

Soybean Fungicide Trial

Trial ID: 2024-SF02 - R.M. of Pipestone

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; frogeye leafspot and bacterial blight were also present. 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/jog |
| Application Method | Broadcast |
| Soil Texture | Loamy Clay Loam |
| Previous Crop | Oats |
| Tillage | Zero Till |
| Seeding Date | May 16 |
| Variety | Young R2X |
| Seeding Rate | 175,000 seeds/ac |
| Row Spacing | 12" |
| Plant Stand @ R4 | 149,000 plants/ac |
| Harvest Date | September 25 |

Precipitation (mm)

| | May | June | July | Aug | Total |
|----------|------|-------|------|------|-------|
| Rainfall | 96.6 | 120.5 | 21 | 73.4 | 311.5 |
| Normal | 53 | 75.2 | 66.1 | 57.8 | 252.1 |
| % Norm | 182% | 160% | 32% | 127% | 124% |

Summary of Disease Rating (R3)+

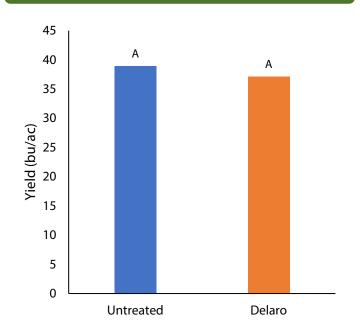
| | Incidence (% plants infected) | | | | |
|--------|-------------------------------|-------------|----------------|----------------|---------------------|
| | Septoria B.S. | Frog Eye | Stem Canker | White Mould | Bacterial Blight |
| Single | 58% (0.6) | 5% | 0% | 0% | 100% |
| None | 47% (0.5) | 5% | 0% | 0% | 100% |

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

NDVI Field Image August 9



Yield by Treatment





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Overall Yield & Economics

| | Mean (bu/ac) | Cost † | Change in Profit ⁺⁺ |
|---------------------------|--------------|----------|--------------------------------|
| Single Application | 37.1 | \$20/ac | -\$20/ac |
| Untreated | 38.9 | | |
| Yield Difference | -1.8 | | |
| P-Value | 0.329 | | |
| CV | 7.6% | | |
| 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.