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Fungicide Thoughts for 2014 Season

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Fungicide Thoughts for 2014 Season

Abstract

We will have a fair amount of corn tasseling shortly after the weekend — so fungicide application season is about here. In talking with farmers and retailers the last week or so, based on all the rainfall and wet soils this is shaping up to be a big year for fungicide applications, so just a few thoughts for guys "on the fence" and trying to decide whether to spray or not.

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Disciplines

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Fungicide Thoughts for 2014 Season

ICM News

July 7, 2014

By Clarke McGrath, Extension Field Agronomist, and Daren Mueller, and Alison Robertson, Department of Plant Pathology and Microbiology

We will have a fair amount of corn tasseling shortly after the weekend — so fungicide application season is about here.

In talking with farmers and retailers the last week or so, based on all the rainfall and wet soils this is shaping up to be a big year for fungicide applications, so just a few thoughts for guys "on the fence" and trying to decide whether to spray or not.

In soybeans, we are still pretty early, not much disease yet; and we are a little ways off from late R2/R3 when it is the ideal time to put on fungicides to protect soybeans during the critical pod filling growth stages and maximize yield responses. So keep scouting soybeans for diseases; if things look good, delay applications until later. If there is a risk

for white mold, refer to [the article posted last week addressing white mold](#). With all of the moisture we have seen in 2014, this certainly increases the chances of more diseases. See the [Iowa Soybean Association Newsletter](#) article for more information on rainfall and yield responses to foliar fungicides in soybean. There is also a correlation between yield responses and rainfall during July and August (Figure 1).

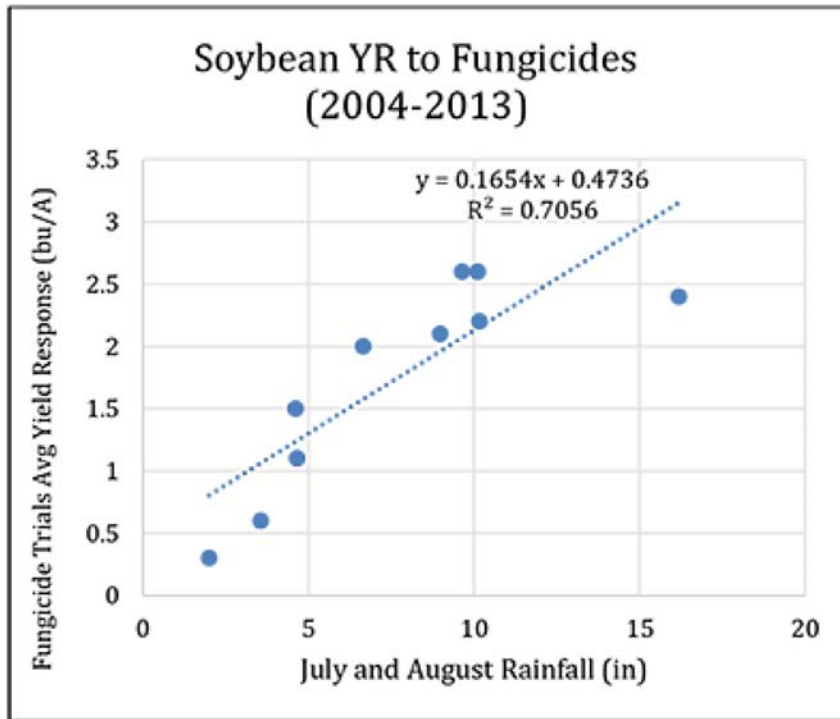


Figure 1. Relationship between soybean yield response to foliar fungicides and cumulative rainfall during July and August in Iowa Soybean Association on-farm trials.

What to look for in corn

For corn, most everyone agrees that the number-one factor impacting fungicide application profitability is management of common diseases (gray leaf spot, common rust, etc.). If crop diseases are present, yield responses to applications are typically higher on hybrids that have low disease resistance scores. Under ideal conditions for disease development, yield responses may be positive on hybrids with solid disease resistance as well.

Warm, humid conditions around grain fill favor the development of diseases. Crop history and crop residue levels can contribute, too. With several pathogens that survive in corn residue, corn-on-corn and other high-residue systems can increase disease levels. Geography can also influence disease. For example, southeastern Iowa tends to be warmer and more humid than much of the state and historically has had higher levels of diseases. While sometimes we see fungicide applications increase yields in fields with low disease pressure, increasing disease is a better indicator to the potential profitability of

treating.

Application timing can influence the odds of a positive return. Combining label recommendations and field observations is critical. If applied too early, the residual effects of the product may be gone as diseases set in. If applied too late, it may not effectively control the diseases already established. Most agronomists agree that the full tassel stage (VT) through blister stage (R2) is the optimum timing if a fungicide is needed.

Scout hybrids with moderate to low disease resistance more intensively. Scout more often if the weather's warm and humid and if rainy weather is present or predicted for July and August. Watch corn-on-corn, high-residue fields closely. Late-planted corn often is more prone to get diseases.

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Prior to joining ISU spent nearly a decade as a retail agronomist/manager in Growmark system, earning 3 M.A.R.C. of Excellence Awards, 5 Annual Sales Program Awards, 6 Iowa Top Gun Awards and 3 Regional Top Gun Awards.

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