

## Bt Corn Products/Traits Currently Available in Canada – As of April 2015

Trade Name	Transgenic Component	Transgenic Events	Target Pests <sup>1</sup>	Herbicide Tolerance <sup>2</sup>	Refuge % & Location	EU Approved
<b>Agrisure® Products</b>						
Agrisure® CB/LL	Cry1Ab	Bt 11	ECB	LL	20% - 400 m	Y
Agrisure® GT/CB/LL	Cry1Ab	Bt11 GA21	ECB	GT LL	20% - 400 m	Y
Agrisure® 3000GT	Cry1Ab mCry3A	Bt11 GA21 MIR604	CRW, ECB	GT LL	20% - adjacent	Y
Agrisure Viptera® 3110	Vip3A Cry1Ab	Bt11 GA21 MIR162	BCW, CEW, ECB, FAW, WBC	GT LL	20% - 400 m	N*
Agrisure Viptera® 3111	Vip3A Cry1Ab mCry3A	Bt11 GA21 MIR604 MIR162	BCW, CEW, CRW, ECB, FAW, WBC	GT LL	20% - adjacent	N*
Agrisure Viptera® 3220	Cry1Ab Vip3A Cry1F	Bt11 GA21 TC1507 MIR162	BCW, CEW, ECB, FAW, WBC	GT LL	5% IR	N*
Agrisure® 3122	Cry1Ab mCry3A Cry1F Cry34Ab1/Cry35Ab1	Bt11 GA21 DAS-59122-7 MIR604 TC1507	BCW, CRW, ECB, FAW, WBC	GT LL	5% IR	N*
<b>*stack is not approved but all single traits have approval in the EU</b>						
<b>Genuity®/SmartStax® Products</b>						
Genuity® VT Double PRO® (GENVT2P)	Cry1A.105 Cry2Ab2	MON89034 NK603	CEW, ECB, FAW	RR2	5% - 400 m or 5% IR	Y
Genuity® VT Triple PRO® (GENVT3P)	Cry1A.105 Cry2Ab2 Cry3Bb1	MON88017 MON89034	CEW, CRW, ECB, FAW	RR2	20% - adjacent or 10% IR	Y
Genuity® SmartStax® (GENSS) (Monsanto) or SmartStax® (Dow)	Cry1A.105 Cry2Ab2 Cry1F Cry3Bb1 Cry34Ab1/Cry35Ab1	MON88017 MON89034 TC1507 DAS59122-7	BCW, CEW, CRW, ECB, FAW, WBC	LL RR2	5% - adjacent (2 row minimum) or 5% IR	Y
<b>Herculex® Products</b>						
Herculex® 1 (HX1)	Cry1F	TC1507	BCW, ECB, FAW WBC	LL	20% - 400 m	Y
Herculex® 1 (HX1) w RR2	Cry1F	TC1507 NK603	BCW, ECB, FAW WBC	LL RR2	20% - 400 m	Y
Herculex® XTRA (HXX)	Cry1F Cry34Ab1/Cry35Ab1	TC1507 DAS59122-7	BCW, CRW, ECB, FAW, WBC	LL	20% - adjacent	Y
Herculex® XTRA (HXX) w RR2	Cry1F Cry34Ab1/Cry35Ab1	TC1507 DAS59122-7 NK603	BCW, CRW, ECB, FAW, WBC	LL RR2	20% - adjacent	Y
<b>Optimum® Products</b>						
Optimum® Intrasect® Insect Protection	Cry1F Cry1Ab	NK603 TC1507 MON810	BCW, ECB, FAW, WBC	LL RR2	5% - 400 m	N
Optimum® AcreMax®	Cry1F Cry1Ab	NK603 TC1507 MON810	BCW, ECB, FAW, WBC	LL RR2	5% IR	N
Optimum® Intrasect® Xtra	Cry1F Cry 1Ab Cry34Ab1/Cry35Ab1	NK603 TC1507 MON810 DAS59122-7	BCW, ECB, FAW, WBC, CRW	LL RR2	20% - adjacent	N
Optimum® AcreMax® XTreme	Cry1F Cry1Ab Cry34Ab1/Cry35Ab1 mCry3A	NK603 TC1507 MON810 DAS59122-7 MIR604	BCW, ECB, FAW, WBC, CRW	LL RR2	5% IR	N
Optimum® AcreMax® Xtra	Cry1F Cry 1Ab Cry34Ab1/Cry35Ab1	NK603 TC1507 MON810 DAS59122-7	BCW, ECB, FAW, WBC, CRW	LL RR2	10% IR	N
<b>YieldGard® Products</b>						
YieldGard® CB (YGCB) w/RR2	Cry1Ab	MON810 NK603	ECB	RR2	20% - 400 m	Y
YieldGard® VT Triple® (VT3)	Cry1Ab Cry3Bb1	MON88017 MON810	CRW, ECB	RR2	20% - adjacent	Y
<b>Bt Sweet Corn Products</b>						
Performance Series	Cry1A.105 Cry2Ab2 Cry3Bb1	MON88017 MON89034	CEW, CRW, ECB, FAW	RR2	No refuge required if stubble destroyed within 30 days	Y

<sup>1</sup> Target Insects:

BCW - black cutworm;  
CEW - corn earworm;  
CRW - corn rootworm;  
ECB - European corn borer;  
FAW - fall armyworm;  
WBC - western bean cutworm

<sup>2</sup> Herbicide traits:

GT - glyphosate tolerant;  
LL - Liberty Link / glufosinate tolerant;  
RR2 - Roundup Ready® / glyphosate tolerant

Note: Herbicide tolerances listed are for the non-Integrated Refuge products. Integrated Refuge products may have different herbicide tolerances and herbicide selection should be based on the properties of the refuge hybrid.

IR = refers to Integrated Refuge, where refuge hybrid seed has been pre-mixed with Bt hybrid seed in the bag

This table was modified from the original "Handy Bt Traits Table" by Chris DiFonzo (Michigan State University) and Eileen Cullen (University of Wisconsin-Madison). It was modified by Jocelyn Smith (University of Guelph Ridgetown Campus) and Tracey Baute (OMAFRA) to include products available in Canada.