Herculex® *Trumps* Competition

Research Shows Herculex® Traits Top Other Management Options For Corn Rootworm

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Research trials last year at three midwestern universities as well as in 11 Pioneer agronomy sciences trials have shown that Herculex® XTRA consistently outperforms other corn rootworm management options, including other transgenic and soil insecticides.

"Though corn rootworm pressure was less this past growing season in several areas of the Corn Belt than the previous two years, research trials were good indicators of yield performance during lower pressure situations," said Murt McLeod, Ph.D., Pioneer agronomy research scientist. "Higher yielding corn is still the overall goal for growers, and hybrids need to perform in all levels of insect pressure."

The university research was conducted in three trials at the University of Illinois, one at Iowa State University and three at Purdue University. The research trials showed that Pioneer® hybrids with Herculex® traits were more effective against root damage than hybrids with YieldGard® traits by Monsanto.

In the trials, researchers evaluated nodes of roots injured by corn rootworm and found that Herculex® XTRA averaged 0.06 nodes destroyed compared to YieldGard VT™ which averaged 0.11. The untreated check averaged 0.70. In one trial at the University of Illinois in Urbana, Herculex® XTRA averaged 0.49 nodes destroyed, while YieldGard VT™ averaged 0.84. The evaluations are based on a 0-3 root node scale with 0 being no damage and 3 full root damage.

The researchers also found the consistency ratings, an indicator of variability of root protection, were noticeably higher for hybrids with Herculex® traits compared to hybrids with YieldGard® traits.

Herculex® XTRA treated hybrids contain both Herculex® I and Herculex® RW for a broader range of above- and below-ground insects in corn compared to any other in-seed product now available.

Pioneer® hybrids with Herculex® XTRA not only protect roots, but provide higher yields. Results from a recently published two-year Pioneer agronomy sciences systems trials show Pioneer hybrids with Herculex® XTRA average a three-bushel advantage over DeKalb hybrids with YieldGard® Plus.

Research showed that Herculex® XTRA provided the highest protection against black cutworms, excellent control of European corn borer and southwestern corn borer, and good protection against fall armyworms, while also offering good control of western bean cutworms.

Corn rootworms generally affect yield losses of 10 percent to more than 30 percent with moderate to high populations in untreated fields. While damage varies from year to year, management of the pest is an ongoing issue for producers, especially in areas where continuous corn is planted. The variant western corn rootworm has continued to expand in the Corn Belt, especially in Illinois and Indiana. Δ

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