GUEST COLUMN

Maximize Corn Silage Performance with Foliar Fungicides

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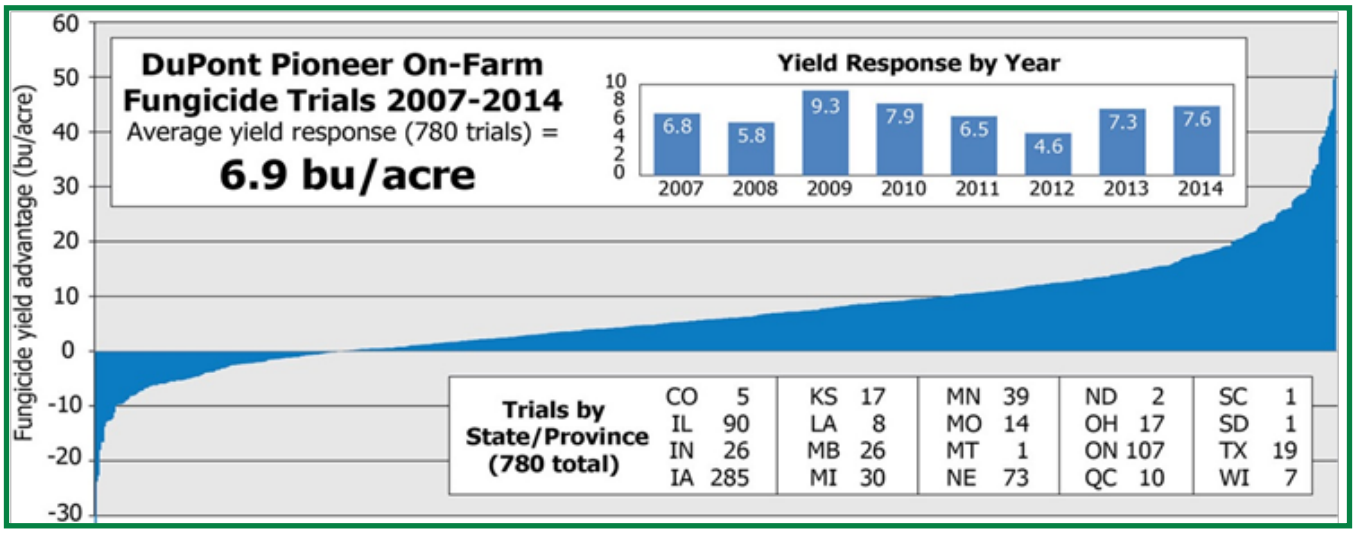
Interest and use of foliar fungicides to control corn diseases continues to grow. Producers applying fungicides look to improve plant health by controlling fungal infections like Gray Leaf Spot, Northern Corn Leaf Blight, and Common Rust. At the end of the day, corn silage producers who apply foliar fungicides are expecting improved whole plant yield and a possible improvement in grain content or starch.

Where is the evidence?

Research work with foliar fungicide treatment on corn shows inconsistent yield response. Overall, the evidence points to positive yield responses. In a recent DuPont Pioneer summary of 780 on-farm fungicide trials, yield responses to fungicides average 6.9 bushels per acre with positive yield responses 80% of the time.

There have been limited fungicide studies with corn silage, although the positive plant health and yield benefits seen in corn grown for grain should have a similar benefit for corn silage producers.

Figure 1. Maximizing the Value of Foliar Fungicides in Corn.



Crop Insights, 2015. Mark Jeschke, DuPont Pioneer.

What are the Keys to Success with Foliar Fungicides?

To increase your chances of success with foliar fungicides, pay attention to the following key factors.

- Scout for foliar disease pressure. If infection has moved up through the leaf canopy and more than 5% of the ear leaf area contains fungal lesions by silking (VT-R1), consider an application.
- Average yield response to foliar fungicide applications is greater in fields with large amounts of corn residue on the soil surface, such as corn-following-corn, and no-till or strip-till.
- When planting hybrids susceptible to the predominant leaf diseases in the field, foliar fungicide applications may be more profitable.
- Later-maturing fields can be at greater risk for yield loss due to foliar diseases and, therefore, are more likely to benefit from a fungicide application.
- Planting corn at very high populations and/or in narrow row configurations may increase the likelihood of fungal infections.
- Extended warm, wet, humid growing weather may signal a need for fungicide use as many fungal organisms grow best under these conditions.

Foliar fungicides can be a viable management tool, especially in challenging, high-yield environments with hybrids susceptible to foliar disease. Do not expect fungicides to always return a profit. However, there is data suggesting fungicides can be a very effective tool for managing foliar diseases in corn silage resulting in healthier plants with higher starch content.