Trust the Performance of SmartStax® Technology

- **Two Built-in Modes of Action** for Maximum Corn Rootworm Control
- Proven on over **100 Million Acres**

**QUANTIFYING THE DAMAGE**

- Root feeding damage can lead to **yield losses up to 45%**
- Farmers are impacted **more than $1 billion annually** in crop damage and increased control costs

### Corn Rootworm Protection

<table>
<thead>
<tr>
<th>MODES OF ACTION</th>
<th>CORN ROOTWORM (NORTHERN &amp; WESTERN)</th>
<th>EUROPEAN CORN BORER</th>
<th>SOUTHWESTERN CORN BORER</th>
<th>CORN EARWORM</th>
<th>FALL ARMYWORM</th>
<th>BLACK CUTWORM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SmartStax® Age Complete</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Optimum® AcreMax® XTreme Corn</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Qrome® Corn***</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

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1. Pioneer claims suppression of corn earworm with Herculex® I technology.
2. Cry1A.105 and Cry2Ab2 from B.t. controls or suppresses corn earworm.
4. **U.S. Department of Agriculture (USDA)**
5. ***Qrome contains event DP4114 which is a molecular stack of the insect protection genes in Herculex® I and Herculex® RW.**

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IS PROTECTING YOUR YIELD WORTH THE INVESTMENT?
**COMPARISON OF CORN ROOTWORM DAMAGE**

**IN MODERATE-TO-HEAVY PRESSURE LOCATIONS**

<table>
<thead>
<tr>
<th></th>
<th>Node Injury Score (NIS 0-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-CRW</td>
<td>0.25</td>
</tr>
<tr>
<td>Qrome Corn</td>
<td>0.50</td>
</tr>
<tr>
<td>Optimum AcreMax XTreme Corn</td>
<td>1.25</td>
</tr>
<tr>
<td><strong>Optimum® AcreMax® XTreme Corn</strong></td>
<td><strong>1.50</strong></td>
</tr>
</tbody>
</table>

*Means connected by the same letter are not significantly different (α=0.05)*

**Significantly Less Corn Rootworm Damage**

Compared to the non-CRW treated check:
- SmartStax® RIB Complete® corn blend showed 65% less root damage.
- Qrome and Optimum AcreMax XTreme showed 37% and 49% less root damage, respectively.

**Below-Ground Insect Protection is Critical for Protecting Yield Potential...**

**When Corn Rootworm is Present.**

**COMPARE YOUR CORN ROOTWORM PROTECTION OPTIONS**

*2019 Small plot replicated research trials were conducted across the Corn Belt to evaluate systemic approaches for corn rootworm (CRW) control. Trials were planted at 7 locations (IA, IL, ND & NE) with moderate-to-high corn rootworm pressure that had a Node Injury Score on R-3 scale (NIS 1-3) ≥ 0.5 in the non-CRW treated check. Corn products evaluated included SmartStax® RIB Complete®, corn blend as well as crop selection products including Genuity® and Optimum® AcreMax® XTreme from Bayer Agribusiness.

**IMPORTANT IRM INFORMATION: RIB Complete® corn blend products do not require the planting of a structured refuge except in the Cotton-Growing Area where corn cornworms is a significant pest. SmartStax® RIB Complete® corn blend is not allowed to be sold for planting in the Cotton-Growing Area. See the IRM/Grower Guide for additional information. Always read and follow IRM requirements.**

Properly growing and managing a high percentage of corn acres is important to help increase yield and profitability. Bayer recommends following your agronomic or crop scouting practices to determine if corn rootworm damage is occurring in your fields. Bayer SmartStax®, RIB Complete®, Genuity® and SmartStax® technologies are managed and regulated by the United States Department of Agriculture (USDA) and by the states where they are sold. SmartStax® and RIB Complete® technologies are subject to patent restrictions due to the exclusive rights of some breeders. Bayer Specialty Seeds is a trademark of Bayer Group. All other trademarks are the property of their respective owners. ©2019 Bayer Group. All rights reserved.