



syngenta<sub>®</sub>







## **SOYBEANS**

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## **Agronomic characteristics**



	PRODUCT	MAT	URITY			AGRONOMIC	PLANT CHAR	ACTERISTICS			GRAIN Q	UALITY			DISE	ASES/PES	TS			GI	ENERAL A	DAPTAT	ON
															PHYTOPHT	THORA							
	Variety	Relative maturity	СНО	Emergence	Standability	Wide row	Plant height	Canopy index	Hilum colour	Seed size	Protein ratings	Oil ratings	SCN resistance source	Soybean cyst nematode	Gene resistance	Field tolerance	Sclerotinia white mould	Sudden death syndrome	Pod and stem blight	Drought prone soils	Highly productive soils	Variable environments	Poorly drained soils
	S20-E3 <b>NEW</b>	2.0	3000	3	2	1	M	5.28	BF	-	-	-	PI88788	MR3	Rps1c,Rps3a	2	4	2	-			*	
000	S26-E3 <b>NEW</b>	2.6	3175	2	2	2	М	4.62	BF	-	-	-	Peking	-	Rps1k	4	4	3	-		*		
> 3(	S28-2E3 <b>NEW</b>	2.8	3275	3	4	1	M	-	BF	-	-	-	PI88788	-	Rps1a	3	-	5	-	-	-	-	-



### ROUNDUP READY 2 XTEND®

	PRODUCT	MA	TURITY			AGRONOMIC	C/PLANT CHAR	ACTERISTICS			GRAIN	QUALITY			DISE	ASES/PES	TS			GI	ENERAL A	DAPTATI	ON
															РНҮТОРНТ	HORA							
	Variety	Relative maturity	СНО	Emergence	Standability	Wide row	Plant height	Canopy index	Hilum colour	Seed size	Protein ratings	Oil ratings	SCN resistance source	Soybean cyst nematode	Gene resistance	Field tolerance	Sclerotinia white mould	Sudden death syndrome	Pod and stem blight	Drought prone soils	Highly productive soils	Variable environments	Poorly drained soils
	S007-Z1X <b>NEW</b>	0.07	2400	3	3	2	MT	6.27	BR	L	Average	Very high	S	S	Rps1c	4	4	-	4	*	*	*	
	S01-C4X	0.1	2525	3	3	2	MT	5.61	BL	M	High	High	S	S	Rps1c	2	3	-	5		*		
	S04-J6X <b>NEW</b>	0.4	2625	3	2	1	M	4.95	BL	M	High	High	PI88788	MR3	Rps1c	3	4	-	4	*	*	*	*
	S05-N5X	0.5	2675	2	2	3	MS	3.63	BR	L	High	High	S	S	Rps1c,Rps3a	3	3	-	2		*		
몽	S07-K5X	0.7	2700	1	3	2	M	4.62	GR	L	Very high	Average	S	S	Rps3a	3	3	-	4			*	
000	S09-C3X	0.9	2775	3	4	1	M	5.94	BL	L	Very high	Average	PI88788	R3	Rps1c	3	4	-	3				
0-3(	S09-R8X	0.9	2775	3	4	2	MT	5.61	IMY	M	High	Average	PI88788	R3,MR14	Rps1c	4	4	3	5	*	*	*	
2400	S12-M5X <b>NEW</b>	1.2	2825	3	2	1	MS	5.94	BL	L	Average	Very high	PI88788	MR3	Rps1k,Rps3a	2	3	2	2		*	*	*
	S12-P3X	1.2	2825	3	3	2	M	4.95	BR	L	High	High	PI88788	MR3	Rps1k	2	2	3	4				
	S14-U9X	1.4	2850	3	2	2	MT	4.62	BR	M	High	High	PI88788	MR3,MR14	Rps1c	2	3	3	2		*		
	S16-K2X <b>NEW</b>	1.6	2875	2	2	1	M	4.95	BL	L	High	High	PI88788	MR3	Rps1k,Rps3a	2	4	4	4	*	*	*	*
	S18-G4X	1.8	2925	3	2	1	MT	5.61	BL	L	High	High	PI88788	R3,MR14	Rps1c	3	6	2	2			*	*
_	S20-L8X	2.0	3025	2	3	2	M	4.62	BL	L	High	High	PI88788	R3,MR14	Rps1c	4	2	3	3				
몽	S22-J4X	2.2	3075	3	3	2	M	4.95	BL	L	High	High	PI88788	R3,MR14	Rps1c	4	3	3	3				*
3000 (	S25-B6X	2.5	3150	3	3	1	MT	7.26	BR	L	High	High	PI88788	R3,MR14	Rps1c	4	3	4	4			*	*
)S \	S29-R5X	2.9	3275	2	4	1	MT	6.60	BR	M	Average	High	Peking	R1,R3,MR5	Rps1k	2	4	3	2		*	*	*
	S31-Y2X	3.1	3300	3	3	2	M	4.95	BL	L	High	Average	PI88788	R3,MR14	Rps1c	4	3	3	2				*

Performance results are based on North American field trials and are not necessarily consistent with Eastern Canadian recommendations on pages 7-10.

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

### 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).

### Agronomic and disease ratings

1 = Best

9 = Worst

- = Under evalutation

Plant height Canopy index

S = ShortIndex is calculated using plant MS = Medium Short height, width and branching M = Mediumcharacteristics. The larger the MT = Medium Tall number, the larger the plant.

T = Tall

Colour abbreviations

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

#### Seed size

VL = Very Large = <2000 seeds/lb or <4400 seeds/kg L = Large = 2000-2275 seeds/lb or 4400-5000 seeds/kgM = Medium = 2275-2725 seeds/lb or 5000-6000 seeds/kg S = Small = >2725 seeds/lb or >6000 seeds/kg

Protein rating Oil rating Average = <40%Average = <22%High = 40-43%High = 22-23%Very high = 43-45%Very high = 23-24%Ultra high = >45%Ultra high = >24%

Protein values fluctuate from year to year and field to field. Protein and oil values are based on 0% moisture.

### **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.

#### Soybean cyst nematode (SCN) resistance source S = Susceptible, Peking or Pl88788

### Soybean cyst nematode (SCN)

1, 3, 5 and/or 14 = Specific race of soybean cyst nematode R = Resistant, MR = Moderately Resistant, S = Susceptible

### 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, 44Rps3a = 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. Numerical rating scale of 1-9; 1 = Excellent, 9 = Poor

### Adaptation ratings

### ★ Above average performance

- Average performance
- ▼ Variety may not perform consistently
- X Variety not recommended



### You have choice.

NK® draws on proprietary genetics to breed unique, high-yielding soybean varieties with strong disease tolerance. We offer a variety of soybean varieties so each grower can select the varieties they need to succeed.

### Discover the NK difference at Syngenta.ca/NK-soybeans







## **Agronomic characteristics**



	PRODUCT	MAT	URITY			AGRONOMIC	PLANT CHAR	ACTERISTICS			GRAIN (	QUALITY			DIS	EASES/PES	TS			Gl	ENERAL A	ADAPTATI	ON
	Variety	Relative maturity	CHU	Emergence	Standability	Wide row	Plant height	Canopy index	Hilum colour	Seed size	Protein ratings	Oil ratings	SCN resistance source	Soybean cyst nematode	Gene resistance	Field tolerance	Sclerotinia white mould	Sudden death syndrome	Pod and stem blight	Drought prone soils	Highly productive soils	Variable environments	Poorly drained soils
_	S0009-M2	0.009	2275	3	4	4	M	3.30	IMY	M	High	Very high	S	S	Rps6	3	3	-	3		*		
CH.	S007-Y4	0.05	2350	3	2	2	M	3.96	IMY	M	High	High	S	S	Rps1c	3	2	-	6		*	*	
2000	S008-N2	0.08	2450	3	3	1	MT	6.27	IMY	M	Average	Very high	S	S	S	4	4	-	5			*	
$\wedge$	S04-D3	0.4	2600	3	2	4	M	4.29	BL	M	High	High	S	S	Rps1c	3	2	-	2		*		



	PRODUCT	MAT	URITY			AGRONOMIC	/PLANT CHARA	CTERISTICS			GRAIN C	UALITY				DISEASE	S/PESTS			GE	ENERAL A	ADAPTATIO	ON
															PHYTOPHT	HORA							
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	S03-W4	0.3	2600	2	2	3	M	2.64	IMY	L	Very high	High	S	S	Rps1c	2	3	-	3		*		*
	S04-K9 <b>NEW</b>	0.4	2625	3	3	2	M	4.95	Υ	VL	Ultra high	Average	PI88788	R3,R14	Rps1c	2	-	-	5				
⊋	S07-D2	0.7	2700	2	4	3	T	3.96	Υ	VL	Ultra high	Average	S	S	Rps3a	2	2	-	7		*		
H) C	S07-M8	0.7	2725	3	1	3	M	3.63	IMY	L	Very high	High	S	S	Rps1c	3	2	5	4		*		
.290	S10-R2	1.0	2800	3	5	1	MT	7.26	Υ	L	Ultra high	Average	PI88788	R3	S	3	5	5	8				*
-006	S12-J7	1.2	2825	3	3	2	M	4.29	Υ	VL	Very high	High	PI88788	MR3,R14 F	Rps1c,Rps3a	2	4	2	4		*	*	*
76	S14-H3	1.4	2850	3	2	4	M	4.95	IMY	VL	Very high	Average	PI88788	MR3	S	3	3	4	3		*		
	S16-F5	1.6	2875	3	1	4	M	4.62	Υ	VL	Ultra high	Average	PI88788	R3,MR14	Rps1c	3	4	2	5	_	*	_	
	S18-R6	1.8	2900	4	1	3	MT	3.63	Υ	L	High	High	PI88788	R3,MR14	Rps1a	4	2	2	3	*	*		
	S20-G7	2.0	3000	3	3	2	MT	4.62	Υ	VL	Very high	Average	S	S	Rps1c	3	2	8	4	_	*		
O CHU	S20-M1	2.0	3000	2	4	2	T	4.95	Υ	L	Very high	Average	PI88788	R3,R14	Rps1c	3	4	4	6	*	*	*	
3000	S21-C6 <b>NEW</b>	2.1	3050	3	3	1	Т	7.26	Y	VL	Ultra high	Average	PI88788	MR3	S	4	4	5	4				
^	S25-P2 <b>NEW</b>	2.5	3150	3	2	1	Т	7.26	IMY	M	High	Average	PI88788	MR3	S	3	3	2	3	*		*	*

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number, the larger the plant.

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

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### **Protein rating**

Oil rating Average = <40%Average = <22%

High = 40-43%High = 22-23%Very high = 43-45%Very high = 23-24%

Ultra high = >45%Ultra high = >24%

Protein values fluctuate from year to year and field to field. Protein and oil values are based on 0% moisture.

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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. Numerical rating scale of 1-9;

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### **Adaptation ratings**

- ★ Above average performance
- Average performance
- Variety may not perform consistently

X Variety not recommended



## SDS protection. Upgraded.

New Saltro® fungicide seed treatment gives soybeans superior protection from sudden death syndrome (SDS) without the stress. Saltro® is an excellent complement to SDS-resistant genetics to help soybeans reach their full yield potential.

### Visit Syngenta.ca for more information



## **SOYBEANS 1**



## Population recommendations by management zone







VARIET	Y PLANT	TYPES
Thin	Between	Branching
	S20-E3	
S26-E3		
	S28-2E3	

	S28-2E3	
Roundup 2	FI N'	

VARIET	Y PLANT	TYPES
Thin	Between	Branching
S0009-M2		
	S007-Y4	
		S008-N2
S04-D3		

Thin         Between         Branching           S007-Z1X           S01-C4X           S04-J6X           S05-N5X           S07-K5X           S09-C3X
S01-C4X S04-J6X S05-N5X S07-K5X
\$04-J6X \$05-N5X \$07-K5X
S05-N5X S07-K5X
S07-K5X
S09-C3X
S09-R8X
S12-M5X
S12-P3X
S14-U9X
S16-K2X
S18-G4X
S20-L8X
S22-J4X
S25-B6X
S29-R5X
S31-Y2X

VARIET	Y PLANT	TYPES
Thin	Between	Branching
S03-W4		
	S04-K9	
S07-D2		
	S07-M8	
		S10-R2
	S12-J7	
	S14-H3	
	S16-F5	
S18-R6		
	S20-G7	
	S20-M1	
		S21-C6
		S25-P2

**Thin** varieties perform best grown in row widths of 15" or less

**Between** varieties can be managed to act either thin or branching

Branching varieties excel in row widths of 20" or greater with performance across all row widths

	YIELD ENVIRONMENT (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						
Clay	Branching	140,000	165,000	190,000						
Loom	Thin	160,000	180,000	200,000						
Loam	Branching	100,000	125,000	150,000						

#### Increase population by 10% over recommendations 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 (after June 15th)

#### Decrease population by 10-20% under recommendations if:

• Field has a high risk or history of Sclerotinia white mould

#### Row width considerations:

• Consider selecting between and branching varieties for row widths of 20" or greater

Population recommendations and variety positioning performance ratings are based on Eastern Canadian field trials and are not necessarily representative of the North American data provided on pages 3-6.



### **Genetics x Environment x Management = High-yielding soybeans**



### **Genetics**

**Seed:** Select high-performing seed bred for local conditions.

**SCN protection:** Guard against yield loss with pest-resistant seed.



### **Environment**

**Pest management:** Protect crops against weeds, pests and diseases.

**Soil type:** Understand how to optimize growth by soil type.

**Weather:** Prepare for and respond to specific weather conditions.





### Management

**Fertility:** Monitor crop nutrition and take appropriate action.

**Stand establishment:** Make Seedcare<sup>™</sup> and planting decisions to start off strong.

**Equipment:** Calibrate precision equipment for peak performance.

**Harvest management:** Maximize yield through timing and equipment.

### Sclerotinia white mould

- Top yield-robbing disease in soybeans with losses of up to 75%.
- Our research capabilities help ensure growers have excellent solutions to Sclerotinia white mould.

#### How to manage:

- Select genetics with excellent tolerance where possible.
- In fields with Sclerotinia white mould history and high-risk environments, reduce populations by 10% for varieties with an "excellent" rating and up to 20% for varieties with an "average" rating.
- Consider applying Allegro® fungicide as part of a Sclerotinia white mould integrated pest management (IPM) strategy.





Excellent	Average
	S20-E3
	S26-E3
	S28-2E3



Excellent		Average
S01-C4X	S14-U9X	S007-Z1X
S05-N5X	S20-L8X	S04-J6X
S07-K5X	S22-J4X	S09-C3X
S12-M5X	S25-B6X	S09-R8X
S12-P3X	S31-Y2X	S16-K2X
		S18-G4X
		S29-R5X



Excellent	Average
S0009-M2	S008-N2
S007-Y4	
S04-D3	



Excellent	Average
S03-W4	S10-R2
S07-D2	S12-J7
S07-M8	S16-F5
S14-H3	S20-M1
S18-R6	S21-C6
S20-G7	
S25-P2	



### Pod and stem blight

- Small black raised dots (pycnidia) often in rows on the stem and no pattern on the pods.
- Fungus overwinters in seed and crop residue.
- Warm, wet or humid weather during pod fill favours disease development.

#### How to manage:

- Variety selection
- Residue management
- Fungicide application
- Consider adding Mertect® SC to your seed treatment





I	Excellent		Average	
	S05-N5X	S20-L8X	S007-Z1X	S12-P3X
	S09-C3X	S22-J4X	S01-C4X	S16-K2X
	S12-M5X	S29-R5X	S04-J6X	S25-B6X
	S14-U9X	S31-Y2X	S07-K5X	
	S18-G4X		S09-R8X	



Excellent	Average
S0009-M2	S007-Y4
S04-D3	S008-N2



Excellent	Average	
S03-W4	S04-K9	S16-F5
S14-H3	S07-D2	S20-G7
S18-R6	S07-M8	S20-M1
S25-P2	S10-R2	S21-C6
	S12-J7	

### Sudden death syndrome (SDS)

- Caused by the fungal disease Fusarium virguliforme.
- Potentially linked with soybean cyst nematode (SCN), as nematode feeding allows the entry of secondary pathogens.
- Leaf symptoms caused by toxins produced by the fungus.

#### How to manage:

- Choose varieties with SCN resistance
- Apply Vibrance® Maxx or Cruiser Maxx® Vibrance Beans + Mertect SC





Excellent	Average
S20-E3	S28-2E3
S26-E3	



Excellent		Average
S09-R8X	S20-L8X	S16-K2X
S12-M5X	S22-J4X	S25-B6X
S12-P3X	S29-R5X	
S14-U9X	S31-Y2X	
S18-G4X		



Excellent	Average
S12-J7	S07-M8
S16-F5	S10-R2
S18-R6	S14-H3
S25-P2	S20-M1
	S21-C6

Population recommendations and variety positioning performance ratings are based on Eastern Canadian field trials and are not necessarily representative of the North American data provided on pages 3-6.

<sup>\*</sup>Clariva pn is only for protection against soybean cyst nematode.



### **Brown stem rot (BSR)**

- Pathogen survives in crop debris.
- Infection occurs early in the season but foliar symptoms appear when pods begin to fill (R3-R4).
- Pith will show brown discolouration.

### How to manage:

- Rotation
- Residue management
- Variety selection









Average
S0009-M2
S007-Y4
S008-N2
S04-D3



Excellent	Average
S04-K9	S12-J7
S10-R2	S14-H3
	S16-F5

### Phytophthora root rot (PRR)

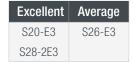
- Caused by soil-borne pathogen Phytophthora sojae.
- Most common on poorly drained soils.
- Can infect at all plant stages when conditions favour the pathogen.
- Symptoms usually become apparent two weeks after heavy rains.
- Genetic selection against PRR should include major genes Rps genes and field tolerance.

#### How to manage:

- Vibrance Maxx RFC or Cruiser Maxx Vibrance Beans (consider tank-mixing with Apron XL® LS\*)
- Variety selection
- Improve soil drainage









Excellent		Average
S01-C4X	S12-P3X	S007-Z1X
S04-J6X	S14-U9X	S09-R8X
S05-N5X	S16-K2X	S20-L8X
S07-K5X	S18-G4X	S22-J4X
S09-C3X	S29-R5X	S25-B6X
S12-M5X		S31-Y2X



Excellent	Average
S0009-M2	S008-N2
S007-Y4	
S04-D3	



Exce	ellent	Average
S03-W4	S14-H3	S18-R6
S04-K9	S16-F5	S21-C6
S07-D2	S20-G7	
S07-M8	S20-M1	
S10-R2	S25-P2	
S12-J7		

<sup>\*</sup> Tank mix if target fields have a history of high Phytophthora pressure, or susceptible varieties are to be treated. Tank mix either 100 mL of Vibrance Maxx RFC or 195 mL of Cruiser Maxx Vibrance Beans Seed Treatment with 31 mL of Apron XL LS Fungicide per 100 kg of seed.

CHU

2525



### **Description key**

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



A relative maturity (RM) system is used to rank soybeans. Each variety is classified with a 0 to 9 decimal number following the group (or zone) number. For example, a variety with a 2.1 RM can be grown in the northern part of the "II" relative maturity zone, while a 2.9 is a variety that can be grown in the southern part of that maturity zone.

S01-C4X



- Excellent performance across most soil types
- · Good plant height, even when moved south of zone
- Rps1c with excellent field tolerance to Phytophthora root rot

CHU: 2525: Specific crop heat units for this product.

### Soybean index



### Enlist E3<sup>™</sup> soybeans

NK® soybeans with Enlist E3™ trait technology are tolerant to 2,4-D choline (Group 4), glyphosate (Group 9) and glufosinate (Group 10), enabling growers to meet ever-increasing weed challenges, including glyphosate resistance, and helping to maximize profit per acre.



### Roundup Ready 2 Xtend® soybeans

NK soybean varieties bred with Roundup Ready 2 Xtend® trait technology are tolerant 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 glyphosate-resistant giant ragweed, common ragweed, and Canada fleabane.



### Roundup Ready 2 Yield® soybeans

NK soybean varieties bred with Roundup Ready 2 Yield® trait technology and Syngenta genetics are tolerant to glyphosate (Group 9) herbicides.



### Soybean cyst nematode solutions

NK offers two sources of resistance to soybean cyst nematode: Pl88988 and Peking. The source of resistance is indicated in the SCN Solutions logo beside the variety description.



### **Conventional soybeans**

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

CHU 3000-3275



NOTES:



2.0 CHU 3000

S20-E3





- Very strong sudden death syndrome tolerance
- Rps1c/3a stack with excellent field tolerance to Phytophthora root rot
- · Great row spacing flexibility

RM 2.6

CHU

3175

S26-E3





• Strong sudden death syndrome tolerance

- Great standability for the highly productive acre
- Best performance in mid to high yield environments

2.8

CHU 3275 S28-2E3





- Best performance in mid to lower yielding environments
- · Maintains height on tough clays
- Very good Phytophthora root rot field tolerance

12 \_\_\_

## **SOYBEANS 1**





### **ROUNDUP READY 2 XTEND®**

CHU 2400-2850

0.07

0.07

NEW

CHU 2400 S007-Z1X

- TEND SOYBEANS
- Strong emergence and quick canopy closure in a short season maturity
- Great performance to move south of zone as an early harvest option
- Large plant type that performs well across soil types and row widths

RM 0.9

S09-C3X





Taller plant with good branching to quickly fill in rowsSolid disease package

CHU 2775 • Sullu disease package

· Flexibility to grow north and south of zone

RM 0.1

CHU

2525

S01-C4X



• Excellent performance across most soil types

- Good plant height, even when moved south of zone
- Rps1c with excellent field tolerance to Phytophthora root rot

RM 0.9

CHU

2775

S09-R8X





 Performs well regardless of soil type, yield environment, or geography

 Rps1c with above-average tolerance to Phytophthora root rot

Good pod height for easy harvest

DM

CHU

2625

NEW

**S04-J6X** 







- Excellent standability for the highly productive acre
- Maintains performance and height on lower yielding acres

RM 1.2

NEW

S12-M5X





·

CHU 2825  Great performance across yield levels, excelling in high yield environments

- Excellent Phytophthora field tolerance with desired Rps1k/3a gene stack
- Flexibility to place north and south of zone

RM 0.5

CHU

2675

S05-N5X



 Unique Rps1c/3a gene stack with strong Phytophthora root rot field tolerance

- Strong tolerance to Sclerotinia white mould
- Very good performance across a range of soil types

RM

CHU

2825

S12-P3X





Consistent, top-end yield performance

 Exciting Sclerotinia white mould tolerance, additionally supported by genetic background

 Distinguishing Phytophthora root rot field tolerance and Rps1k gene

RM 0.7

S07-K5X



CHU 2700

- Desired Rps3a Phytophthora root rot gene
- Taller plant with excellent standability
- Strong Sclerotinia white mould tolerance

RM 1.4

CHU

2850

S14-U9X





- Performs well across a range of soil types
- Very good tolerance to sudden death syndrome and Sclerotinia white mould
- Rps1c gene with excellent field tolerance to Phytophthora root rot

12

CHU 2875-3300





1.6

CHU 2875 S16-K2X





- Excellent performance across yield levels and soil types allows for ease of placement
- Desired Rps1k/3a Phytophthora gene stack
- · Great emergence and standability

2.9

CHU

3275

S29-R5X





· Excellent speed of emergence and larger plant type for early season establishment

> Outstanding Phytophthora root rot field tolerance with Rps1k genetic resistance

· Very strong performance across soil types while maintaining plant height

CHU

2925

S18-G4X





· Very good standability

- · Rps1c Phytophthora gene with solid emergence across multiple soil types
- Very good stress tolerance

S31-Y2X





CHU 3300

NOTES:

- · Very good sudden death syndrome tolerance coupled with solid emergence
- Medium plant height with very good standability
- Excellent performance on poorly drained soils

20

S20-L8X





• Excellent sudden death syndrome and Sclerotinia white mould tolerance

- Fast emergence under tough soil conditions
- Excels in lower yielding environments

3025

CHU

S22-J4X





- · Excellent performance across most soil types
- Excellent sudden death syndrome tolerance and Sclerotinia white mould tolerance
- Very good stress tolerance

CHU 3075

2.5

CHU

3150

22

S25-B6X





- Tall, bushy plant type provides fast canopy closure
- · Strong Sclerotinia white mould tolerance
- · Outstanding drought tolerance

14

## **SOYBEANS 1**



### **ROUNDUP READY 2 YIELD®**

CHU 2275-2600

NOTES:

RM 0.009

CHU

2275

## S0009-M2



variab
Deper

- Maintains medium plant height across variable environments
- Dependable Phytophthora root rot field tolerance with Rps6 gene
- · Superb Sclerotinia white mould tolerance

RM 0.05

## S007-Y4



CHU 2350 Excellent standability for ease of harvest

- Strong Phytophthora root rot field tolerance with the Rps1c gene
- Solid emergence with excellent Sclerotinia white mould tolerance

RM n na

## S008-N2



CHU 2450

- Large plant type with good canopy closure, even under stress
- Moves south of zone well
- Strong emergence for early-season establishment

RM 0.4

CHU

2600

S04-D3



- Medium plant height with dependable standability
- Known for its excellent Sclerotinia white mould tolerance
- Rps1c gene for Phytophthora root rot with very good field tolerance

·

### CONVENTIONAL

CHU 2600-3150



0.3

CHU

2600

## S03-W4



Excellent disease package for dependable performance

- High yield and export demand
- Consistent performer in most soil types and tillage systems

0.4

CHU

2625

S04-K9





· Soybean cyst nematode resistance in a food-grade variety

- Excellent Phytophthora root rot field tolerance with Rps1c gene
- Very good emergence and early season vigour providing a strong start

0.7

CHU

2700

S07-D2



• Thin line plant type with upright branching that is adapted to narrow rows

· Strong agronomics including Sclerotinia white mould tolerance

Rps3a with good field tolerance of Phytophthora root rot

0.7

CHU

2725

S07-M8



- Tall plant type with very good standability
- Rps1c with above average Phytophthora root rot field rating
- Developed with Sclerotinia white mould tolerance

CHU

2800

S10-R2





- Tall, bushy plant type that canopies quickly
- · Excellent yields on tough acres
- · Great root disease protection package for early-season start

CHU

2825

S12-J7





- Performs across a range of soil types allowing for ease of placement
- Strong soybean cyst nematode protection and desired Rps1c/3a Phytophthora gene stack
- Exceptional food-grade qualities to drive higher premiums

1.4

CHU

2850

S14-H3





- Soybean cyst nematode protection for critical maturity
- Attractive field appearance with excellent standability
- · Well adapted across variable yield environments

CHU

2875

S16-F5





- Responds to highly productive, well-drained soil types
- · Very strong standability for ease of harvest
- Medium plant height with a medium canopy

1.8

CHU

2900

S18-R6





- · Excellent stress tolerance
- Excellent Sclerotinia white mould tolerance
- Broadly adapted to most tillage systems and soil types

2.0

S20-G7



 Above average protein and large seed size for the export market Solid agronomics that include Sclerotinia CHU

white mould tolerance

· Medium-tall plant with a thin canopy type

20

CHU

3000

2.1

CHU

3050

3000

S20-M1





- Noticeable speed of emergence and vigour allows for broad placement, including on tough acres
- Maintains height for placement south of zone
  - Yellow hilum with above average protein and sugars

NEW

S21-C6





- Consistent performance across yield levels
- Robust plant type that canopies early
- · Solid performance across soils, excelling on clay-based soils

NEW

CHU

3150

2.5

S25-P2

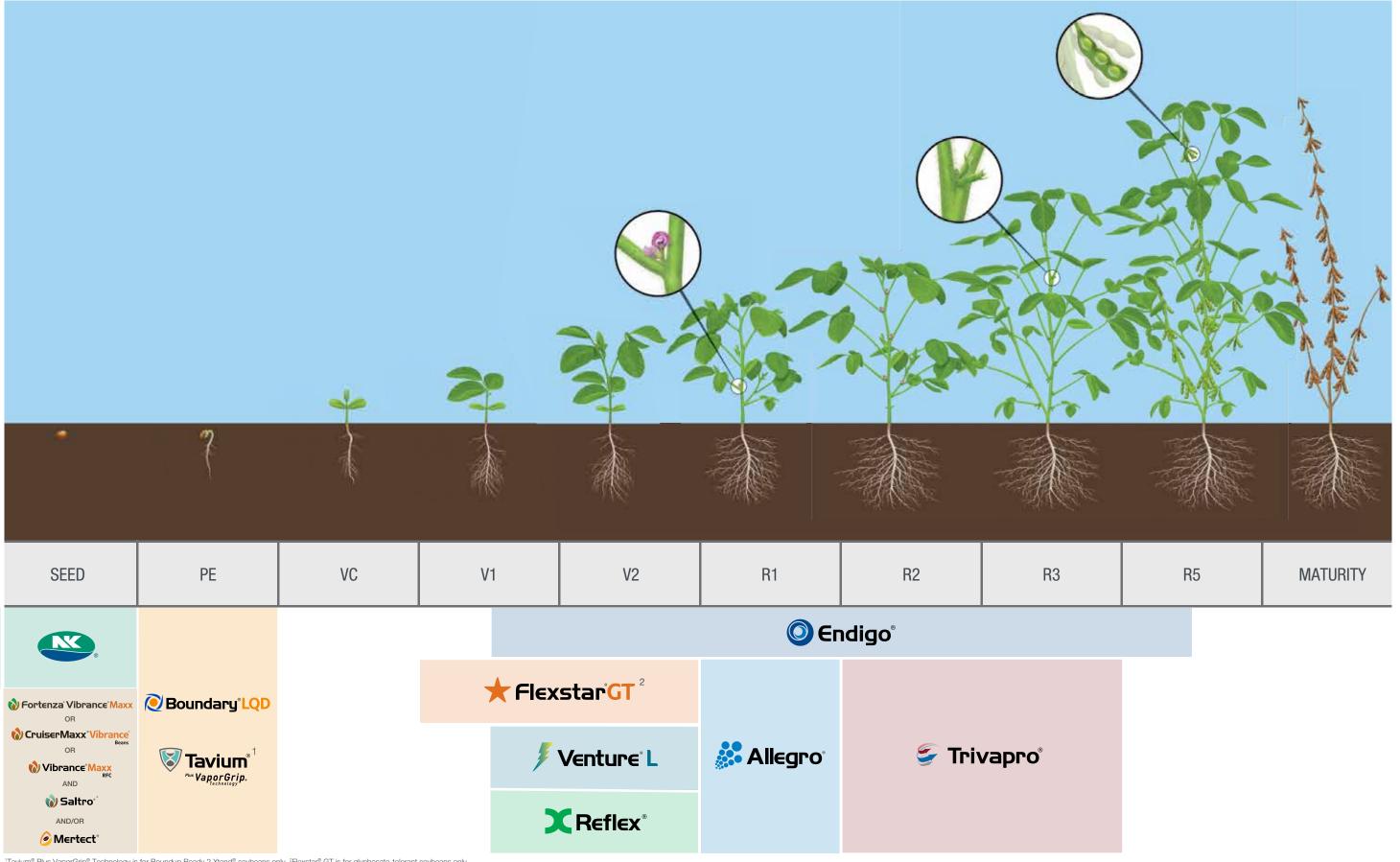




- · Broadly adapted across a range of soil types with large plant type
- Excellent performance across yield levels, excelling in lower yield environments
- · Great sudden death syndrome tolerance with solid Phytophthora root rot field tolerance

Conventional varieties available by seed count!





<sup>&#</sup>x27;Tavium® Plus VaporGrip® Technology is for Roundup Ready 2 Xtend® soybeans only. ²Flexstar® GT is for glyphosate-tolerant soybeans only



## **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.

	INSECT PROTECTION	DISEASE PROTECTION	
<b>Saltro</b> ®		Control of root infection     Suppression of sudden death syndrome symptoms	
Fortenza Vibrance Maxx	<ul> <li>European chafer</li> <li>June beetle</li> <li>Seed corn maggot</li> <li>Wireworm</li> <li>Bean leaf beetle</li> <li>Black cutworm</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 Phytophthora-tolerant varieties</li> </ul>	ROO POV
CruiserMaxx°Vibrance°	<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 Phytophthora-tolerant varieties</li> </ul>	Also in Vigor Tr
Vibrance Maxx RFC		<ul> <li>Seed rot</li> <li>Seedling blight</li> <li>Pre- and post-emergence damping-off</li> <li>Early-season root rot on Phytophthora-tolerant varieties</li> </ul>	ROOT POV
ApronXL°		Early-season root rot on Phytophthora-sensitive varieties	







## Fortenza Vibrance Maxx

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

Fortenza® Vibrance® Maxx is a non-neonicotinoid soybean seed treatment. It delivers control of below-ground pests such as European chafer, June beetle, wireworm and seed corn maggot, as well as above-ground pests such as bean leaf beetle and black cutworm. 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.





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syngenta





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

### Corn rootworm control

Agrisure Duracade expresses a protein with a unique binding site in the gut of the corn rootworm, reducing pressure on the corn seedling and helping hybrids protect against feeding for a 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 genetic yield potential and increase profit opportunities.



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



Non-traited, Ridgetown, ON, July 28th, 2017

	DESCRIPTION	E-Z REFUGE	TYPE OF INSECTS Controlled <sup>1</sup>
AgrisureDuracade* 5222 E-Z Refuge*	Industry-leading above- and below-ground insect control.  Agrisure Duracade 5222 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.	<b>~</b>	Above- and below-ground insects
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.	<b>~</b>	Above- and below-ground insects

22 •——

<sup>&</sup>lt;sup>1</sup>Consult bag tag for a complete list of insects controlled.



### **Corn trait index**



Agrisure Viptera® is the first vegetative insecticidal protein in corn and is the only trait currently available that effectively controls western bean cutworm. It also protects the crop from key above-ground insects like corn earworm, black cutworm and fall armyworm.

### Western bean cutworm control

Western bean cutworm is native to North America and has progressively spread through Ontario and Quebec. 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 for effective control of western bean cutworm.

	DESCRIPTION	E-Z REFUGE	TYPE OF INSECTS CONTROLLED <sup>1</sup>
Agrisure Viptera 3220 E-Z Refuge'	The most comprehensive above-ground insect control with two modes of action and integrated E-Z Refuge. Tolerant to glyphosate.	<b>~</b>	Above-ground insects



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.

	DESCRIPTION	E-Z REFUGE	TYPE OF INSECTS CONTROLLED <sup>1</sup>
Agrisure 3120 E-Z Refuge	This trait stack provides two modes of action against above-ground pests and glyphosate tolerance.	<b>✓</b>	Above-ground insects

<sup>1</sup>Consult bag tag for a complete list of insects controlled.





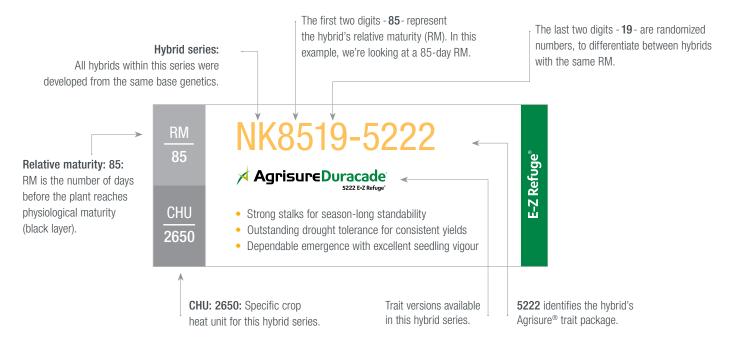
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NOTES:	
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### **Description key**



## 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.

- Broad lepidopteran
- Corn borer
- 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 Canadian Food Inspection Agency for managing insect resistance.

**Example:** A hybrid with the Agrisure Viptera 3120A trait stack features one mode of action on broad lepidopterans, two modes of action on corn borer and no mode of action on corn rootworm. The name also tells you that this hybrid has Agrisure Artesian technology and integrated single-bag refuge.

Agrisure	Duracade	5	2	2	2	Α	E-Z Refuge
		Toohnology			Traits		
Master brand	Brand suffix	Technology series	Broad lepidopteran	Corn borer	Corn rootworm	Artesian	Integrated, single-bag refuge

26



## **Agronomic characteristics**

		PRODUCT	DUCT MATURITY AGRONOMIC CHARACTERISTICS								SEEDING RATE POP			POPULATION INSIDERATIONS			ADAP Yie	TATION TO	O SOILT RONMEN	YPES/ ITS	CONTINUOUS CORN	NCE	SILAGE RATINGS														
	Brand name	Trait	Agrisure Viptera® E-Z-1 Refuge	Relative maturity (RM)	CHU RM to silk	RM to blacklayer	Emergence	Seedling vigour	Plant height	Stavareen	Drydown	Test weight	Yield in 28–30K	Yield in 30–34K	Yield in 34–37K	Yield In >3/K	Root strength	Stalk strength		Drought prone	Highly productive	Variable soils	Poorly drained	Continuous corn	Grey leaf spot	Northern corn leaf blight	Goss's wilt	Eyespot	Yield (ton/ac)	CP (% of DM)	Starch (% of DM)	TDN (% of DM)	NEL (Mcal/lb)	Milk (lbs/ton)	Milk (lbs/ac)	Beef (lbs/ton)	Beef (lbs/ac)
	NK7837	3220	111	78 23	350 78	78	3	3	4	3 2	3	2					4	2			*		*		-	-	4	-	-	-	-	-	-	-	-	-	-
	NK8005	3220A	111	80 24	100 78	77	3	3	5 4	1	4	2	*	*			3	3		*		*			-	4	4	3	-	-	-	-	-	-	-	-	-
궂	NK8204	3220	/ / /	82 25	550 84	82	3	2	4 4	4	2	4	*		•	<b>7</b>	2	4	•	<b>V</b>	*				-	4	4	4	_								lacksquare
<2700 CHU	NK8519	3220	/ / /	85 26	650 86	85	3	2	3 4	3	3	3	*	*	* '	7	4	3		*	*	*		•	-	3	4	4	*		•	*	-	*	*	*	*
<2	NK8519	5222	/ / /	85 26	650 86	85	3	2	3 4	3	3	3	*	*	*	<b>7</b>	4	3	,	*	*	*		*	-	3	4	4	*			*	-	*	*	*	*
	NK8618	3120A	/ /	86 20	650 84	85	3	3	3 !	5 3	4	2	*	*	*		3	2		*	*	*	*	•	-	3	4	3	*		•				•		
	NK8618	5122A	1 1	86 20	650 84	85	3	3	3 5	5 3	4	2	*	*	*		3	2	,	*	*	*	*	•	-	3	4	3	*								
	NK8920	3120	\[   \]	89 2	725 89	88	2	2	3 5	5 2	3	3	*	*	* 7	<b>k</b>	3	3		<b>V</b>	*			•	-	4	4	3	*				-				
	NK8920	5122	/ /	89 2	725 89	88	2	2	3 5	5 2	3	3	*	*	* 7	*	3	3	•		*			*	-	4	4	3	*				-				
	NK9227	3220A	1 1 1	92 2	750 92	92	2	3	2 2	2 3	3	2	•	*	* 7	<b>k</b>	4	2		*	*	*	•	•	-	3	4	- '	*	*	•	•			*		*
	NK9227	5222A	1 1 1	92 2	750 92	92	2	3	2 2	2 3	3	2		*	* 7	*	4	2		*	*	*		*	-	3	4	-	*	*					*		*
-3100 CHU	NK9535	3220	/ / /	95 28	350 95	95	3	3	3 4	2	3	2	*	*	* 7	<b>k</b>	3	2		*	*	*	*	•	4	5	3	2	*		*	•		*	*	*	*
2700-3	NK9610	5122	<b>√</b> √	95 28	350 93	94	3	3	3 4	1 3	3	3		*	* 7	*	2	3	`		*			*	-	4	5	3	-	-	-	-	-	-	-	-	-
27	NK9738	3220	/ / /	97 29	900 95	97	2	2	3 2	2 3	3	3	•	•	* 7	<b>k</b>	4	2	:	×	*	_	*	•	4	4	4	- '	*		*	*	*	*	*	*	*
	NK9738	5222	1 1 1	97 29	900 95	97	2	2	3 2	2 3	3	3			* 7	*	4	2		×	*		*	*	4	4	4	-	*		*	*	*	*	*	*	*
	NK0243	5122	1 1	102 30	075 101	102	3	3	5 5	5 1	3	5			* 7	*	2	2		*	*	*	*	*	3	4	3	3	-	-	-	-	-	-	-	-	-
	NK0472	5222	/ / /	103 3	100 103	100	2	3	4	3	4	2		*	* 7	*	2	2			*		*	*	4	5	3	3	-	-	-	-	-	-	-	-	-

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

### Corn chart key

## Agronomic and disease tolerance ratings and population considerations

1 = Best

9 = Worst

- = Under evalutation

## Continuous corn, seeding and adapation ratings

- ★ Above average performance
- Average performance
- Hybrid may not perform consistently
- \* Hybrid not recommended
- Data not available

#### Silage ratings

- ★ Greatest opportunity to maximize performance relative to other hybrids in maturity group
- Performs well relative to other hybrids in maturity group
- 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

### ✓ Agrisur∈Duracade

Hybrids highlighted green are Agrisure Duracade.

### ✓ Agrisur∈Artesian

Hybrids highlighted blue are Agrisure Artesian. These hybrids maximize yield when it rains and increase yield by up to 15% when it doesn't.

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.

### LIBERTY LINK W

28 \_\_\_\_\_

Seed products with the LibertyLink® (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 excellent weed control.

Consult bag tags for E-Z Refuge product herbicide options. Only those labeled E-Z-1 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.

All hybrid chassis and/or chassis combinations are subject to change.



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### We've captured it! Innovative corn disease control

Turns out, you can catch lightning in a bottle. Miravis® Neo fungicide lets you manage for yield AND quality in your corn without compromise. Miravis® Neo delivers best-in-class protection against the broadest range of quality and yieldrobbing diseases - including Fusarium for a higher-yielding, healthier crop, and a difference you can clearly see.

For more information, visit Syngenta.ca/Miravis-Neo-Corn



## NK7837-3220

## Agrisure Viptera

CHU 2350

- Very good emergence and vigour
- Heavy test weight with good grain quality
- Great drought tolerance for consistent yields

CHU

2400

## NK8005-3220A





 Maximizes vield when it rains: increases vield when it doesn't

- Early flowering for good northern adaptation
- Heavy test weight
  - ★ May benefit from an application of Miravis® Neo around tasseling

CHU

2725

86

CHU

2650

## NK8920-3120/5122

NK8618-

yield when it doesn't

Strong stalks and roots

Heavy test weight

3120A/5122A

Agrisure3120 AgrisureDuracade

Maximizes yield when it rains; increases

Agrisure3120 AgrisureDuracade

Excellent emergence and seedling vigour for

Moderate stature with strong roots and stalks

Superb staygreen and late-season plant health

## NK8204-3220

## Agrisure Viptera 3220 E-Z Refuge

CHU 2550

- Maximum yields on highly productive soils
- Very strong roots
- Strong emergence with great early vigour

## NK9227-3220A/5222A

✓ Agrisur∈Viptera ✓ Agrisur∈Duracade

E-Z Refuge

E-Z Refuge

CHU 2750

- · Maximizes yield when it rains; increases yield when it doesn't
- Superb stalk strength for ease of harvest
- Very good staygreen and drydown

## NK8519-3220/5222

✓ Agrisur∈Viptera ✓ Agrisur∈Duracade

- Strong stalks for season-long standability
- · Outstanding drought tolerance for consistent yields
- Dependable emergence with excellent seedling vigour

95

CHU

2850

## NK9535-3220

🗡 AgrisureViptera 🛚 💥 Miravis 🖰



E-Z Refuge

- Broad adaptation across yield environments
- Superb stalks for season-long standability
- Solid agronomics for continuous corn acres
- × May benefit from an application of Miravis® Neo around tasseling

CHU 2650



## NK9610-5122

### ✓ Agrisur∈Duracade¹

2850

- · Very strong stalks and roots allow for higher populations
- · Early flower, high test weight and excellent agronomics allow movement north of zone



2900

- Dependable emergence with strong early vigour
- Responds well to high populations
- Superb stalks for season-long standability

## NK0243-5122

## AgrisureDuracade 5122 E-Z Refuge\*

CHU 3075

- · Performs extremely well south of zone
- · Very strong stalks, roots and staygreen for season-long standability

3100

## NK0472-5222





- · Excellent stalks and roots
- · Solid emergence and early vigour for fast stand establishment
- × May benefit from an application of Miravis® Neo around tasseling

E-Z Refuge

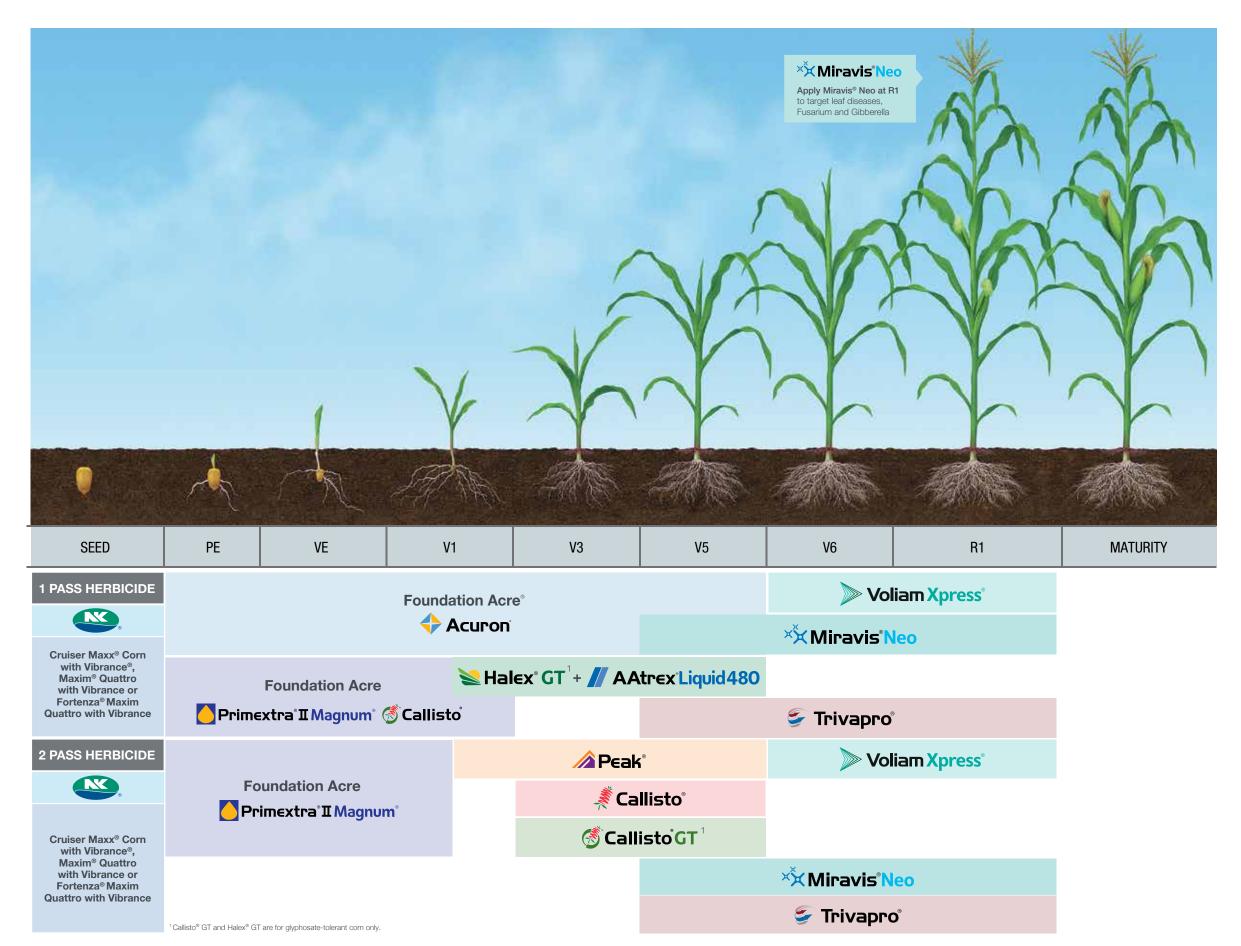
E-Z Refuge<sup>®</sup>

NOTES:

**CORN ♥** 









## **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	
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>	ROOTING
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>	Also includes Vigor Trigger®
Maxim <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>	ROOTING





### The value of seed applied insecticides

Seed applied insecticides (SAIs) represent one of the most 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 per acre compared to foliar and soil-applied pesticides, and minimize off-target drift, reducing the impact on non-target organisms. For growers who require a fungicide-only seed treatment, NK soybean seed is available treated with Vibrance Maxx RFC seed treatment, and NK corn seed is available treated with Maxim Quattro with Vibrance seed treatment.

### Protecting pollinators on the farm

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 seed and to further efforts on other bee health issues.

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.

### For more information, please visit beehealth.ca

Always read and follow label directions.

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## **STEWARDSHIP**

Syngenta is committed to the 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 corn, Enlist E3™ soybean, Roundup Ready 2 Yield® soybean, Roundup Ready 2 Xtend® soybean and conventional soybean seed will be delivered only to growers with valid agreements.

### Seed stewardship is everyone's responsibility

Before opening a bag of seed, be sure to read and understand the stewardship requirements applicable to the seed, including refuge requirements. In addition to the information provided on this page, stewardship requirements may be found in the Syngenta Stewardship Agreement that you sign and/or on the bags/tags accompanying the seed. By opening and using a bag of seed, you are reaffirming your obligation to comply with those stewardship requirements.

### Syngenta stewardship corn best management practices

### Insect resistance management (IRM)

Bt corn must have an insect resistance management plan. This is a requirement set by the Canadian Food Inspection Agency (CFIA). It is also a strategy endorsed by leading scientists to reduce the risk of insect populations developing resistance to Bt corn.

Syngenta is committed to following, supporting, and providing growers with relevant information to help them implement the IRM requirements set by the CFIA. Therefore, all growers must sign a Syngenta Stewardship Agreement before ordering any Agrisure insect protected corn. Doing so will, in part, demonstrate their commitment to supporting the best management practices to reduce the potential risk of insects developing resistance to the Bt traits.

It is important to recognize that different products may have different insect resistance management requirements.

## 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!

Proper observation of your fields, as well as other integrated pest management strategies, will also aid in increasing the longevity of insect traits in the field. In order to first determine potential pest impact, a grower should consider pest populations in the area, crop damage from insect feeding seen in the previous year, and the rotation of the crop (to consider pest overwintering habitats).

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

### Growers should rotate every year if:

- Fields have been in long-term continuous corn systems
- Target insect populations are high
- There have been problems with insect-resistant trait performance

Rotation to crops such as soybeans, alfalfa or small grains will aid in removing the pests' food source and cause a population shift.

For more information about Syngenta corn stewardship, please visit: **Syngenta.ca/seedstewardship** 





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 Agreement that you sign. By opening and using a bag of seed, you are reaffirming your obligation to comply with those stewardship requirements.

To view recommended planting layouts, maps and configurations, please visit the Canadian Corn Pest Coalition at cornpest.ca or request a Grower's Handbook at 1-800-756-7333.

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



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#### **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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The transgenic soybean event in Enlist E3™ soybeans is jointly developed and owned by Dow AgroSciences LLC and M.S. Technologies L.L.C.





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 Technology contains genes that confer tolerance to glyphosate. Roundup Ready 2 Xtend® soybeans contain genes that confer tolerance to glyphosate and dicamba. Glyphosate will kill crops that are not tolerant to glyphosate. Dicamba will kill crops that are not tolerant to dicamba. Roundup Ready 2 Xtend®, Roundup Ready 2 Yield®, Roundup Ready®, VaporGrip® and Plus VaporGrip® Technology and Design are registered trademarks of Bayer Group, Monsanto Canada ULC licensee. © 2020 Bayer Group. All rights reserved.

Hybrid 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 internal trials, field observations and/or 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.

These are general considerations. Always consider the specific situation on your field and exercise good agronomic practices.

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

The seeds, traits, and technology contained herein, as well as the parental lines and progeny, are covered by intellectual property protection, which may include plant variety certificates, trade secrets and patents which may include, but are not limited to, patented germplasm, transgenic traits, native traits, transformation technologies, methods of use and breeding methods. The purchase/bailment/transfer of these seeds conveys no right under any intellectual property to use these seeds for any purpose. A conditional right for a specific use, including planting for a single commercial crop, must be first obtained by entering into a Syngenta Stewardship Agreement.

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. Cruiser Maxx Vibrance Beans is an on-seed application of Cruiser Maxx Beans Seed Treatment insecticide/fungicide and Vibrance 500 FS Seed Treatment fungicide. Fortenza Maxim Quattro with Vibrance is an on-seed application of Fortenza Seed Treatment insecticide, Maxim Quattro Seed Treatment fungicide and Vibrance 500 FS Seed Treatment fungicide. Fortenza Vibrance Maxx is an on-seed application of Fortenza Seed Treatment insecticide and Vibrance Maxx RFC Seed Treatment fungicide. Maxim Quattro with Vibrance is an on-seed application of Maxim Quattro Seed Treatment fungicide and Vibrance Maxx RFC Seed Treatment fungicide. Miravis® Neo 300SE fungicide. Trivapro® is a co-pack of Trivapro® A fungicide and Trivapro® B fungicide. Adtrex®, Acuron®, Agrisure®, Agrisure Artesian®, Agrisure Duracade®, Agrisure Viptera®, Apron Maxx®, Apron XL®, Boundary®, Callisto®, Cruiser®, Cruiser Maxx®, Endigo®, E-Z Refuge®, Flexstar®, Fortenza®, Foundation Acre®, Halex®, IP Globe™, Magnum®, Maxim®, Mertect®, Miravis®, NK®, NK® and Design, Peak®, Primextra®, Reflex®, Rooting Power®, RTA®, Saltro®, SCN Solutions™, Seedcare™, Tavium®, Treat Right™, Trivapro®, Venture®, Vibrance®, Vigor Trigger®, Voliam Xpress®, the Alliance Frame, the Purpose Icon and the Syngenta Iogo are trademarks of a Syngenta Group Company. Allegro® is a trademark of ISK Biosciences Corporation. Respect the Refuge® is a trademark of the Canadian Seed Trade Association. Other trademarks are property of their respective owners.

# Treat **RIGHT**

Go beyond seed protection.

Treat Right is a stewardship initiative brought to you by Syngenta Seedcare™ and The Canadian Seedcare Institute, sharing best practices and our experience with the industry-led Agrichemical Warehousing Standards Association (AWSA) Accredited Seed Treatment Operation audit.

Whether you're a grower or a commercial or mobile seed treater, we're here to help with how-to videos, downloadable resources and treating tips.

For more information, or to subscribe to email updates, visit Syngenta.ca/TreatRight



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