

# WHAT'S IN THE BAG?



Pioneer® brand integrated corn refuge products will be treated  for the major component and  for the minor component.

	PRODUCT NAME	INSECT PROTECTION	INTEGRATED COMPONENTS	REFUGE REQUIREMENTS	FIELD SIGN EXAMPLE
INTEGRATED REFUGE SOLUTIONS	<b>AcreMax</b> ABOVE		<b>INTEGRATED</b> ● 95% (YGCB,HX1,LL,RR2) ● 5% (LL,RR2)	Additional 20% corn borer refuge is required in EPA-designated cotton counties.	
	<b>POWERCORE</b> Enlist REFUGE ADVANCED		<b>INTEGRATED</b> ● 95% (HX1,VTP,ENL,LL,RR2) ● 5% (ENL,LL,RR2)	Additional 20% corn borer refuge is required in EPA-designated cotton counties.	
	<b>POWERCORE</b> Enlist REFUGE ADVANCED		<b>INTEGRATED</b> ● 95% (AVBL,HX1,VTP,ENL,LL,RR2) ● 5% (ENL,LL,RR2)	Additional 20% corn borer refuge is required in EPA-designated cotton counties.	
	<b>AcreMax</b> ABOVE <i>Leptra</i>		<b>INTEGRATED</b> ● 95% (AVBL,YGCB,HX1,LL,RR2) ● 5% (LL,RR2)	Additional 20% corn borer refuge is required in EPA-designated cotton counties.	
	<b>QROME</b>		<b>INTEGRATED</b> ● 95% (RW,YGCB,HXX,LL,RR2) ● 5% (LL,RR2)	Additional 20% corn borer refuge is required in EPA-designated cotton counties.	
	<b>VORCEED</b> Enlist		<b>INTEGRATED</b> ● 95% (HXX,RW3,VTP,ENL,LL,RR2) ● 5% (ENL,LL,RR2)	Additional 20% corn borer refuge is required in EPA-designated cotton counties.	
	<b>AcreMax</b> ABOVE/BELOW <i>Xtra</i>		<b>INTEGRATED</b> ● 90% (YGCB,HXX,LL,RR2) ● 10% (LL,RR2)	Additional 20% corn borer refuge is required in EPA-designated cotton counties.	
	<b>AcreMax</b> ABOVE/BELOW <i>Xtreme</i>		<b>INTEGRATED</b> ● 95% (RW,YGCB,HXX,LL,RR2) ● 5% (LL,RR2)	Additional 20% corn borer refuge is required in EPA-designated cotton counties.	

Structured corn products are treated 100% .

Exception: Structured products treated with the CRW package noted below are treated 100% .

	PRODUCT NAME	INSECT PROTECTION	STRUCTURED	REFUGE REQUIREMENTS	FIELD SIGN EXAMPLE
STRUCTURED REFUGE SOLUTIONS	<b>Intrasect</b> ABOVE		<b>STRUCTURED</b> ● 100% (YGCB,HX1,LL,RR2)	Structured refuge, 5% Corn Belt, 20% in EPA-designated cotton counties.	
	<b>POWERCORE</b> Enlist		<b>STRUCTURED</b> ● 100% (HX1,LL,RR2,ENL,VTP)	Structured refuge, 5% Corn Belt, 20% in EPA-designated cotton counties	
	<b>POWERCORE</b> Enlist		<b>STRUCTURED</b> ● 100% (AVBL,HX1, VTP, ENL, LL,RR2)	Structured refuge, 5% Corn Belt, 20% in EPA-designated cotton counties	
	<b>Leptra</b>		<b>STRUCTURED</b> ● 100% (AVBL,YGCB,HX1,LL,RR2)	Structured refuge, 5% Corn Belt, 20% in EPA-designated cotton counties.	

Not all products are available in all areas.

## LUMIGEN™ SEED TREATMENT PORTFOLIO

### PIONEER PREMIUM PACKAGE

- Enhanced disease protection with multiple modes of action fungicide recipe
- Unique combination with multiple modes of action insecticide recipe
- Lumialza® nematicide seed treatment protects roots for more than 80+ days

OR

### CRW PACKAGE

- Same disease package as Pioneer Premium Package
- Lumisure® 1250 seed treatment for added protection against corn rootworm



To protect the usefulness and availability of these technologies for the future, in products you implement an Insect Resistance Management (IRM) program as specified in product use guides. For detailed IRM requirements for products with in-plant insect resistance, refer to the appropriate product use guide, available from your Pioneer sales professional or on the web at: [www.traitstewardship.com](http://www.traitstewardship.com).

Planting Refuges. Preserving Technology

HXX - Herculex<sup>®</sup> XTRA contains the Herculex I and Herculex RW genes  
 YGCB - The YieldGard<sup>®</sup> Corn Borer gene offers a high level of resistance to European corn borer and common stalk borer; and above average resistance to fall armyworm.  
 LL - Contains the LibertyLink<sup>®</sup> gene for resistance to Liberty<sup>®</sup> herbicide.  
 LR - Contains the LibertyLink<sup>®</sup> gene and the Roundup Ready<sup>®</sup> Corn 2 trait.  
 RP2 - Contains the Roundup Ready<sup>®</sup> Corn 2 trait that provides crop safety for over-directions.  
 State registrations for Lumiza™ is pending. This product may not be registered for sale or use in all states. Contact your local retailer or representative for details and availability in your state. Lumiza™ has not yet received regulatory approval in any country outside the United States; approvals are pending.  
 Herculex<sup>®</sup> insect protection technology by Dow AgroSciences and Pioneer Hi-Bred<sup>®</sup> trademarks used under license from Monsanto Company.  
 YieldGard<sup>®</sup>, the YieldGard<sup>®</sup> Corn Borer Design and Roundup Ready<sup>®</sup> are registered trademarks of BASF.  
 Agrisure<sup>®</sup> and Agrisure Viptera<sup>®</sup> are registered trademarks of, and used under license from, Syngenta Group Company. Agrisure<sup>®</sup> technology incorporated into these seeds.

PWUE - PowerCore<sup>®</sup> Ultra Enlist<sup>®</sup> corn products with AVBL, HX1, VTP, ENL, LL, RP, A separate 5% corn borer refuge in the corn belt, and a separate 20% corn borer refuge in EPA-designated cotton-growing counties must be planted PowerCore Ultra Enlist products.  
 Q (Crome<sup>®</sup>) - Contains a single-bag integrated refuge solution for above- and below-Crome<sup>®</sup> products. The major component contains the Agrisure<sup>®</sup> RW trait, the YieldGard<sup>®</sup> Corn Borer gene, and the Herculex<sup>®</sup> XTRA genes. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Crome<sup>®</sup> products. Crome<sup>®</sup> products are approved for cultivation in the U.S. and Canada. They have also received approval in a number of importing countries, most recently China. For additional information about the status of regulatory authorizations, visit [www.biotechdata.com/](http://www.biotechdata.com/).  
 V (Vorceed<sup>™</sup> Enlist<sup>®</sup>) - Contains a single-bag integrated refuge solution with multiple modes of action for above- and below-ground insects. The major component contains the Herculex<sup>®</sup> XTRA genes, the RW3 trait and the VTP trait. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted Vorceed Enlist products.  
 YGCB, HX1, LL, RP2 (Optimum<sup>®</sup> IntraSect<sup>®</sup>) - Contains the YieldGard<sup>®</sup> Corn Borer gene and Herculex<sup>®</sup> I gene for resistance to corn borer.  
 AVBL, YGCB, HX1, LL, RP2 (Optimum<sup>®</sup> Leptra<sup>®</sup>) - Contains the Agrisure Viptera<sup>®</sup> trait, the YieldGard<sup>®</sup> Corn Borer gene, the Herculex<sup>®</sup> I gene, the LibertyLink<sup>®</sup> gene and the Roundup Ready<sup>®</sup> Corn 2 trait.  
 HX1 - Contains the Herculex<sup>®</sup> I insect protection gene which provides protection against European corn borer, southwestern corn borer, black cutworm, fall armyworm, lesser corn stalk borer, southern corn stalk borer, and sugarcane borer, and suppresses corn earworm.

AM - Optimum<sup>®</sup> AcrelMax<sup>®</sup> Insect Protection System with YGCB, HX1, LL, RP2, Contains a single-bag integrated refuge solution for above-ground insects. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Optimum AcrelMax products.  
 AXL - Optimum<sup>®</sup> AcrelMax<sup>®</sup> Leptra<sup>®</sup> products with AVBL, YGCB, HX1, LL, RP2, Contains a cotton-growing counties, a 20% separate corn borer refuge must be planted with Optimum AcrelMax Leptra products.  
 AXN - Optimum<sup>®</sup> AcrelMax<sup>®</sup> Xtra products with YGCB, HX1, LL, RP2, Contains a cotton-growing counties, a 20% separate corn borer refuge must be planted with Optimum AcrelMax Xtra products.  
 In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Optimum AcrelMax Xtra products.  
 AXN (Optimum<sup>®</sup> AcrelMax<sup>®</sup> Xtra) - Contains a single-bag integrated refuge solution for above- and below-ground insects. The major component contains the Agrisure<sup>®</sup> RW trait, the YieldGard<sup>®</sup> Corn Borer gene, and the Herculex<sup>®</sup> XTRA genes.  
 In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Optimum AcrelMax Xtra products.  
 PCE - Contains a single-bag integrated refuge solution for above-ground insects. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with PowerCore Ultra Enlist<sup>®</sup> Refuge Advanced<sup>®</sup> products.  
 RP2 - Contains a single-bag integrated refuge solution for above-ground insects. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with PowerCore Ultra Enlist<sup>®</sup> Refuge Advanced<sup>®</sup> products.  
 PCUE - PowerCore<sup>®</sup> Ultra Enlist<sup>®</sup> corn products with AVBL, HX1, VTP, ENL, LL, RP2, A separate 5% corn borer refuge in the corn belt, and a separate 20% corn borer refuge in EPA-designated cotton-growing counties must be planted PowerCore Ultra Enlist products.

# THE ALPHABET SOUP OF PIONEER<sup>®</sup> BRAND CORN PRODUCTS

- AM** – Optimum<sup>®</sup> AcreMax<sup>®</sup> product
- AML** – Optimum<sup>®</sup> AcreMax<sup>®</sup> Leptra<sup>®</sup> product
- AMX** – Optimum<sup>®</sup> AcreMax<sup>®</sup> Xtra product
- AMXT** – Optimum<sup>®</sup> AcreMax<sup>®</sup> XTreme product
- AVBL** – Agrisure Viptera<sup>®</sup> insect trait
- HX1** – Herculex<sup>®</sup> I insect trait
- HXX** – Herculex<sup>®</sup> XTRA insect trait
- LL** – LibertyLink<sup>®</sup> (glufosinate) herbicide resistance
- LR** – LibertyLink<sup>®</sup> and Roundup Ready<sup>®</sup> Corn 2 herbicide resistance  
*(NOTE: all seed color will be purple)*
- PCE** – PowerCore<sup>®</sup> Enlist<sup>®</sup> Refuge Advanced<sup>®</sup> product
- PCUE** – PowerCore<sup>®</sup> Ultra Enlist<sup>®</sup> Refuge Advanced<sup>®</sup> product
- PWE** – PowerCore<sup>®</sup> Enlist<sup>®</sup> product
- PWUE** – PowerCore<sup>®</sup> Ultra Enlist<sup>®</sup> product
- Q** – Qrome<sup>®</sup> product
- RR2** – Roundup Ready<sup>®</sup> Corn 2 (glyphosate) herbicide resistance
- RW** – Agrisure<sup>®</sup> RW insect trait
- V** – Vorceed<sup>™</sup> Enlist<sup>®</sup> product
- VYHR** – Optimum<sup>®</sup> Leptra<sup>®</sup> product
- W** – White product
- WX** – Waxy product
- YHR** – Optimum<sup>®</sup> IntraSect<sup>®</sup> product



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Know Your Corn Products by Pioneer

