

Soybean Fungicide Trial

Trial ID: 2020-SF07 - R.M. of Richot

Objective: Quantify the agronomic and economic impacts of a single foliar fungicide application in soybeans

Summary: Septoria brown spot was prevalent throughout the trial; frogeye and phytophthora were also present. There was no significant yield difference between soybeans with and without a single application of Dyax. Due to the lack of yield response, there was a decrease in profit/ac in the treated area of the trial, equivalent to the cost of the fungicide application.

Trial Information

| Treatment | Dyax |
|---------------------------|-------------------|
| Application Timing | R3 |
| Application Date | July 20 |
| Application Rate | 160 ml/ac |
| Application Method | Broadcast |
| Soil Texture | Clay |
| Previous Crop | Wheat |
| Tillage | Conventional |
| Seeding Date | May 18 |
| Variety | TH 88005R2XN |
| Seeding Rate | 175 000 seeds/ac |
| Row Spacing | 20" |
| Plant Stand @ R5 | 150 000 plants/ac |
| Harvest Date | September 22 |

Precipitation (mm)

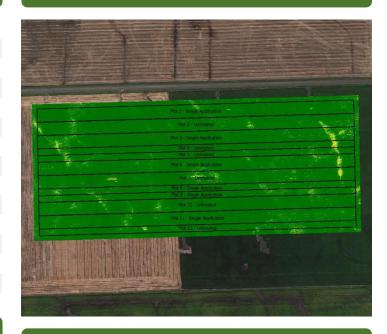
| | May | June | July | August |
|----------|------|------|------|--------|
| Normal | 52.6 | 88 | 69.5 | 75.8 |
| Rainfall | 14.3 | 49.4 | 43.9 | 88.7 |

Summary of Disease Rating (R4)+

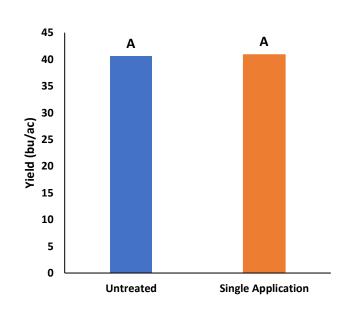
| | Frogeye | | Septoria Brown Spot | | Phytophthora | |
|-----------|---------|-----|---------------------------|------|--------------|-----|
| | UN | SGL | UN | SGL | UN | SGL |
| Incidence | 12% | 8% | 92% | 93% | 22% | 30% |
| Severity | n/a | n/a | 2.09 | 2.11 | n/a | n/a |

† SGL=Single application; Frogeye (presence/absence), septoria brown Spot 0 – 5 rating scale, phytophthora (presence/absence); bacterial blight present throughout the trial

NDVI Field Image August 19



Yield by Treatment







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Overall Yield & Economics

| | Mean (bu/ac) | Cost + | Change in Profit/ac++ |
|-------------------------|--------------|-----------------|-----------------------|
| Single Application | 40.9 | \$15/ac | -\$15/ac |
| Untreated | 40.6 | | |
| Yield Difference | 0.3 | | |
| P-Value | 0.3598 | | |
| CV | 1.1% | | |
| Significance | No | Economic | No |

⁺ Based on an estimated cost for a single application of soybean fungicide

^{+ +} Because yields were not significantly different, there was no increased income with fungicide application to offset the cost of the product