

**EVALUATION OF HERCULEX ROOTWORM HYBRIDS FOR CORN ROOTWORM  
LARVAL CONTROL IN CORN, 2006**

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A trial was established to test two Herculex hybrids containing the Bt-rootworm trait (Mycogen 2G777 (HxRW) and Mycogen 2P788 (HxXTRA) against a hybrid without this trait, Mycogen 2784 for control of corn rootworm larvae in corn at the OARDC, Western Agricultural Research Station near South Charleston, OH. The hybrids were treated with Cruiser seed treatment at 0.25 mg ai/kernal rate for control of secondary pests. The test was designed as a RCB with 3 treatments and 4 replications. Plot size was 10 ft (4 rows on 30 in centers) by 20 ft. The test area had been in corn in 2005 and the area was tilled before planting. The trial was planted on 3 May with a two row John Deere 7000 MaxEmerge planter set to plant 30,200 seeds per acre.

Rootworm feeding injury was evaluated by randomly digging 10 roots per replicate for each treatment. Roots were washed, examined for corn rootworm larval feeding injury and rated in accordance with the 0-3 Node Injury Scale. Lodging counts will be taken later in the season.

Results can be found in Table 1. Roots were dug and evaluated for rootworm larval injury on 17 July. Heavy rootworm larval feeding was observed in this trial with the untreated having an average root rating of 1.89. The Herculex hybrids had significantly less feeding injury as compared to the untreated.

Table 1. Evaluation of Herculex Technology for Corn Rootworm Larval Control in Corn, OARDC 2006.

Product	Root Rating (0-3 Node Injury Scale) <sup>a</sup>	% Consistency <sup>b</sup>
Herculex RW (Mycogen 2G777)	0.04 a	100
Herculex XTRA (Mycogen 2P788)	0.03 a	100
Untreated (Mycogen 2784)	1.89 b	10

Means in a column followed by the same letter are not significantly different (P = 0.05).

<sup>a</sup> Root ratings based on 0-3 Node Injury Scale, where 0.00 = no damage to the root system, 1.00 = one node (or the equivalent of one node) removed from the root system, 2.00 = two nodes or the equivalent removed from the root system and 3.00 = three nodes or the equivalent removed from the root system.

<sup>b</sup> Percent consistency is the percentage of roots have a rating < 1.0 on the 0-3 Node Injury Scale.