



Cor5-2011 - Foliar Fungicides and Disease Management for Ontario Seed Corn Production

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Foliar Fungicides and Disease Management for Ontario Seed Corn Production

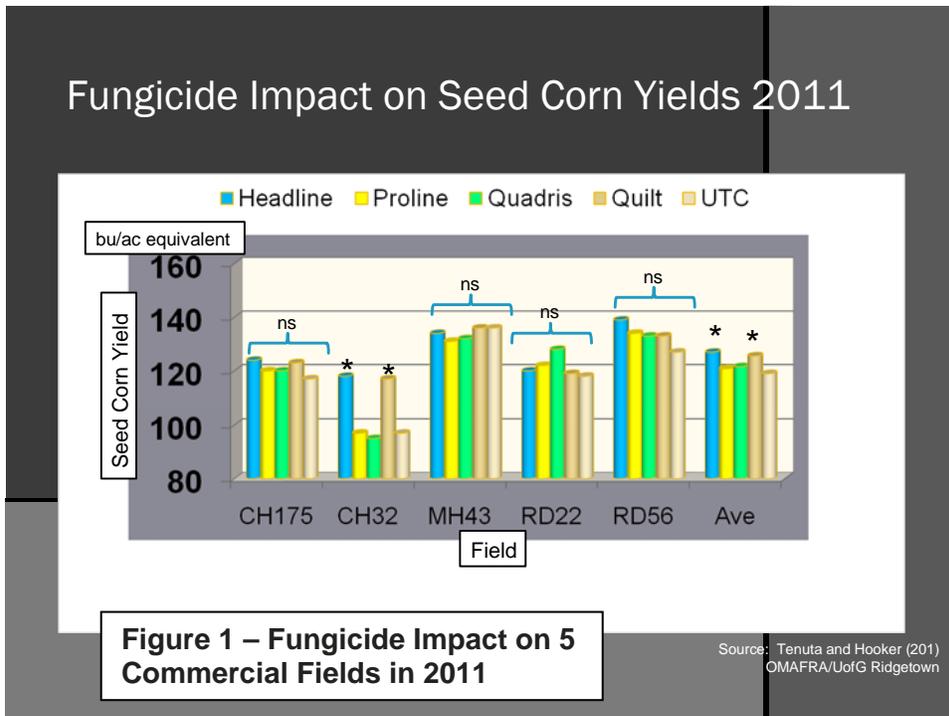
Purpose:

Over the past few years, the promotion of foliar fungicides has increased in North America and most of this information has been generated for commercial corn and soybeans. Very little work has been done in Ontario or elsewhere to investigate inbred-specific responses to fungicides; therefore, a multi-year study was started in order to identify factors that would increase the probability a seed corn grower would have in achieving a profit from a fungicide application. Seed Corn Growers in Ontario would benefit from local data to assist in profitable and accurate decisions when it comes to disease management thereby maintaining or increasing the competitiveness of the Ontario seed corn industry.

Methods:

Five commercial seed corn fields were selected in the Chatham area in southwestern Ontario which represents the primary seed corn production area in the province. At each location, various treatments were established which included fungicides (Headline, Proline, Quadris and Quilt) and an untreated control in which no fungicides were used. Fungicides were applied with the high clearance John Deere Field Research Sprayer maintained by the University of Guelph Ridgetown Campus. Plots were allowed to be naturally infected and disease ratings were recorded pre and post fungicide application.

Results:



In the majority of fields, although not statistically significant all of the fungicide applications yielded better than the untreated controls.

Statistically significant yield increases were however observed in 2011 for Headline and Quilt in field CH32 as well as when all five field locations were compared to the untreated control.

Summary:

Many of the corn inbreds used in commercial seed corn production are prone to many of the common foliar diseases found in the province. The use of fungicides has been utilized for many of these inbreds and in many incidences these products can limit disease and potentially increase yields thereby increasing the competitiveness of the Ontario seed corn industry.

Next Steps:

OMAFRA and the University of Guelph, Ridgetown Campus plan to complete the final year of this project in 2012.

Acknowledgements:

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