



Technology	ECB Trait		CRW Trait	Broad Lep	Herbicide		Refuge Requirements	Different insects controlled by technology						
	■	■			RR	LL		ECB	CRW	BCW	FAW	CEW	WBC	SB
Optimum® AcreMax® XTreme (AMXT)	■	■	●		x	x	5% IR	C	C	C	C*	S	S*	C
Optimum® Intrasect® XTreme (CYXR)	■	■	●		x	x	†5%	C	C	C	C*	S	S*	C
Optimum® AcreMax® Xtra (AMX)	■	■	●		x	x	10% IR	C	C	C	C*	S	S*	C
Optimum® AcreMax® Xtra (AMX-R)	■	■	●		x		10% IR	C	C	C	C*	S	S*	C
Optimum® AcreMax® TRIsect® (AMT)	■	■	●		x	x	10% IR	C	C*	C	C*	S	S*	C
Optimum® Intrasect® Xtra (YXR)	■	■	●		x	x	20%	C	C	C	C*	S	S*	C
Optimum® TRIsect® (CHR)	■		●		x	x	20%	C	C*	C	C*	S	S*	C
Optimum® AcreMax® (AM)	■	■			x	x	5% IR	C	NoA	C	C*	S	S*	C
Optimum® AcreMax® (AM-R)	■	■			x		5% IR	C	NoA	C	C*	S	S*	C
Herculex® XTRA/RR (HXX/RR/Q)	■		●		x	x	20%	C	C	C	C*	S	S*	C
Herculex® XTRA (HXX)	■		●				20%	C	C	C	C*	S	S*	C
Herculex® 1 (HX1/RR/S)	■				x	x	*20%	C	NoA	C	C*	S	S*	C
Optimum® AcreMax® 1 (AM1)	■		●		x	x	*20%	C	C	C	C*	S	S*	C
Optimum® AcreMax® RW (AMRW-R)			●		x		10%	NoA	C	NoA	NoA	NoA	NoA	NoA
Optimum® Intrasect® 1 (YHR)	■	■			x	x	*5%	C	NoA	C	C*	S	S*	C
Agrisure Duracade® 5222 E-Z Refuge®	■	■	●	◆	x		5% IR	C	C	C	C	C	C	C
Agrisure Duracade® 5122 E-Z Refuge®	■	■	●		x		5% IR	C	C	C	C*	NoA	S*	C
Agrisure® 3122 E-Z Refuge®	■	■	●		x		5% IR	C	C	C	C*	S	S*	C
Agrisure Viptera® 3111	■		●	◆	x	x	20%	C	C*	C	C*	C	C	C
Agrisure® 3000GT	■		●		x	x	20%	C	C*	NoA	NoA	NoA	NoA	NoA
Agrisure Viptera® 3220 E-Z Refuge®	■	■		◆	x		5% IR	C	NoA	C	C	C	C	C
Agrisure Viptera® 3110	■			◆	x	x	*20%	C	NoA	C	C*	C	C	C
Agrisure® 3010	■				x	x	*20%	C	NoA	NoA	NoA	NoA	NoA	NoA
Refuge Advanced® Powered by SmartStax®	■	■	●		x	x	5% IR	C	C	C	C	C	S*	C
Genuity® SmartStax® (GENSS)	■	■	●		x	x	5% IR	C	C	C	C	C	S*	C
Genuity® VT Triple PRO® (GENVT3P)	■		●		x		10% IR	C	C*	NoA	C	C*	NoA	C
YieldGard VT Triple® (VT3)	■		●		x		20%	C	C*	NoA	NoA	NoA	NoA	NoA
Genuity® VT Double PRO® (GENVT2P)	■				x		5% IR	C	NoA	NoA	C	C*	NoA	C
PowerCore™ Enlist™**	■	■			x	x	5%	C	NoA	C	C	C	S*	C

EVENT (Protein Expressed, Insect Target)

- TC1507 (Cry1F, ECB)
- MON 810 (Cry1Ab, ECB)
- BT11 (Cry1Ab, ECB)
- MON89034 (Cry1A.105 + Cry2Ab2, Broad Lep)
- DAS-59122-7 (Cry34Ab1/Cry35Ab1, CRW)
- MIR604 (mCry3A, CRW)
- MON88017 (Cry3Bb1, CRW)
- Event 5307 (eCry3.1Ab, CRW)
- ◆ MIR162 (Vip3Aa, Broad Lep)

CORN BELT REFUGE GUIDELINES

5% is single bag refuge with refuge blended in the bag, no separate refuge needed
 †5% non-Bt refuge must be within field or directly adjacent
 *5% non-Bt refuge must be within 1/2 mile of the field
 10% is single bag refuge with refuge blended in the bag, no separate refuge needed
 10% & 20% means 10% of CRW refuge is blended in the bag plus 20% non-Bt refuge for ECB must be within 1/2 mile from the field
 20% non-Bt refuge must be within field or directly adjacent
 *20% non-Bt refuge must be within 1/2 mile of the field

**2,4-D and FOP resistance

ECB - European corn borer
 CRW - Corn rootworm
 BCW - Black cutworm
 FAW - Fall armyworm
 CEW - Corn earworm
 WBC - Western bean cutworm
 SB - Common stalk borer
 S* - In certain geographies, Western Bean Cutworm in is no longer controlled by this trait
 C - Control of the insect
 C* - No reported resistance in the Burrus footprint, but resistance exists in other regional geographies
 S - Suppression of the insect
 NoA - No activity on the insect
 x - Includes herbicide tolerance
 RR - Roundup Ready® (Glyphosate)
 LL - LibertyLink® (Glufosinate)
 IR - Integrated Refuge