

Soybean Fungicide Trial

Trial ID: 2024-SF01 – R.M. of Morris

Objective: Quantify the agronomic and economic impacts of a single foliar fungicide application vs. none in soybeans.

Summary: There was no significant yield difference between soybeans with and without a single application of Delaro. As a result, profit/ac in the treated area of the trial decreased by the cost/ac of fungicide. Septoria brown spot was prevalent throughout the trial; white mould was not present. Disease pressure was similar between treatments.

Trial Information

| Treatment | Delaro vs Untreated |
|-------------------------|---------------------|
| Application Timing | R1 |
| Application Date | July 12 |
| Application Rate | 30 ac/jug |
| Application Method | Broadcast |
| Soil Texture | Clay |
| Previous Crop | Wheat |
| Tillage | Conventional Till |
| Seeding Date | May 13 |
| Variety | SI 001XTN |
| Seeding Rate | 127,000 seeds/ac |
| Row Spacing | 30″ |
| Plant Stand @ R3 | 112,000 plants/ac |
| Harvest Date | September 26 |

Precipitation (mm)

| | May | June | July | Aug | Total |
|----------|------|------|------|------|-------|
| Rainfall | 122 | 90.6 | 60.4 | 60.6 | 333.6 |
| Normal | 53.6 | 86.4 | 71.9 | 65.4 | 277.3 |
| % Norm | 228% | 105% | 84% | 93% | 120% |

Summary of Disease Rating (R3)⁺

| | Incidence (% plants infected) | | | | |
|--------|-------------------------------|-------------|----------------|----------------|---------------------|
| | Septoria B.S. | Frog Eye | Stem Canker | White Mould | Bacterial Blight |
| Single | 95% (1.05) | 0% | 0% | 0% | 0% |
| None | 85% (1) | 0% | 0% | 0% | 0% |

+ Septoria brown spot severity, listed in brackets, was rated on a 0-5 scale.

NDVI Field Image August 10



Yield by Treatment





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| Overall Yield & Economics | | | | |
|---------------------------|--------------|-------------------|--------------------------------|--|
| | Mean (bu/ac) | Cost ⁺ | Change in Profit ⁺⁺ | |
| Single Application | 56.0 | \$20/ac | -\$20/ac | |
| Untreated | 53.1 | | | |
| Yield Difference | 2.9 | | | |
| P-Value | 0.169 | | | |
| CV | 4.1% | | | |
| Significance | No | Economic | No | |

+ Based on an estimated cost for a single application of soybean fungicide; does not include application cost ++ Because yields were not significantly different, there is no increased income to offset the cost of the fungicide. Profit/ac declined by the cost of

the fungicide application.

