

TRAIT TEST GUIDE

****This trait table was adapted from *The Handy Bt Trait Table* for use by Iowa State University Seed Lab with permission from Chris DiFonzo/Michigan State University. Version: March 2023**

CORN			
TRADEMARK NAME, Listed A-Z	ELISA TESTING	INSECT PEST TARGETS	HERBICIDE TOLERANCE
<i>*former name in italics if applicable</i>	<i>Font type denotes target: caterpillar or rootworm</i>		<i>(? = check bag)</i>
AcreMax	Cry1Ab - Cry1F	CEW FAW WBC	GLY LL
AcreMax CRW	Cry34Ab1 - Cry35Ab1	NCR WCR	GLY LL
AcreMax1	Cry1F - Cry34Ab1 - Cry35Ab1	ECB FAW NCR SWCB WBC WCR	GLY LL
AcreMax Leptra	Cry1Ab - Cry1F - Vip3A		GLY LL
AcreMax TRisect	Cry1Ab - Cry1F - mCry3A	CEW FAW WBC WCR	GLY LL
AcreMax Xtra	Cry1Ab - Cry1F - Cry34Ab1 - Cry35Ab1	CEW FAW NCR WBC WCR	GLY LL
AcreMax Xtreme	Cry1Ab - Cry1F - Cry34Ab1 - Cry35Ab1 - mCry3A	CEW FAW WBC WCR	GLY LL
Agrisure 3010	Cry1Ab	CEW	GLY LL
Agrisure 3000GT & 3011A	Cry1Ab - mCry3A	CEW WCR	GLY LL
Agrisure Above = Agrisure 3120EZ			
Agrisure Above Refuge Renew 3120	Cry1Ab - Cry1F	CEW FAW WBC	GLY LL?
Agrisure Total = Agrisure 3122EZ			
Agrisure Total Refuge Renew = 3122	Cry1Ab - Cry1F - Cry34Ab1 - Cry35Ab1 - mCry3A	CEW FAW WBC WCR	GLY LL?
Agrisure Viptera 3110	Cry1Ab - Vip3A		GLY LL
Agrisure Viptera 3111	Cry1Ab - Vip3A - mCry3A	WCR	GLY LL
Duracade = Agrisure 5122EZ			
Duracade Refuge Renew = 5122	Cry1Ab - Cry1F - eCry3.1Ab - mCry3A	CEW FAW WBC WCR	GLY LL?
Duracade Viptera = Agrisure 5222EZ			
Duracade Viptera Refuge Renew	Cry1Ab - Cry1F - Vip3A - eCry3.1Ab - mCry3A	WCR	GLY LL?
Duracade Viptera Z3 = 5332EZ			
Duracade Viptera Z3 Reguge Renew	Cry1Ab - Cry1A.105 - Cry2Ab2 - Vip3A - eCry3.1Ab - mCry3A	WCR	GLY LL?
Herculex I	Cry1F	ECB FAW SWCB WBC	GLY LL
Herculex RW	Cry34Ab1 - Cry35Ab1	NCR WCR	GLY LL
Herculex XTRA	Cry1F - Cry34Ab1 - Cry35Ab1	ECB FAW NCR SWCB WBC WCR	GLY LL
Intrasect	Cry1Ab - Cry1F	CEW FAW WBC	GLY LL
Intrasect TRisect	Cry1Ab - Cry1F - mCry3A	CEW FAW WBC WCR	GLY LL
Intrasect Xtra	Cry1Ab - Cry1F - Cry34Ab1 - Cry35Ab1	CEW FAW NCR WBC WCR	GLY LL
Intrasect Xtreme	Cry1Ab - Cry1F - Cry34Ab1 - Cry35Ab1 - mCry3A	CEW FAW WBC WCR	GLY LL
Leptra	Cry1Ab - Cry1F - Vip3A		GLY LL
Powercore	Cry1A.105 - Cry2Ab2 - Cry1F	CEW WBC	GLY LL
Powercore Refuge Adv.	Cry1A.105 - Cry2Ab2 - Cry1F	CEW WBC	GLY LL
Powercore Enlist Refuge Adv.	Cry1A.105 - Cry2Ab2 - Cry1F	CEW WBC	2,4-D fops
QROME	Cry1Ab - Cry1F - Cry34Ab1 - Cry35Ab1 - mCry3A	CEW FAW WBC WCR	GLY LL
SmartStax & Genuity Smartstax	Cry1A.105 - Cry2Ab2 - Cry1F - Cry3Bb1 - Cry34Ab1 - Cry35Ab1	CEW NCR WBC WCR	GLY LL
SmartStax Enlist	Same as SmartStax	CEW NCR WBC WCR	GLY LL 2,4-D fops
SmartStax Enlist Refuge Adv.	Same as SmartStax	CEW NCR WBC WCR	GLY LL 2,4-D fops
SmartStax Refuge Adv. Or RIB Complete	Same as SmartStax	CEW NCR WBC WCR	GLY LL
SmartStax PRO	Cry1A.105 - Cry2Ab2 - Cry1F - Cry3Bb1 - Cry34Ab1 - Cry35Ab1 - dvSnf7	CEW WBC	GLY LL
SmartStax PRO Enlist	Same as SmartStax Pro	CEW WBC	GLY LL 2,4-D fops
SmartStax PRO Enlist Refuge Adv.	Same as SmartStax Pro	CEW WBC	GLY LL 2,4-D fops
SmartStax PRO Refuge Adv. RIB Complete, or w/RNAi Tech	Same as SmartStax Pro	CEW WBC	GLY LL
Trecepta RIB Complete	Cry1A.105 - Cry2Ab2 - Vip3A		GLY
TRisect	Cry1F - mCry3A	ECB FAW SWCB WBC WCR	GLY LL
Viptera = Agrisure Viptera 3220EZ			
Viptera Refuge Renew = 3220	Cry1Ab - Cry1F - Vip3A		GLY LL?
Viptera Z3 = Agrisure Vip 3330EZ			
Viptera Z3 Reguge Renew = 3330	Cry1Ab - Cry1A.105 - Cry2Ab2 - Vip3A		GLY LL?
Vorceed Enlist	Cry1A.105 - Cry2Ab2 - Cry1F - Cry3Bb1 - Cry34Ab1 - Cry35Ab1 - dvSnf7	CEW NCR WBC	GLY LL 2,4-D fops
VT Double PRO	Cry1A.105 - Cry2Ab2	CEW	GLY
VT2 PRO RIB Complete	Cry1A.105 - Cry2Ab2	CEW	GLY
VT Triple PRO	Cry1A.105 - Cry2Ab2 - Cry3Bb1	CEW NCR WCR	GLY
VT3 PRO RIB Complete	Cry1A.105 - Cry2Ab2 - Cry3Bb1	CEW NCR WCR	GLY
VT4 Pro w/RNAi Tech. *Expected 2024	Cry1A.105 - Cry2Ab2 - Vip3A - Cry3Bb1 - dvSnf7		GLY
YieldGard Corn Borer	Cry1Ab	CEW	GLY
YieldGard Rootworm	Cry3Bb1	NCR WCR	GLY
YieldGard VT Triple	Cry1Ab - Cry3Bb1	CEW NCR WCR	GLY

ELISA TESTS	
INSECT PEST TARGETS	
BCW	black cutworm
CEW	corn earworm
CRW	corn rootworm
ECB	European corn borer
FAW	Fall armyworm
NCR	northern corn rootworm
SB	stalk borer
SCB	sugarcane borer
SWCB	southwestern corn borer
TAW	true armyworm
WBC	western bean cutworm
WCR	western corn rootworm

Yellow = ELISA Tests for Pest Targets/Abbreviations
Green = Herbicide Tolerance Weed tests/Abbreviations

Herbicide	
GLY	glyphosate/Roundup-Ready
LL	glufosinate/Liberty Link
2, 4D	2, 4-D/Enlist

SOYBEAN			
TRADEMARK NAME	NO ELISA TEST TYPES	HERBICIDE TOLERANCE	TEST INITIALS
Roundup Ready 2 Xtend		Glyphosate Dicamba	RR DMO
XtendFlex		Glyphosate Dicamba Glufosinate	RR DMO LL
Enlist E3		Glyphosate Glufosinate 2,4-D	RR LL ENLIST
LibertyLink GT27 (LLGT27)		Isoxaflutole Glyphosate Glufosinate	IFT RR LL

Blue = Soybean Herbicide Tolerance Weed Tests/Abbreviations