MU Certified Strip Trial Program
2018 Fungicide Trial Harvest Report

Site Number: 10 (Marion County)
Extension Contact: Wyatt Miller

Trial Harvest Summary
This is a fungicide trial comparing the effect of yield on using fungicide versus no fungicide in treatment strips across the field. The field was planted on May 8th, sprayed for fungicide on July 10th, and harvested on October 28th. The mean difference between the treatment strips was 0.5 bushels per acre, but the difference at this location was not statistically significant in our initial analysis.

The field was scouted for foliar diseases on June 27th and August 3rd. Of the 40 points in the field that were scouted for foliar disease, there was little to no foliar disease observed at either scouting time and no statistical differences were observed for Septoria Brown Spot and Frogeye Leaf Spot between the treatment strips.

Please note the section towards the end of the report that summarizes management information currently known about the trial. Missing information is highlighted in yellow. Please provide your extension contact the missing information as soon as possible and let us know if any other corrections or changes need to be made.

At the end of the report is a table summarizing yield results from all of the fungicide trials. Please note that all of the analysis is preliminary.

The MU Strip Trial program will have meetings throughout Missouri in February of 2019. More information on location and dates will be sent out soon. We encourage you to attend the strip trial meeting that is closest to you. This will be an opportunity for discussion on what was learned across farms and multiple years of trials. It will also be an opportunity for you to give feedback on how the trial worked on your farm and provide ideas for future trials.

Please follow us on Twitter at @MUStripTrials!

Thank you for agreeing to do this trial! It is one of 11 fungicide trials in 2018.

The mission of the MU Certified Strip Trial Program is to help farmers validate management decisions on their farm and document efficiency and environmental stewardship.

The MU Certified Strip Trial Program is funded by:

MU Extension, the Missouri Soybean Merchandising Council and the Missouri Corn Merchandising Council.
Figure 1a. Soybean yield monitor data reported as bushels per acre (bu/A). Strips are labeled with their respective treatments: fungicide or no fungicide. The field was harvested October 28, 2018.
Figure 1a. Close up strips showing soybean yield monitor data reported as bushels per acre (bu/A). Strips are labeled with their respective treatments: fungicide or no fungicide.

- < 65 bu/A
- 65 – 70 bu/A
- 70 – 75 bu/A
- 75 – 80 bu/A
- 80 – 85 bu/A
- > 85 bu/A
Table 1/Graph 1. Strip means of soybean yield.

Mean soybean yields:
Mean of all Strips: 74.0 bushels/acre
Mean of strips with Fungicide: 74.3 bushels/acre
Mean of strips with no Fungicide: 73.8 bushels/acre
Treatment difference: 0.5 bushels/acre

Preliminary analysis shows that this difference was not statistically significant.

<table>
<thead>
<tr>
<th>Strip</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>WITH</td>
<td>No</td>
<td>WITH</td>
<td>No</td>
<td>WITH</td>
<td>No</td>
<td>WITH</td>
<td>No</td>
<td>WITH</td>
<td>No</td>
<td>WITH</td>
<td>No</td>
</tr>
<tr>
<td>Yield (Bushels/Acre)</td>
<td>74.1</td>
<td>73.1</td>
<td>71.7</td>
<td>72.7</td>
<td>74.9</td>
<td>75.3</td>
<td>77.9</td>
<td>74.6</td>
<td>73.6</td>
<td>73.7</td>
<td>73.4</td>
<td>73.4</td>
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</table>
Grain Crop Management Information

<table>
<thead>
<tr>
<th>Planting Date</th>
<th>Variety</th>
<th>Seeding Rate</th>
<th>Harvest Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8/2018</td>
<td>Lewis 4372X</td>
<td>142,060</td>
<td>10/28/2018</td>
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</tbody>
</table>

Previous year’s crop: Corn

Does this field have a history of foliar disease? No

If yes, please list dates and diseases:

Crop Rotation | Corn - Soybean
Tillage System | Tills

Input Information

<table>
<thead>
<tr>
<th>Date</th>
<th>Type of Input</th>
<th>Product Name</th>
<th>Rate Applied</th>
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<tbody>
<tr>
<td>7/10/2018</td>
<td>Fungicide</td>
<td>Trivapro</td>
<td>13.7 oz/Acre</td>
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Equipment Specifics

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Type</th>
<th>Width (in feet)</th>
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</thead>
<tbody>
<tr>
<td>Planter</td>
<td>JD 1790</td>
<td>40</td>
</tr>
<tr>
<td>Sprayer</td>
<td>R4030</td>
<td>90</td>
</tr>
<tr>
<td>Combine</td>
<td>JD</td>
<td>30</td>
</tr>
<tr>
<td>Yield Monitor</td>
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<td></td>
</tr>
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