$\star$	$\star$	$\star$
	NK9659	3120	<i>✓ ✓</i>	96	6 2875	96	96	3	3	4	4	3	2	3			$\star$	$\star$	2	4		$\star$			•	-	3	4	-	$\star$		*	$\star$		$\star$	$\star$	$\star$	*
	NK9738 <b>NEW</b>	3220	/ /	97	2900	95	97	2	2	3	2	3	3	3			*	*	4	2	×	*	▼	*		4	4	4	-	*		*	*	*	*	*	*	*

Hybrids highlighted are Agrisure Artesian<sup>®</sup>. These hybrids maximize yield when it rains and increase yield by up to 15% when it doesn't.

#### Corn chart key

#### Agronomic and disease tolerance ratings and population considerations

- 1 = Excellent
- 9 = Poor

. 21

- = Under Evaluation

- Continuous corn, seeding and adaptation ratings Silage ratings
- $\star$  Above average performance  $\star$  Greatest opportunity to maximize performance
  - relative to other hybrids in maturity group Performs well relative to other hybrids in maturity group
  - **V** Performance is lower relative to other hybrids in maturity group
  - **×** Performance is below desired levels relative to other hybrids in maturity group
  - Data not available

This table provides silage quality and yield scores for selected NK hybrids based on actual tonnage and silage analysis values, and represents relative differences among hybrids of a similar maturity.



excellent weed control.

Consult bag tags for E-Z Refuge® product herbicide options. Only those labeled EZ1 may be sprayed with glufosinate ammonium based herbicides, including Liberty® herbicide.

NOTE: Hybrid characteristics such as staygreen and drought stress tolerance are also important to consider when selecting hybrids for silage. Digestibility ratings are based on NIR and in-vitro digestibility analysis. Milk performance estimates generated from University of Wisconsin equations. Comparisons should only be made among hybrids within a maturity group. Although actual silage yield and quality analysis of a hybrid will vary with environment, the relative ranking of a hybrid will be similar. These ratings are a relative performance guide. Conduct a laboratory test to determine actual silage quality when balancing a feed ration.

Average performance

- Data not available

**X** Hybrid not recommended

V Hybrid may not perform consistently

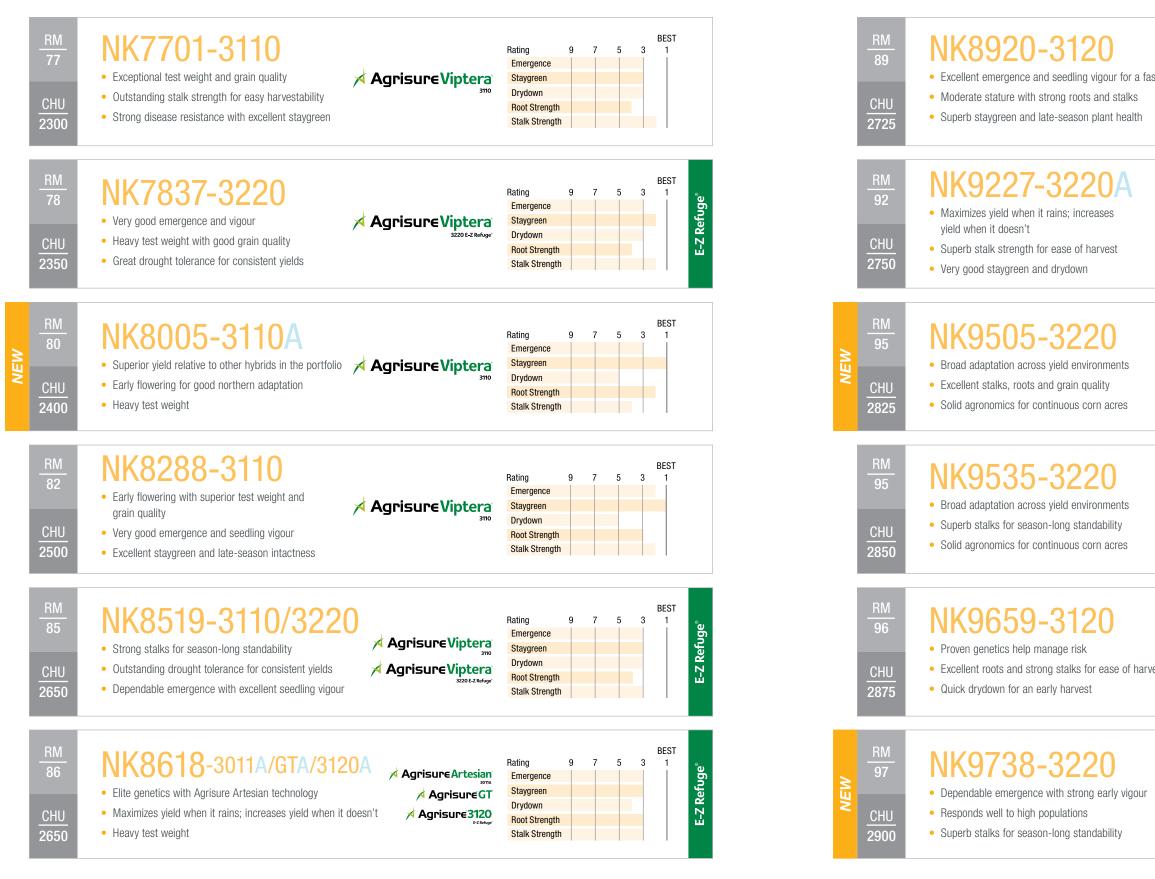
#### 2019 HYBRIDS



LIBERTY Seed products with the LibertyLink<sup>®</sup> (LL) trait are resistant to the herbicide glufosinate ammonium, an alternative to glyphosate in corn, and combine high-yielding genetics with the powerful, non-selective, post-emergent weed control of Liberty® herbicide for optimum yield and



2019 HYBRIDS CHU 2300–2900



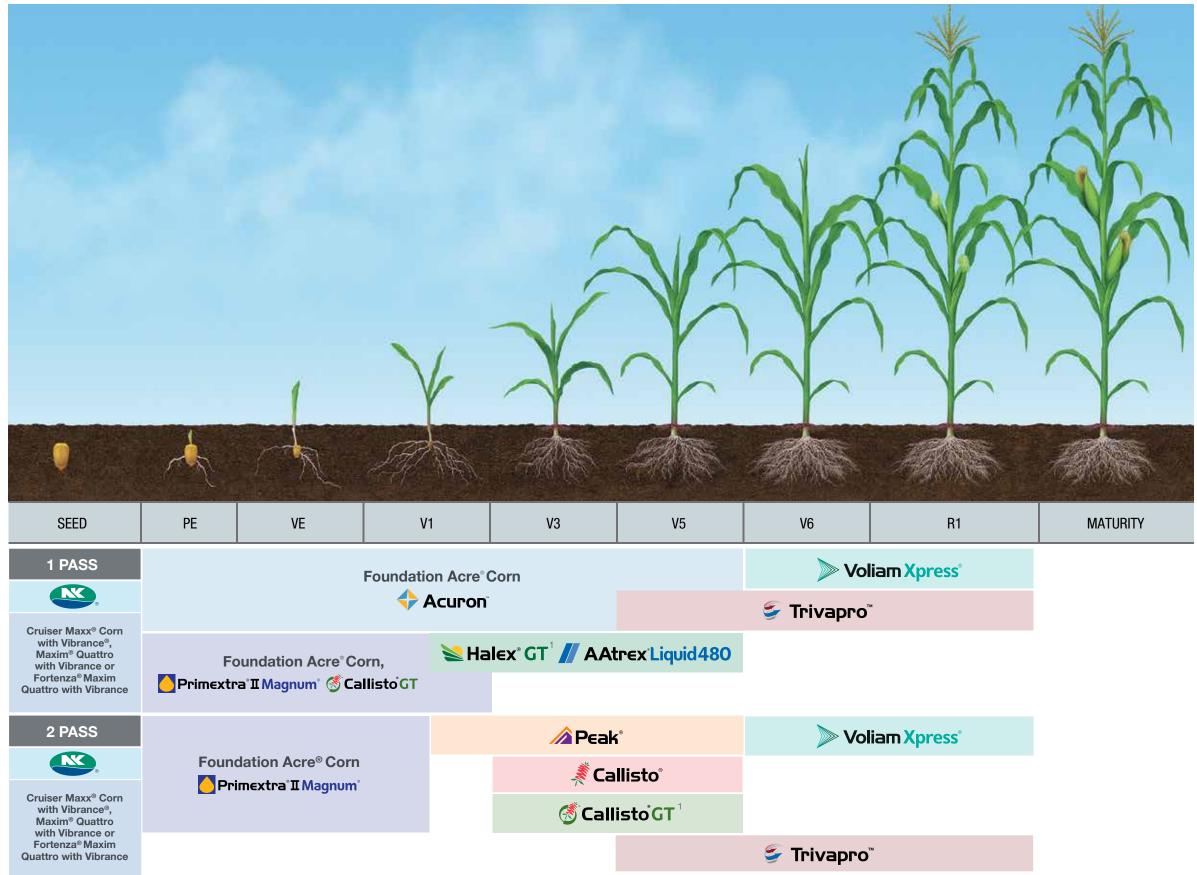


2019 HYBRIDS CHU 2300–2900

			Pating	9	7	5	3	BEST	
			Rating Emergence	9	1	0	3	1	ື່ຍ
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ι υισ	ιιί		Drydown						Re.
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			Rating	9	7	5	3	1	្លា
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		3220 E-Z Refuge	Drydown						E-Z Refuge <sup>®</sup>
			Root Strength						ш
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	X	AgrisureViptera 3220 E-Z Refuge'	Drydown						
	X	Agrisure Viptera 3220 E-Z Refuge'							
	*	Agrisure Viptera 3220 F-Z Refuge	Drydown						E-Z Refuge
	×	Agrisure Viptera 3220 F-2 Refuge	Drydown Root Strength						E-2
	× 	Agrisure Viptera 3220 F.Z Refuge	Drydown Root Strength Stalk Strength					BEST	
	×	Agrisure Viptera 3220 F.Z Refuge	Drydown Root Strength Stalk Strength Rating	9	7	5	3	BEST 1	
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		3220 E-Z Refuge	Drydown Root Strength Stalk Strength Rating Emergence Staygreen	9	7	5	3		
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t	×	3220 E-Z Refuge	Drydown Root Strength Stalk Strength Stalk Strength Emergence Staygreen Drydown		7	5	3		
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st		Sizo F.2 Refuge Agrisure 3120 F.2 Refuge	Drydown Root Strength Stalk Strength Emergence Staygreen Drydown Root Strength Stalk Strength Rating Emergence					BEST	E-Z Refuge <sup>°</sup>
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<sup>1</sup> Callisto GT and Halex GT are for GT corn only.



#### Protect your seed

CORN V

NOTES:

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Syngenta offers several seed treatment options to meet the needs of your farm while supporting sustainable practices that help preserve the environment.

	INSECTS CONTROLLED	DISEASES CONTROLLED	
Fortenza Maxim Quattro     with Vibrance*	<ul> <li>European chafer</li> <li>Wireworm</li> <li>Cutworm</li> </ul>	<ul> <li>Seed rot/pre-emergence damping-off</li> <li>Post-emergence damping- off seedling blight</li> <li>Root rot</li> </ul>	
Cruiser Maxx® Corn with Vibrance®	<ul> <li>Flea beetle that vectors Stewart's wilt</li> <li>European chafer</li> <li>Seed corn maggot</li> <li>Wireworm</li> </ul>	<ul> <li>Seed rot/pre-emergence damping-off</li> <li>Post-emergence damping- off seedling blight</li> <li>Root rot</li> </ul>	ROOTING POWER Vice States Stat
Waxim <sup>®</sup> Quattro with Vibrance <sup>®</sup>		<ul> <li>Seed rot/pre-emergence damping-off</li> <li>Post-emergence damping- off seedling blight</li> <li>Root rot</li> </ul>	



#### The value of seed applied insecticides

Seed applied insecticides (SAIs) represent one of the mo advanced forms of crop protection technology available, offering growers a targeted, environmentally sustainable means of pest management. Applied directly to the seed only where needed, SAIs require less active ingredient pe acre compared to foliar and soil-applied pesticides, and minimize off-target drift, reducing the impact on non-targ organisms. For growers who require a fungicide-only see treatment, NK<sup>®</sup> soybean seed is available treated with Vibrance<sup>®</sup> Maxx seed treatment, while NK corn is available treated with Maxim<sup>®</sup> Quattro seed treatment.

#### Protecting pollinators on the farm

ost d	Syngenta is committed to protecting pollinators and continues work to develop and implement additional solutions to address dust generated when planting treated corn and soybean seeds and to further efforts on other bee health issues.
get ed ble	Best management practices for the handling of seed treated with an insecticide are an important tool to help maximize the benefits of seed treatments and protect bees and other non-target insects at the same time.
010	For more information, please visit beehealth.ca Always read and follow label directions.

# **STEWARDSHIP**

Syngenta is committed to stewardship of offered technologies and requires Syngenta Stewardship Agreements from growers. The agreement outlines the terms under which a grower may grow and market the technologies sourced from Syngenta. Agrisure<sup>®</sup> corn, Genuity<sup>®</sup> Roundup Ready 2 Yield<sup>®</sup> soybean, Roundup Ready 2 Xtend<sup>®</sup> soybean and specified conventional soybean seed will be delivered only to growers with valid agreements.

## Syngenta stewardship best management practices

The best way for growers to preserve the benefits and insect protection of Bt technology is to incorporate Integrated Pest Management (IPM) strategies on their farm. These strategies play a key role in managing pest resistance. Successful management of resistance in turn benefits the grower through higher quality production. IPM strategies include planting refuge, crop and trait rotation, scouting, and use of chemical insecticides.

Bt corn must have a refuge, as mandated by the Canadian Food Inspection Agency. Insect refuge management is a strategy endorsed by leading scientists to reduce the risk of insect populations developing resistance to Bt corn.

All growers must sign a Syngenta Stewardship Agreement before ordering any Agrisure insect-protected corn for the 2018/2019 sales season, and continue to support the best management practices to reduce the potential risk of developing resistance to either the European corn borer (ECB) or corn rootworm (CRW) traits.

#### Failure to comply with refuge requirements may:

- Lead to insect resistance
- Slow down the introduction of new corn technologies that provide additional insect protection
- Affect grower access to Agrisure traited products

#### Scouting is essential!

Scout refuge plantings to determine the level of insect pressure in your field. Then scout the Agrisure insect-protected hybrids to note their effectiveness and look for signs of damage that may indicate resistance to either the Bt trait or the CRW trait. If concerns arise, please contact your local Syngenta Agronomic Sales Representative immediately for further field investigation.

#### **Refuge calculator**

The Canadian Corn Pest Coalition, in collaboration with the Ontario Corn Committee and the Canadian Seed Trade Association and industry, have developed a web-based calculator to help growers plan how to meet the minimum refuge requirements for each Bt corn hybrid on their farm. The calculator can be accessed at refugeselector.ca.

#### **Refuge planting options**

Refuge can be planted as a block, strips within the field, a perimeter around the field, adjacent or a separate block within a quarter mile of the field.

- Quarter mile option may only be used for ECB refuge
- A neighbour's field does NOT meet the refuge requirements

Remember, when calculating a refuge, the calculation must be based on total corn acres.



Before opening a bag of seed, be sur traits as set forth in the Syngenta ste with those stewardship requirements To view recommended planting layou

#### Corn refuge requirement

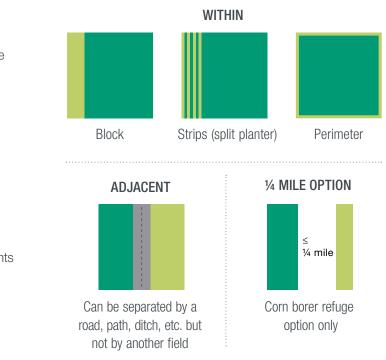
It is important to recognize that different products may have different Insect Resistance Management (IRM) requirements. On-farm mixing of any seed is not an approved method. Syngenta is pleased to provide hybrids with E-Z Refuge<sup>®</sup> for built-in compliance.

PRODUCT	MINIMUM REFUGE SIZE REQUIREMENT	REFUGE DISTANCE REQUIREMENTS
Agrisure Viptera 3220 E-Z Refuge' Agrisure 3120 E-Z Refuge'	5% appropriate refuge material blended into the bag	E-Z Refuge
	20% (corn borer/corn root worm)	Adjacent to or within Bt field
Agrisure Viptera	20% (corn borer)	Adjacent to, within, or up to 400 m from the Bt field

Any of the above trait versions available in the water-optimizing Agrisure Artesian® option would not change the refuge requirements.

NOTE: Crops or other material produced from Agrisure corn traits products can only be exported to, used, processed and/or sold in countries where all necessary regulatory approvals have been granted.

# **STEWARDSHIP**



Before opening a bag of seed, be sure to read and understand the stewardship requirements, including applicable refuge requirements when planting insect protected traits as set forth in the Syngenta stewardship/technology agreement that you sign. By opening and using a bag of seed, you are reaffirming your obligation to comply

To view recommended planting layouts, maps and configurations, please visit the CANADIAN CORN PEST COALITION at www.compest.ca or contact us for a Grower's Handbook: 1-800-756-7333.



#### Benefits of Certified Seed

Sharing the Message – Success, Farmers Plant It

A purchase of Certified Seed opens the door to new opportunities for success:

- Quality assurance
- Access to new and improved varieties
- Efficient use of inputs New marketing opportunities
- Supports the development of new varieties for the future



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Seed products with the LibertyLink<sup>®</sup> (LL) trait are resistant to the herbicide glufosinate ammonium, an alternative to glyphosate in corn, and combine high-yielding genetics with the powerful, non-selective, post-emergent weed control of Liberty<sup>®</sup> herbicides for optimum yield and excellent weed control. LibertyLink<sup>®</sup>, Liberty<sup>®</sup> and the Water Droplet logo are registered trademarks of Bayer. Consult bag tags for E-Z Refuge<sup>®</sup> product herbicide options. Only those labeled EZ1 may be sprayed with glufosinate ammonium based herbicides, including Liberty<sup>®</sup> herbicide.

#### THE FOLLOWING APPLIES TO ALL GENUITY® ROUNDUP READY 2 YIELD® AND ROUNDUP READY 2 XTEND® VARIETIES.



**ROUNDUP READY 2** 

**TEND** 

**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. This product has been approved for import into key export markets with functioning regulatory systems. Any crop or material produced from this product 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 this product. Excellence Through Stewardship® is a registered trademark of Excellence Through Stewardship.

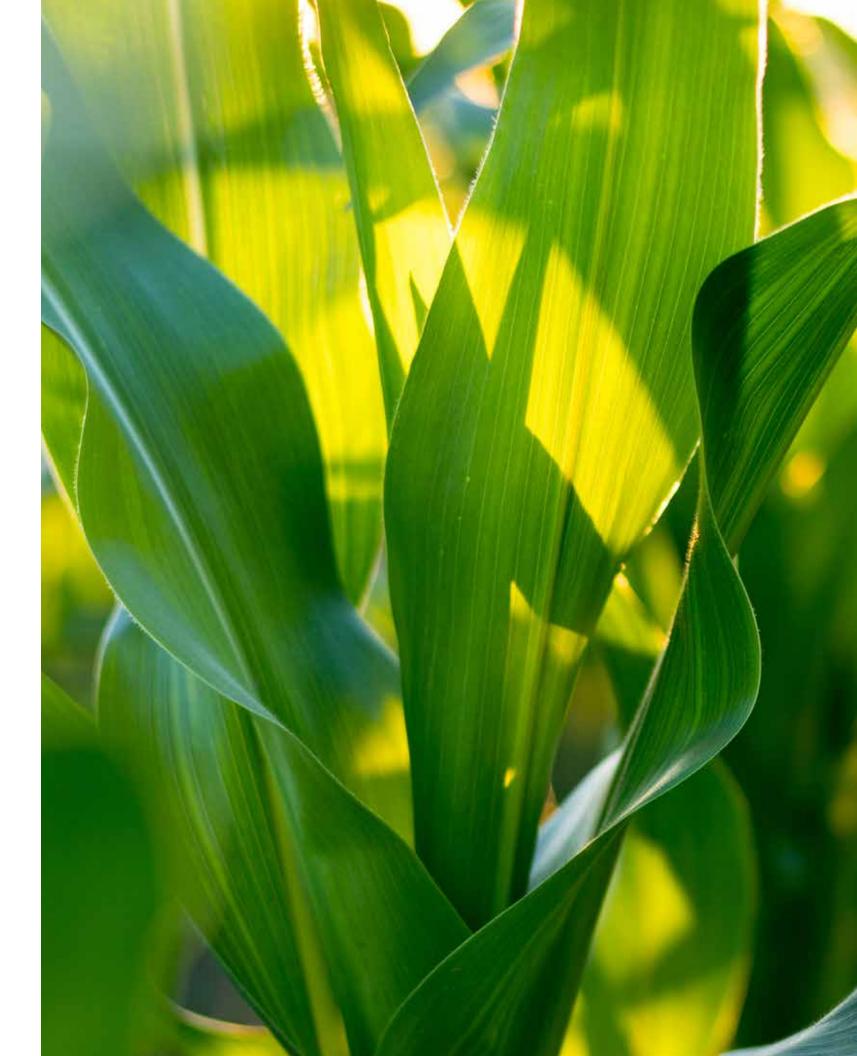
Always read and follow label directions. Genuity® Roundup Ready 2 Yield® crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® brand agricultural herbicides. Roundup Ready 2 Xtend® soybeans contain genes that confer tolerance to glyphosate, an active ingredient in Roundup® brand agricultural herbicides, and dicamba, the active ingredient in XtendiMax<sup>™</sup> herbicide with VaporGrip<sup>™</sup> Technology. Agricultural herbicides containing glyphosate will kill crops that are not tolerant to glyphosate, and those containing dicamba will kill crops that are not tolerant to dicamba. Genuity®, Genuity and Design®, Roundup Ready 2 Xtend®, Roundup Ready 2 Yield®, Roundup®, VaporGrip<sup>™</sup> and XtendiMax<sup>™</sup> are trademarks of Monsanto Technology LLC, Monsanto Canada, Inc. licensee. © 2018 Monsanto Canada Inc.

Hybrid brand names, as opposed to variety names, are stated in this Seed Guide. Please contact Syngenta directly or consult the product's bag/tag to obtain the product's variety name.

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.

#### NK<sup>®</sup> Soybean varieties are protected under granted or pending Canadian variety patents and other intellectual property rights, regardless of the trait(s) within the seed.

Always read and follow label directions. Cruiser Maxx Corn with Vibrance is an on-seed application of Cruiser 5FS Seed Treatment insecticide delivered at the 0.25 mg a.i./seed rate, Maxim Quattro Seed Treatment fungicide, and Vibrance 500FS Seed Treatment fungicide. Fortenza Maxim Quattro is an on-seed application of Fortenza Seed Treatment insecticide and Vibrance 500FS Seed Treatment fungicide. Fortenza Maxim Quattro is an on-seed application of Fortenza Seed Treatment insecticide and Vibrance for Maxx BFC Seed Treatment fungicide. Maxim Quattro with Vibrance is an on-seed application of Fortenza Seed Treatment fungicide. Maxim Quattro with Vibrance is an on-seed application of Maxim Quattro Seed Treatment fungicide. Maxim Quattro is a co-pack of Trivapro A Fungicide and Trivapro B Fungicide. Vibrance Maxx is an on-seed application of: (i) Vibrance 500 FS Seed Treatment fungicide; and (ii) Apron Maxx RTA Seed Treatment fungicide. Corn and soybean seeds treated with thiamethoxam are classified as a Class 12 pesticide in Ontario. Corn and soybean seeds which are not Class 12 pesticides are also available for sale from Syngenta. Acuron<sup>™</sup>, Agrisure<sup>®</sup>, Agrisure Viptera<sup>®</sup>, Apron Maxx<sup>®</sup>, Boundary<sup>®</sup>, Callisto<sup>®</sup>, Clariva<sup>™</sup>, Cruiser<sup>®</sup>, Cruiser Maxx<sup>®</sup>, Duracade<sup>™</sup>, Endigo<sup>®</sup>, E-Z Refuge<sup>®</sup>, Flexstar<sup>®</sup>, Fortenza<sup>®</sup>, Foundation Acre<sup>®</sup>, Halex<sup>®</sup>, IP Globe<sup>™</sup>, Magnum<sup>®</sup>, Maxim<sup>®</sup>, Multi-Pest Complex<sup>™</sup>, NK<sup>®</sup> and Design, Peak<sup>®</sup>, Primextra<sup>®</sup>, Reoting Power<sup>™</sup>, SCN Solutions<sup>™</sup>, Seedcare<sup>™</sup>, Solatenol<sup>®</sup>, Trivapro<sup>™</sup>, Venture<sup>®</sup>, Vibrance<sup>®</sup>, Vigor Trigger<sup>®</sup>, Voliam Xpress<sup>®</sup>, the Alliance Frame, the Purpose Icon and the Syngenta logo are trademarks of a Syngenta Group Company. Allegro<sup>®</sup> is a trademark of ISK Biosciences Corporation. Respect the Refuge<sup>™</sup> is a trademark of the Canadian Seed Trade Association. Other trademarks are the property of their respective owners. <sup>®</sup> 2018 Syngenta.



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