

# Corn Traits and Technologies

Efficacy levels based on Pioneer, Dow AgroSciences and/or independent university entomologist results against susceptible insect populations. Product responses can vary by location, pest population, environmental conditions, and agricultural practices.

# Various factors, including pest pressure, reduced susceptibility, and insect resistance in some pest populations may affect efficacy of certain corn technology products in some regions. To help extend durability of these technologies, we recommend you implement Integrated Pest Management practices such as crop rotation, cultural and biological control tactics (including rotating sources of Bt-protected corn traits), pest scouting, and appropriate use of pest thresholds when employing management practices such as insecticide application. You must also plant the required refuge when using these technologies. Please contact your sales professional or consult with your local university extension for more information regarding insect resistance management guidelines, best management practices and to understand whether there has been a shift in susceptibility or insect resistance with certain pests documented in your area.

\* Western bean cutworm has been removed from the product use statement for several corn products that contain Herculex® I (Cry1F) but lack another mode of action for western bean cutworm due to a wide-spread decrease in susceptibility indicating the possibility of field-evolved resistance to Cry1F in most geographies.

Technology Segment Identifiers	Corn Technology Traits	Herbicide Tolerance			Insect Efficacy Levels													
		Enlist (2,4-D choline)	LibertyLink (glufosinate)	Roundup (glyphosate)	European Corn Borer	Corn Earworm#	Western Bean Cutworm*	Fall Armyworm#	Black Cutworm	Southwestern Corn Borer#	Lesser Cornstalk Borer	Sugarcane Borer	Southern Cornstalk Borer	Stalk Borer (Common)	Western Corn Rootworm#	Northern Corn Rootworm	Mexican Corn Rootworm	
Q, LL, RR2	Qrome®		X	X	C	S		C	C	C	C	C	C	C	S	C	C	C
VYHR, LL, RR2	Optimum® Leptra®		X	X	C	C	C	C	C	C	C	C	C	C				
CHR, LL, RR2	Optimum® TRIssect®, LibertyLink®, Roundup Ready® Corn 2		X	X	C	S		C	C	C	C	C	C	C		C	C	C
YHR, LL, RR2	Optimum® IntraSect®, LibertyLink®, Roundup Ready® Corn 2		X	X	C	S		C	C	C	C	C	C	C	S			
YXR, LL, RR2	Optimum® IntraSect® Xtra, LibertyLink®, Roundup Ready® Corn 2		X	X	C	S		C	C	C	C	C	C	C	S	C	C	C
CYXR, LL, RR2	Optimum® IntraSect® XTreme, LibertyLink®, Roundup Ready® Corn 2		X	X	C	S		C	C	C	C	C	C	C	S	C	C	C
CYHR, LL, RR2	Optimum® IntraSect® TRIssect®, LibertyLink®, Roundup Ready® Corn 2		X	X	C	S		C	C	C	C	C	C	C	S	C	C	C
AM, LL, RR2	Optimum® AcreMax®		X	X	C	S		C	C	C	C	C	C	C	S			
AM1, LL, RR2	Optimum® AcreMax® 1		X	X	C	S		C	C	C	C	C	C	C		C	C	C
AML, LL, RR2	Optimum® AcreMax® Leptra®		X	X	C	S	C	C	C	C	C	C	C	C				
AMX, LL, RR2	Optimum® AcreMax® Xtra		X	X	C	S		C	C	C	C	C	C	C	S	C	C	C
AMXT, LL, RR2	Optimum® AcreMax® XTreme		X	X	C	S		C	C	C	C	C	C	C	S	C	C	C
AMT,LL,RR2	Optimum® AcreMax® TRIssect®		X	X	C	S		C	C	C	C	C	C	C	S	C	C	C
AMRW, LL, RR2	Optimum® AcreMax® RW		X	X												C	C	C
HX1, LL, RR2	Herculex® I		X	X	C	S		C	C	C	C	C	C					
HXX, LL, RR2	Herculex® XTRA		X	X	C	S		C	C	C	C	C	C		C	C	C	
SSX	SmartStax®		X	X	C	C	C	C	C	C	C	C	C	C	C	C	C	C
SSXE	SmartStax®, Enlist™	X	X	X	C	C	C	C	C	C	C	C	C	C	C	C	C	C
PW	PowerCore®		X	X	C	C	C	C	C	C	C	C	C	C				
PWE	PowerCore®, Enlist™	X	X	X	C	C	C	C	C	C	C	C	C	C				
PWRA	PowerCore® Refuge Advanced®		X	X	C	C	C	C	C	C	C	C	C	C				

C = Controlled      S = Supressed      Blank = Not Labeled

As of July 2018



All scores of integrated refuge products are based upon the major component.

Qrome products are approved for cultivation in the U.S. and Canada and have also received import approval in a number of importing countries. DuPont Pioneer continues to pursue additional import approvals for Qrome products, including in China, in accordance with Excellence Through Stewardship Product Launch Guidance.

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Always follow IRM, grain marketing and all other stewardship practices and pesticide label directions. B.t. products may not yet be registered in all states. Check with your seed representative for the registration status in your state. Always read and follow label directions.

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