

Original trial layout and as-applied map for an R3 fungicide application on August 1, 2019. Treated areas received the fungicide Fortix (5.0 oz/acre). Aerial image was taken at 330 feet on August 6, 2019.

# Soybean R3 Fungicide Trial 2019 Site 1 Barton County

Planting date: 6/14/2019

Seeding rate: 150,000 seeds/acre

Variety: Croplan RX4825

Previous crop: Corn

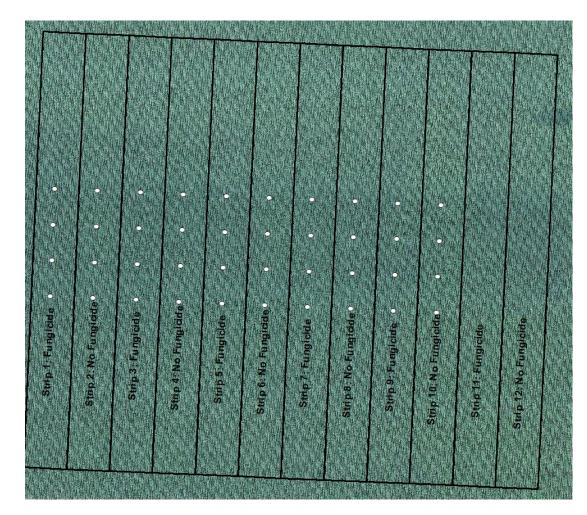
R3 fungicide spray date: 8/1/2019

Product: Fortix (5.0 oz./acre)

Scouted: 8/6 and 8/21/2019

Harvested: 11/5/2019

Replicates: 6



Final trial layout and scouting points (white points). Points were scouted on August 6 and August 21. Aerial image was taken at 330 feet on August 21, 2019.

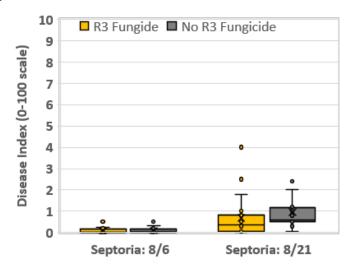
Note that both scouting times were after fungicide application.

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Summary of scouting data. Fungicide applied August 1, 2019. Only Septoria was identified at this location. There is little evidence that fungicide affected scouting results.

|           |                 |                  | Disease Index¹ (0-100) |                      |       |  |  |  |
|-----------|-----------------|------------------|------------------------|----------------------|-------|--|--|--|
| Disease   | R2<br>Fungicide | Number of points | Pre-Spray<br>8/6/2019  | Post-Spray 8/21/2019 | Delta |  |  |  |
| Septoria  | N               | 20               | 0.1                    | 1.0                  | 0.9   |  |  |  |
|           | Υ               | 20               | 0.1                    | 0.7                  | 0.6   |  |  |  |
| Treatment | Difference      |                  |                        |                      | -0.3  |  |  |  |

<sup>1</sup>Disease index is calculated by multiplying the percent plants with disease (incidence) times the severity of the disease and adjusting the project to a scale of 0 to 100.



# •<50 •51-55 • 56-60 •61-65 •66-70 •71-75 •>75 bu/A

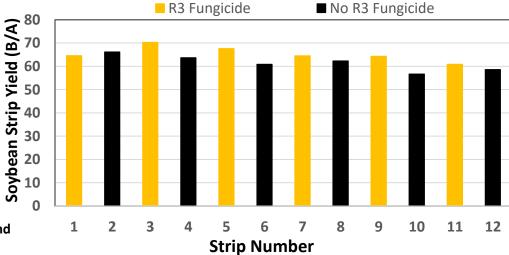
### Soybean yield map harvested Nov. 5, 2019. Final strip layout reflects areas of the field not affected by stand issues not related to R3 Fungicide application. Aerial image was taken at 330 feet on August 27, 2019.

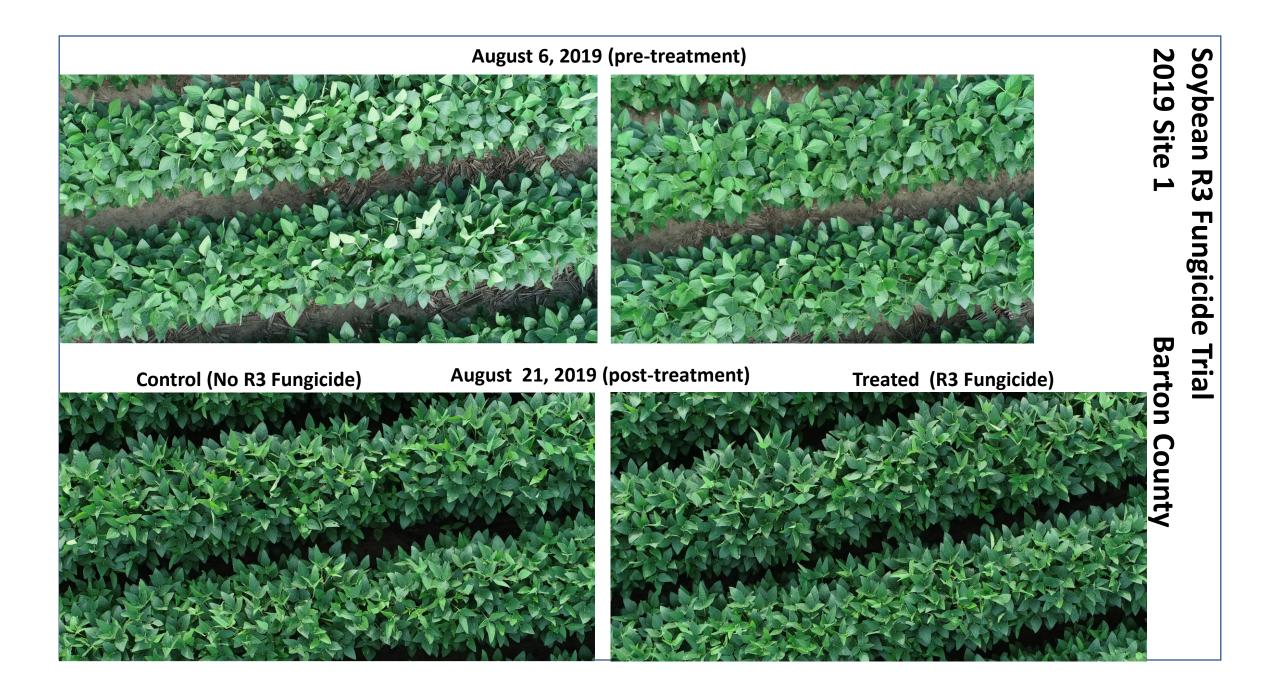
# Soybean R3 Fungicide Trial 2019 Site 1 Barton County

| Treatments       | Mean         | Delta Control |  |  |
|------------------|--------------|---------------|--|--|
|                  | bushels/acre |               |  |  |
| All strips       | 63.4         |               |  |  |
| Control (N)      | 61.4         |               |  |  |
| R3 Fungicide (F) | 65.4         | 4.0           |  |  |

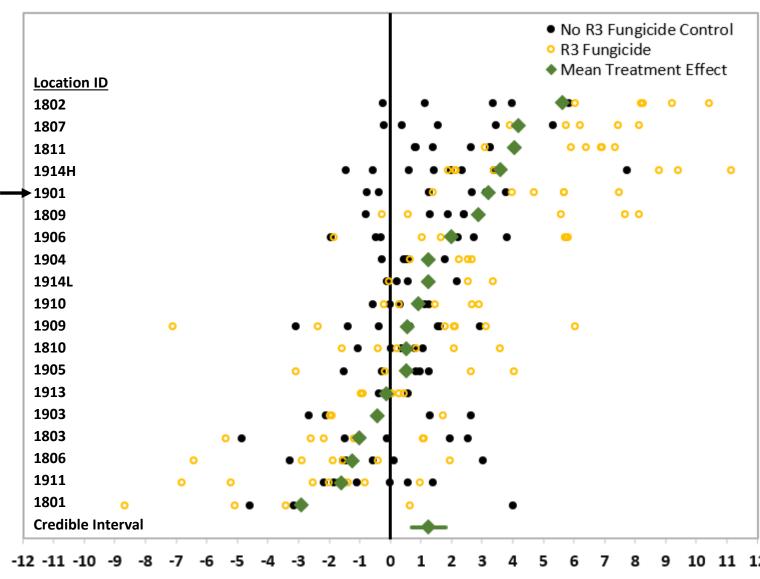
There is evidence that the difference at this location was significant.

| Strip | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| Fung  | Υ    | N    | Υ    | N    | Υ    | N    | Υ    | N    | Υ    | N    | Υ    | N    |
| Yield | 64.6 | 66.2 | 70.3 | 63.7 | 67.6 | 60.9 | 64.5 | 62.3 | 64.3 | 56.7 | 60.9 | 58.6 |





## R3 Fungicide for Soybean: Effect on yield



### **Key Points:**

- Across these 18 farms, R3 fungicide increased yield.
- The benefit was less than 2 bushes per acre.
- There was more than a 50% chance of a one bushel/acre response.
- Results by location suggested significant benefit a five of 18 locations.