Performance of Bt Corn Hybrids, their Near Isolines, and Leading Corn Hybrids in Pennsylvania and Maryland. (C03-roth200944-Poster)

Authors:

- B.L.Dillehay* - *Penn State University*
- G.W.Roth - *Penn State University*
- D.D.Calvin - *Penn State University*
- G.A.Kuldau - *Penn State University*
- R.J.Kratochvil - *University of Maryland*
- J.A.Hyde - *Penn State University*

Abstract:

The European corn borer (Ostrinia nubilalis) is an important pest of field corn (Zea mays L.) in the northeast U.S. This study evaluated Bt hybrids, their near isolines, and regional leading hybrids for grain yield, moisture, and test weight under natural infestations of European corn borer (ECB). Corn hybrids were grown in 2000, 2001, and 2002 at four locations in Pennsylvania and three locations in Maryland. Over all locations, the Bt, isoline, and lead hybrids yielded 10.5, 10.0, and 9.8 Mg/ha respectively. Moisture content at harvest was 22.2, 21.3, and 21.2 percent for the Bt, isoline and lead hybrids respectively. Test weight of the grain was 713.0, 718.1, and 716.9 kg/m3 respectively for the Bt, isoline and lead hybrids. Overall, the Bt yielded significantly higher than the isoline and lead hybrids, the Bt had significantly higher moisture content at harvest as compared to the others, and the Bt had a significantly lower test weight as compared to the isoline and lead hybrids. The overall yield difference from Bt resulted from only significant effects at four of the locations. Results from the 2002 growing season will be included in the presentation.

Corresponding Author Information:

Bryan Dillehay
Penn State University
116 ASI Building
University Park, PA 16802

phone: 814-863-7638
fax: 814-863-7043
e-mail: bld169@psu.edu

Presentation Information:

Presentation Date: Tuesday, November 12, 2002
Presentation Time: 4:00-6:00 pm
Poster Board Number: 1421

Keywords:

Corn, GMO, IPM, European Corn Borer