

Soybean R3 Foliar Fungicide Trial: 2018 Location Results

Key question: Are fungicides applied at R3 effective at reducing foliar disease and increasing yield?

Treatments: Strips with fungicide applied at R3 vs. strips with no fungicide application.

*Farmer's choice of product used.

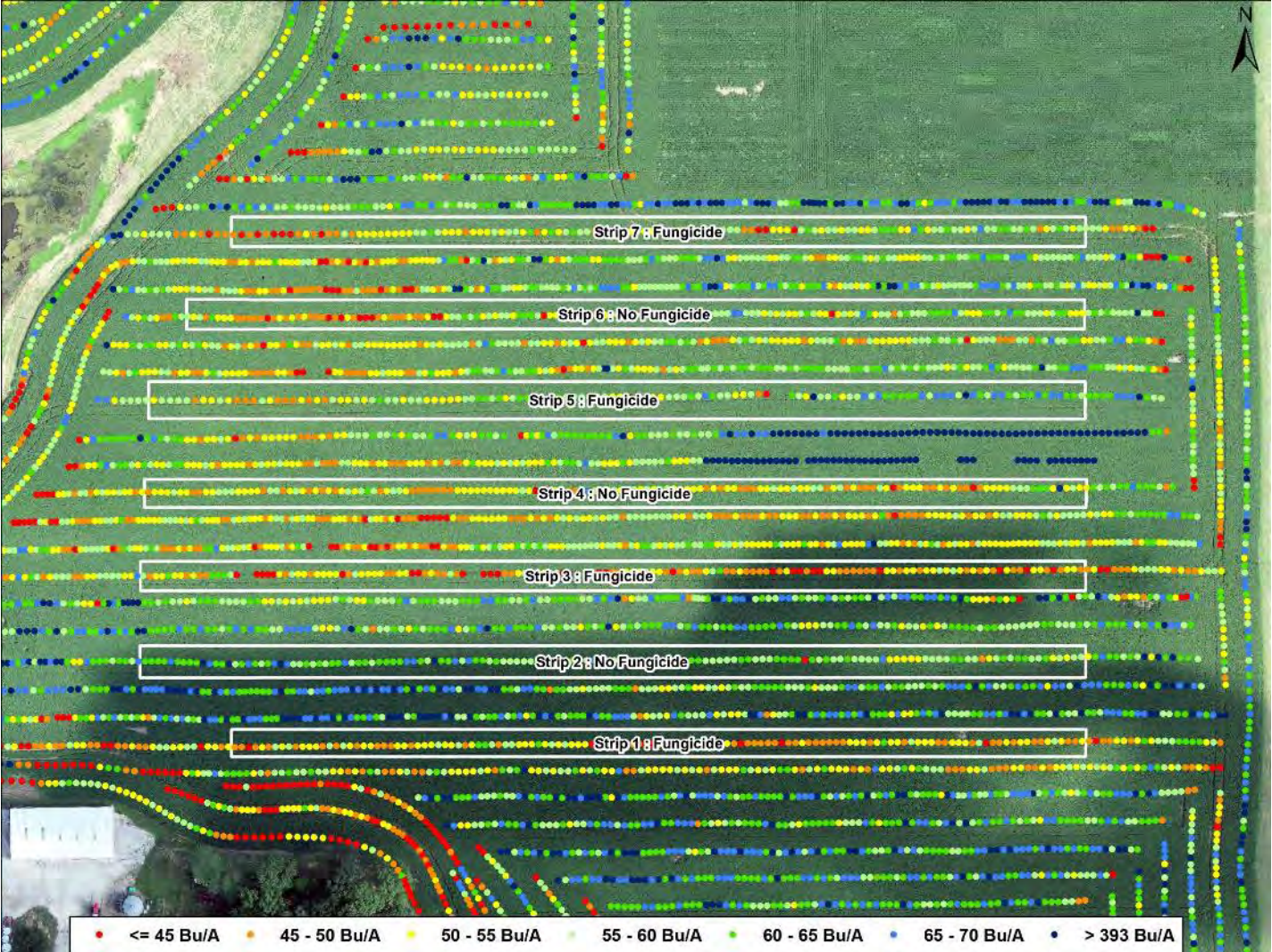
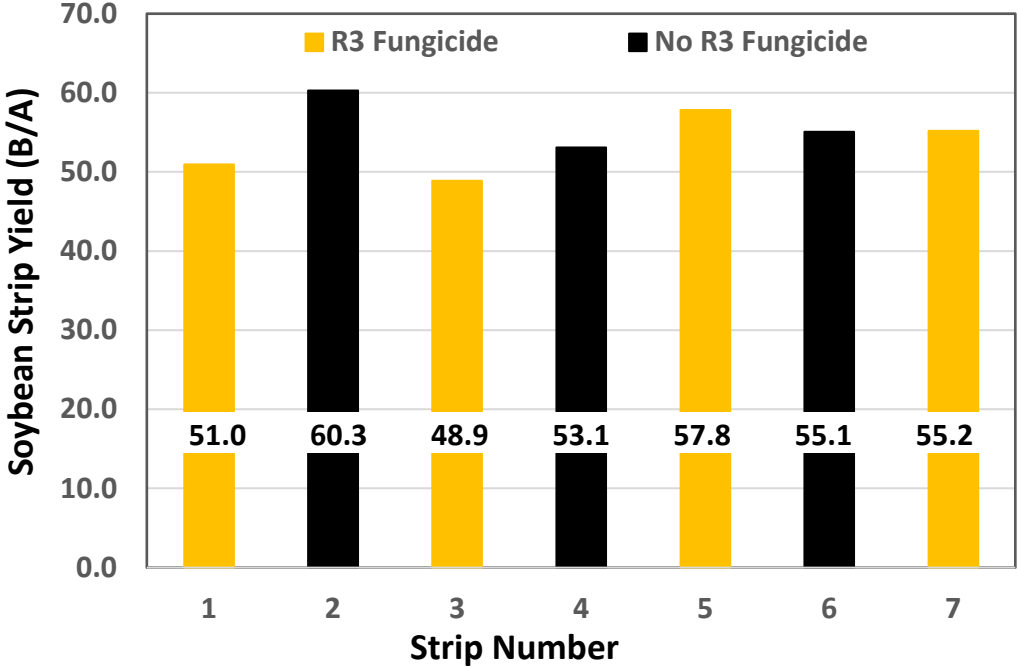
This on-farm research was supported by the Missouri Soybean Merchandizing Council (award No. 18-415) and University of Missouri Extension.

This on-farm research was only possible with the cooperation of Missouri Soybean farmers who volunteered to implement trials on their fields and the Regional MU Extension faculty that supported them.

Soybean R3 Fungicide Trial Site 1801 Ralls County

Conclusion: There was no evidence that R3 fungicide increased yield.

Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	54.1 (4.2)	--
Control (N)	55.8 (3.9)	--
R3 Fungicide (F)	52.8 (4.5)	-3.0

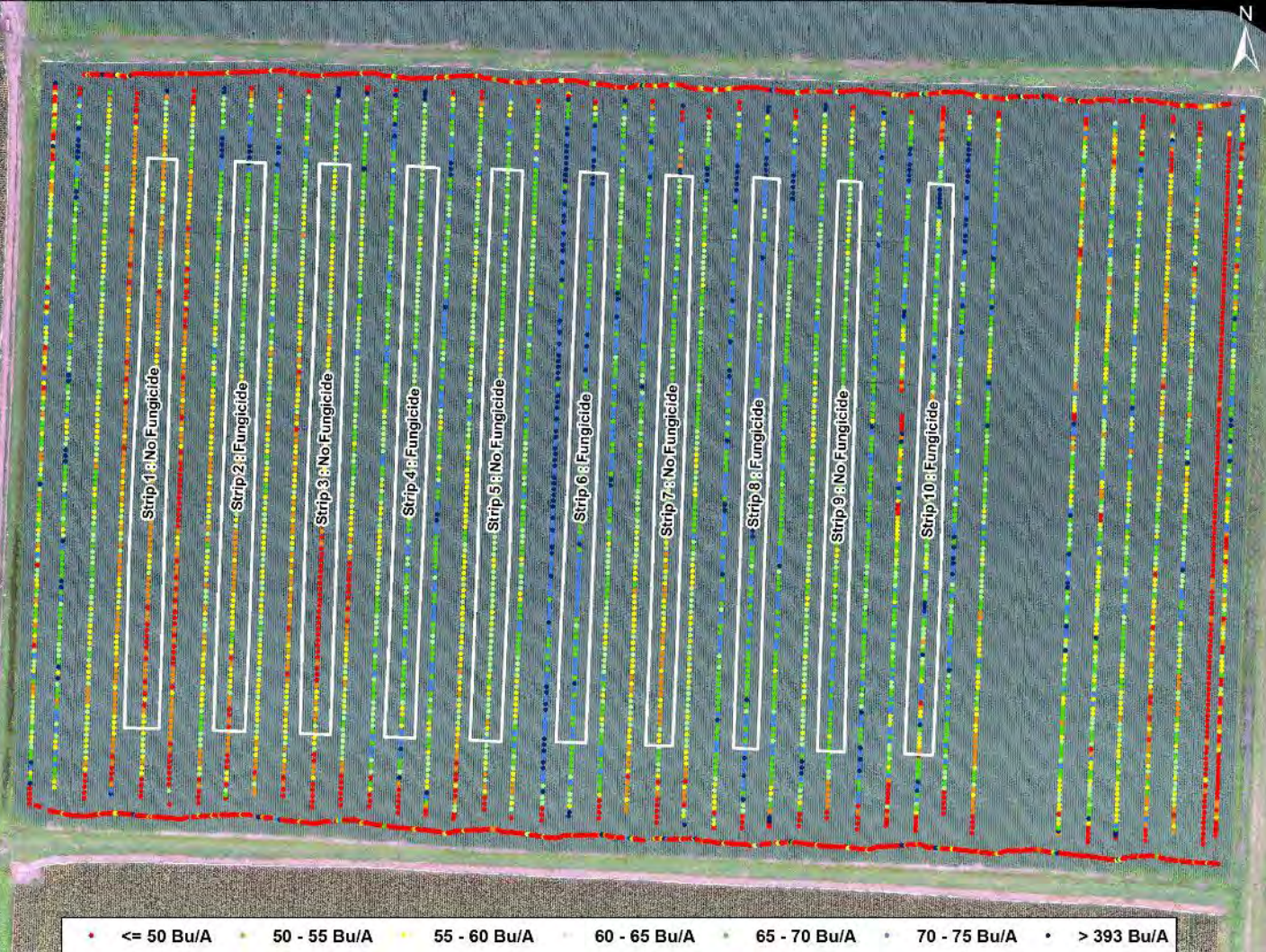


Soybean yield and areas used to determine strip yield. Soybean harvested 10/18/2018; imagery taken at 100m on 8/18/2018.

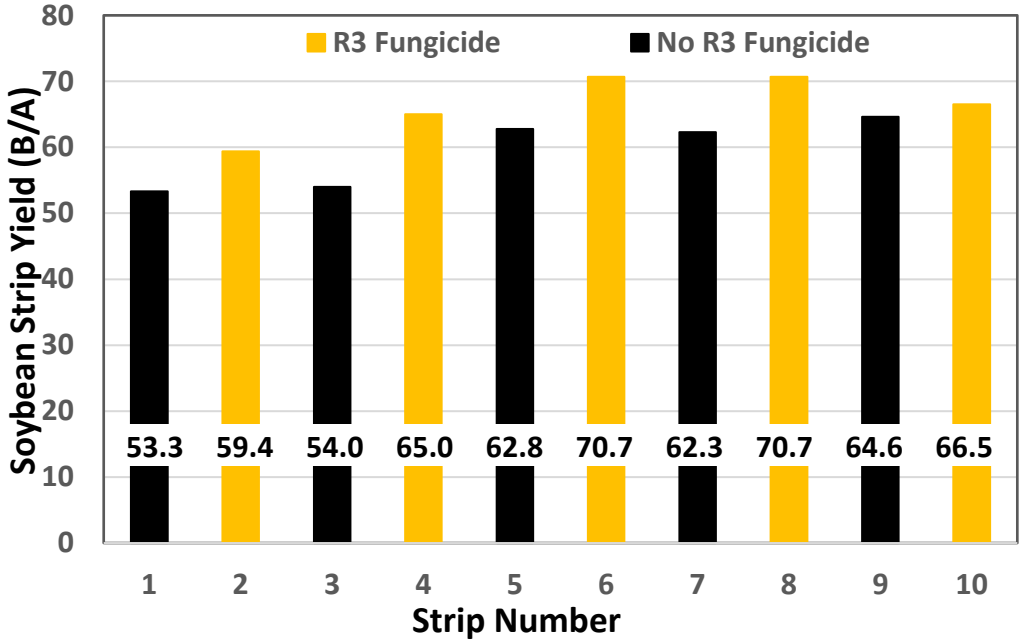
Soybean R3 Fungicide Trial Site 1802 Barton County

Conclusion: There clear evidence that R3 fungicide increased yield. There was a 95% probability the increase was at least 2.5 bushels per acre.

Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	62.9 (6.0)	--
Control (N)	59.4 (5.3)	--
R3 Fungicide (F)	66.5 (4.7)	7.1



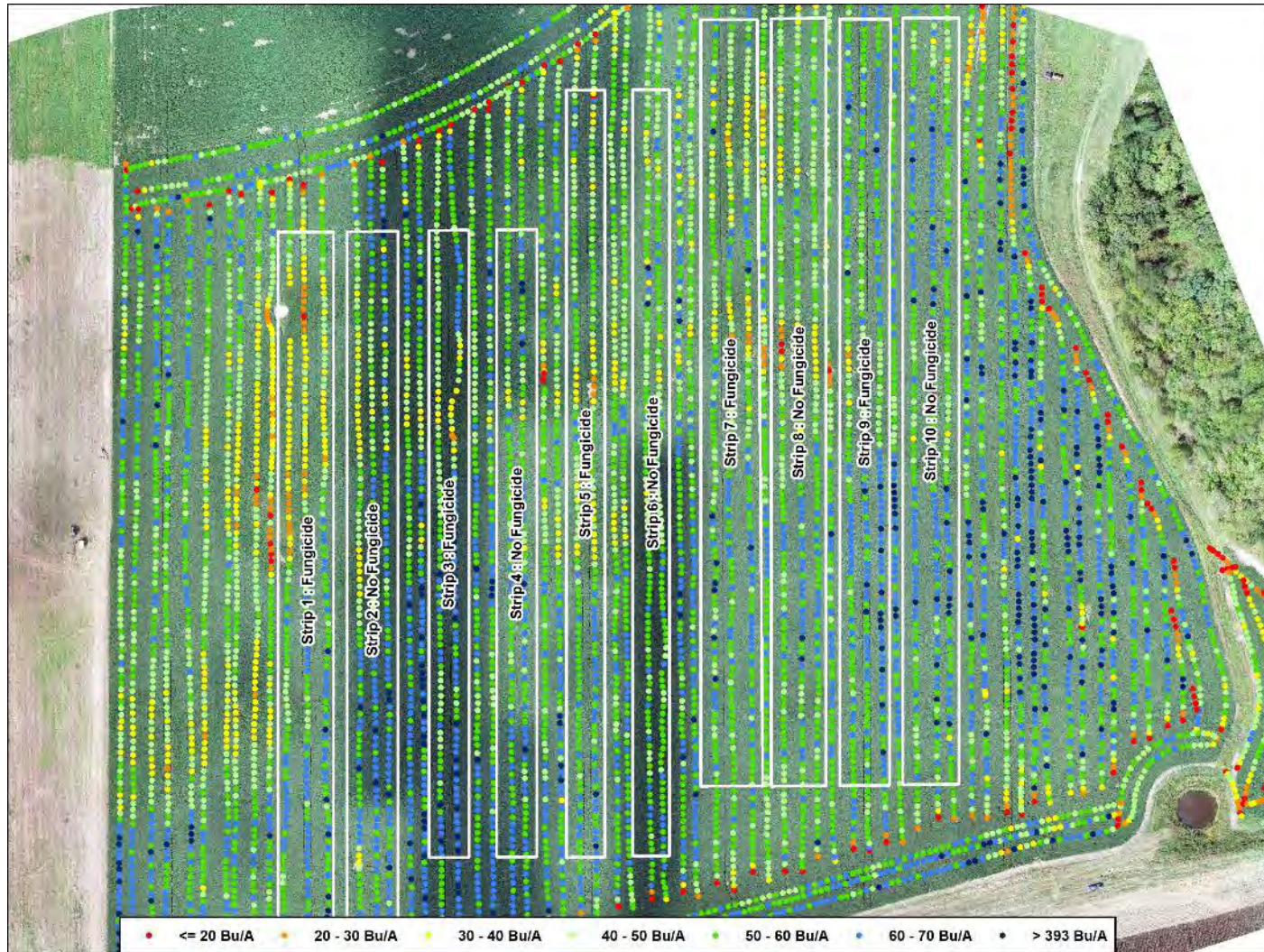
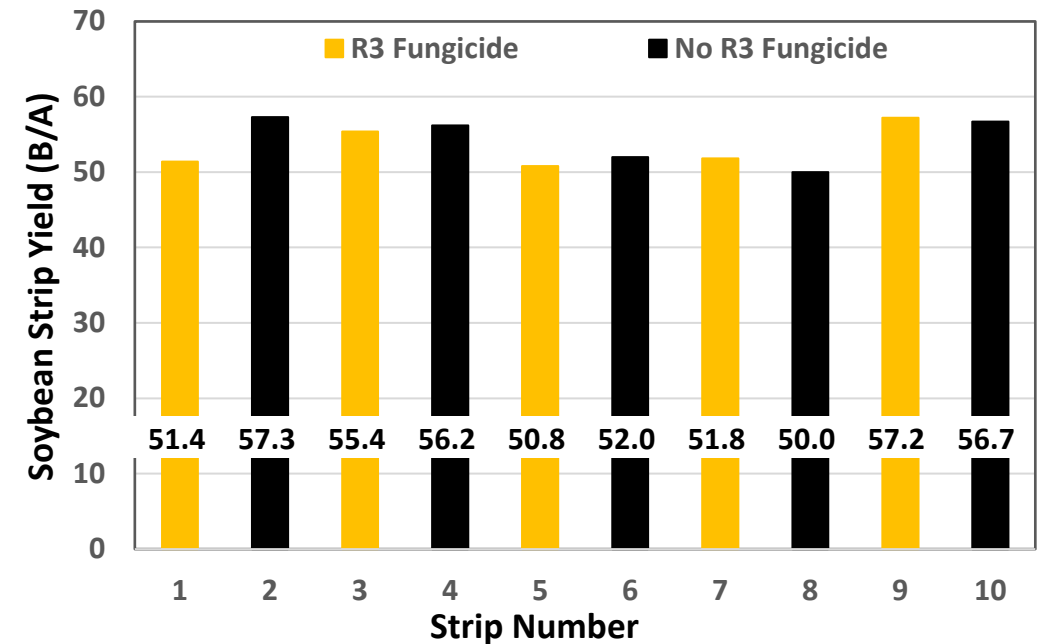
Soybean yield map and areas used to determine strip yield. Soybean harvested 10/22/2018; imagery taken at 100m on 8/17/2018.



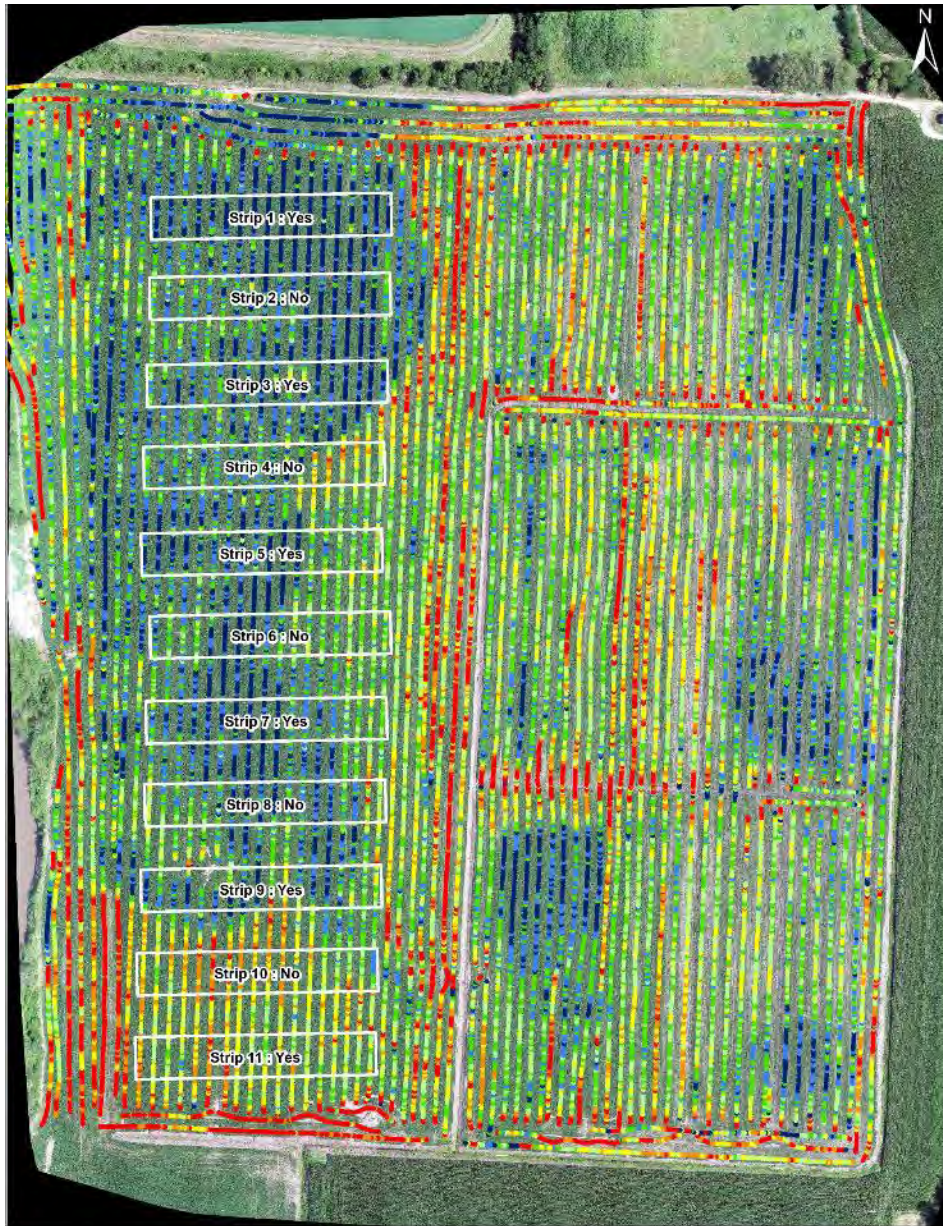
Soybean R3 Fungicide Trial Site 1803 Polk County

Conclusion: There was no evidence that R3 fungicide increased yield.

Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	54.9 (3.7)	--
Control (N)	55.7 (4.3)	--
R3 Fungicide (F)	54.2 (3.3)	-1.5



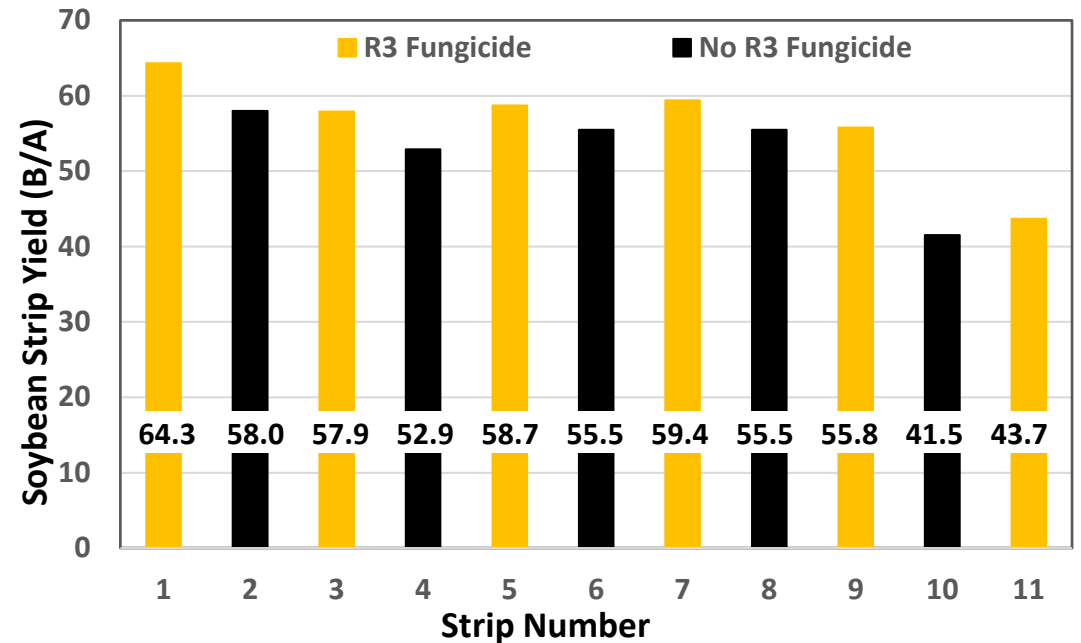
Soybean yield map and areas used to determine strip yield. Soybean harvested 10/22/2018; imagery taken at 100m on 8/17/2018.



Soybean R3 Fungicide Trial Site 1805W Nodaway County

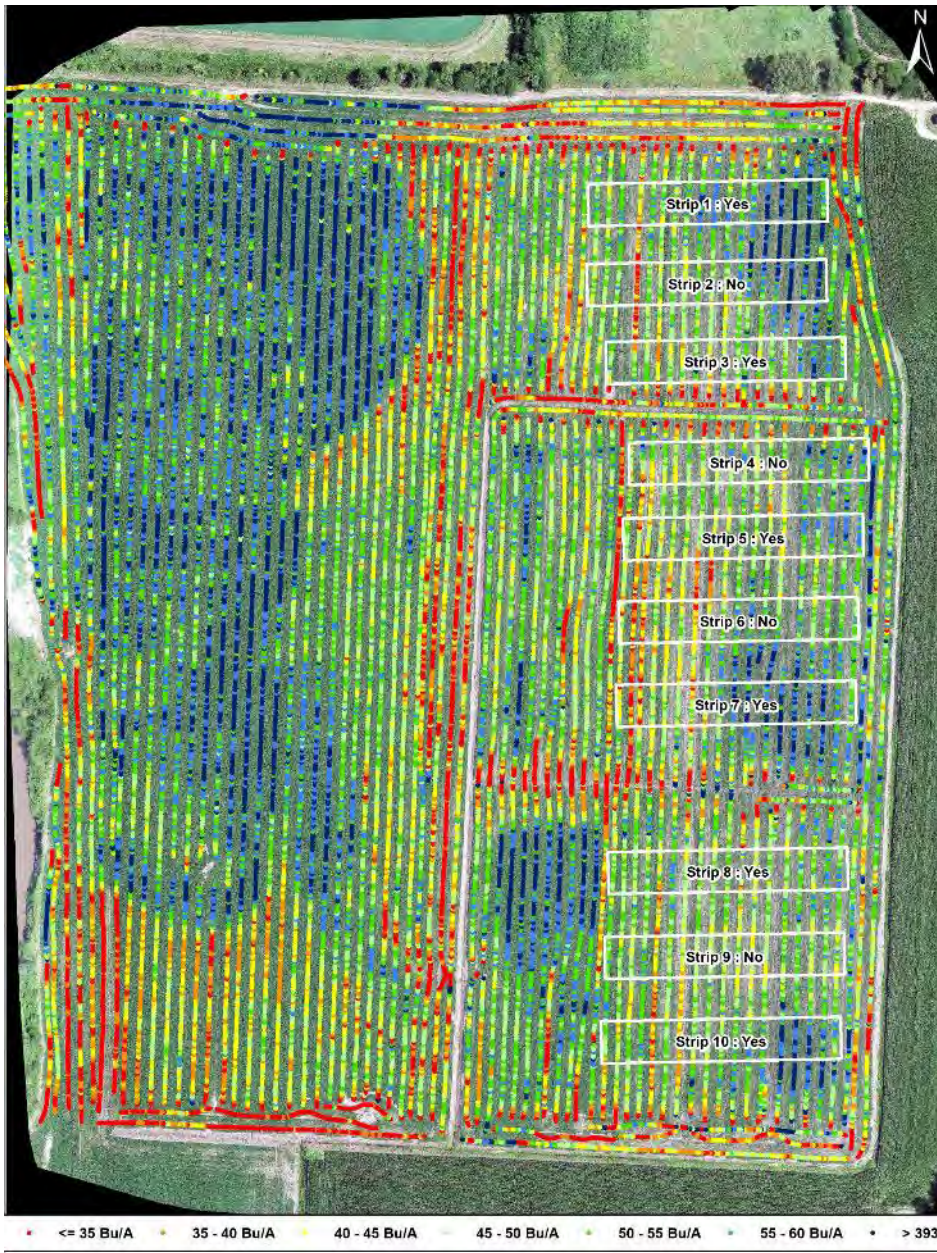
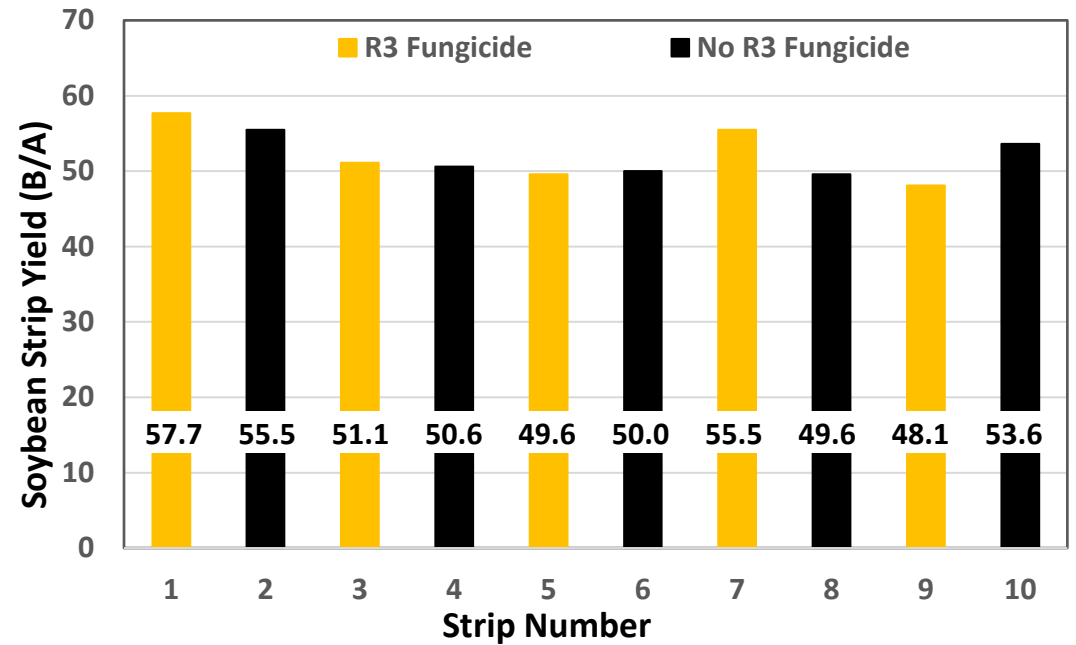
Conclusion: There clear evidence that R3 fungicide increased yield. There was a 90% probability the increase was at least one bushel per acre.

Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	54.8 (6.7)	--
Control (N)	52.7 (6.5)	--
R3 Fungicide (F)	56.6 (6.9)	3.9



Soybean R3 Fungicide Trial Site 1805E Nodaway County

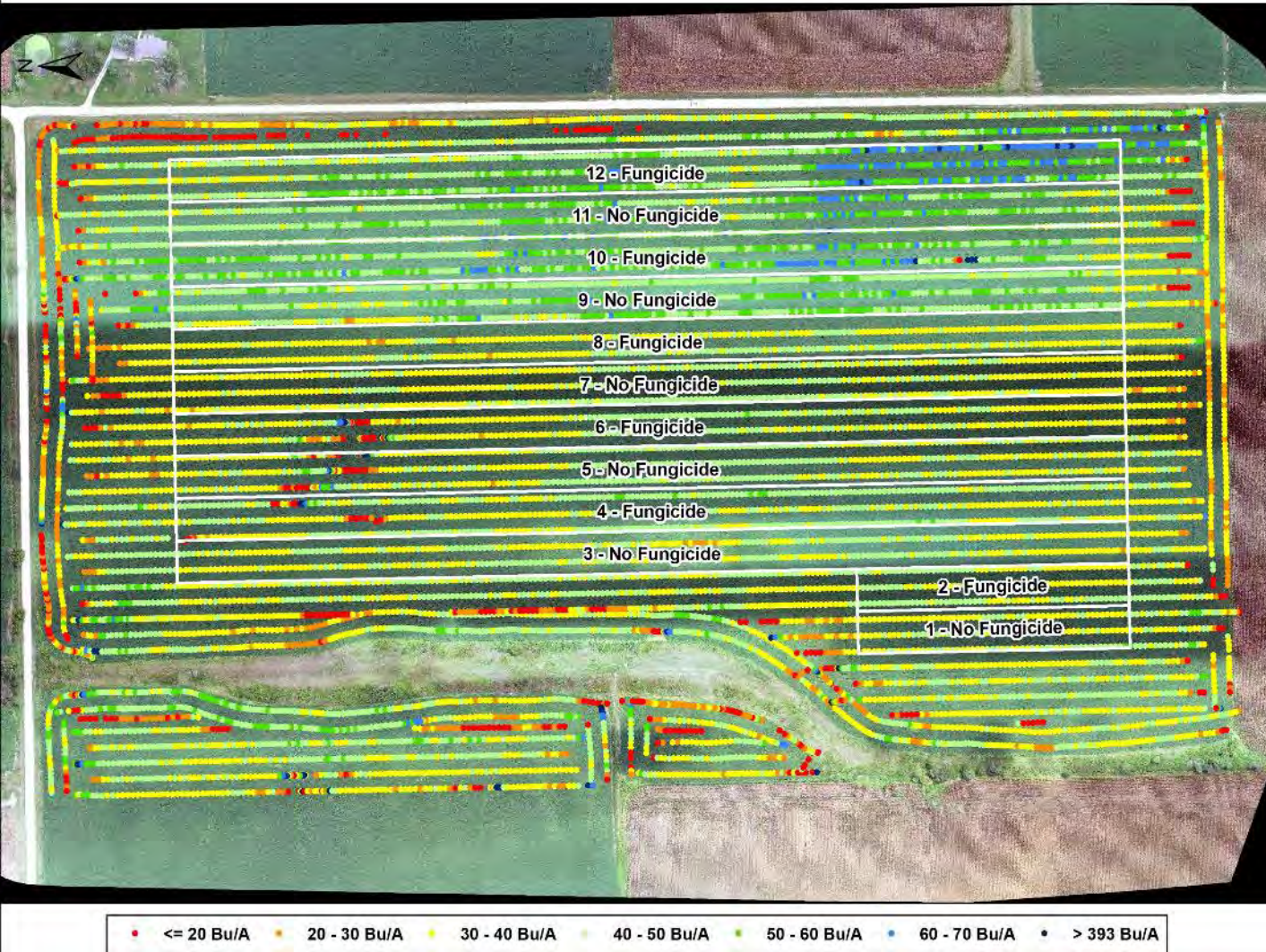
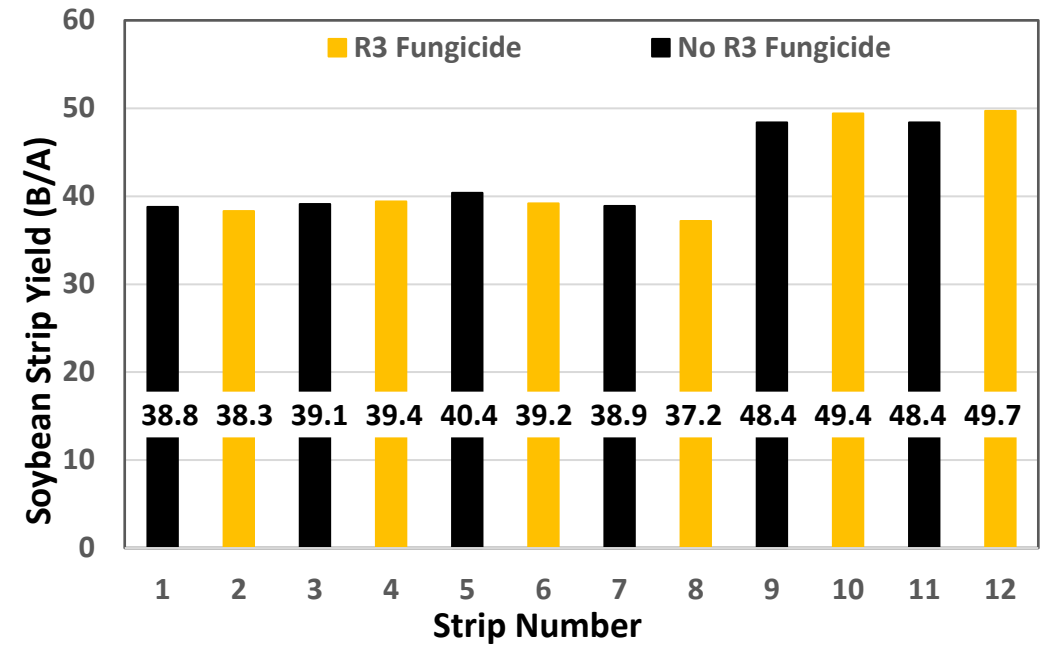
Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	52.1 (3.2)	--
Control (N)	51.1 (3.2)	--
R3 Fungicide (F)	52.9 (3.3)	1.8



Map of soybean yield and areas used to determine strip yield. Soybean harvested 10/24/2018; imagery taken at 100m on 7/3/2018.

Soybean R3 Fungicide Trial Site 1806 Holt County

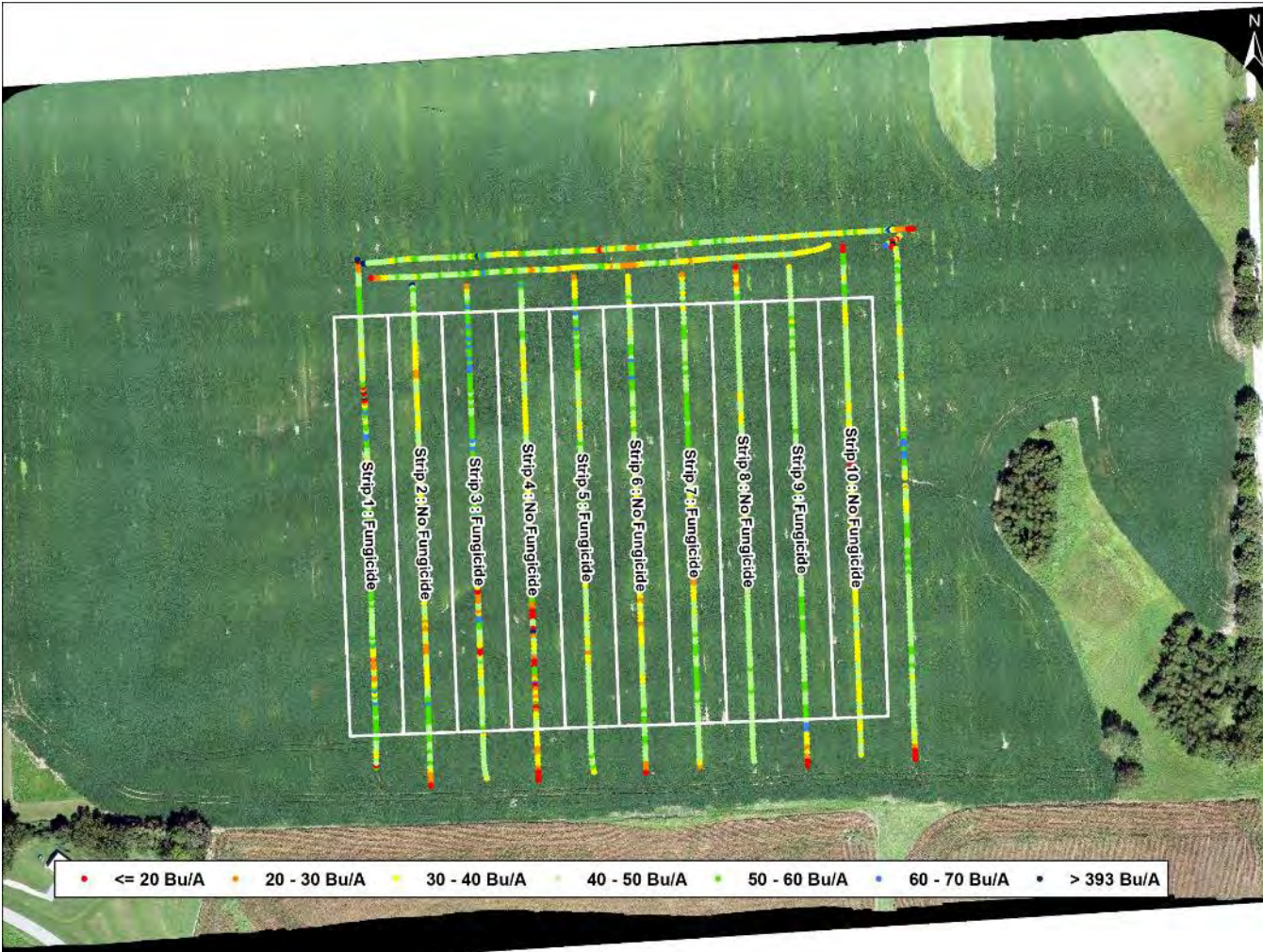
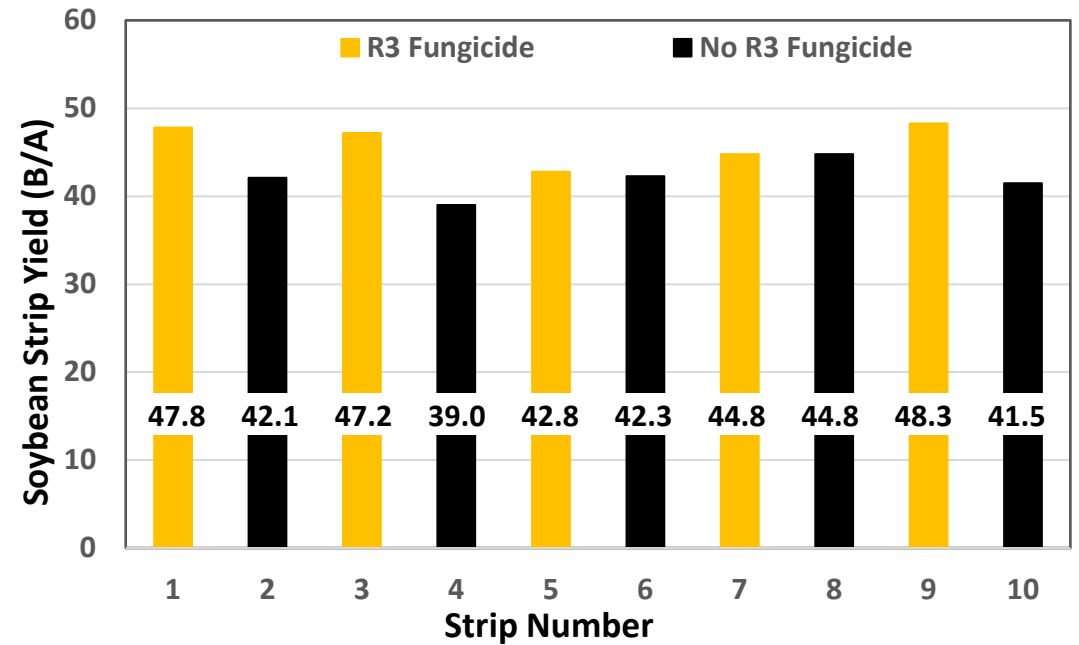
Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	42.3 (5.0)	--
Control (N)	42.3 (4.7)	--
R3 Fungicide (F)	42.2 (5.7)	-0.1



Map of soybean yield and areas used to determine strip yield. Soybean harvested 10/20/2018; imagery taken at 100m on 8/21/2018.

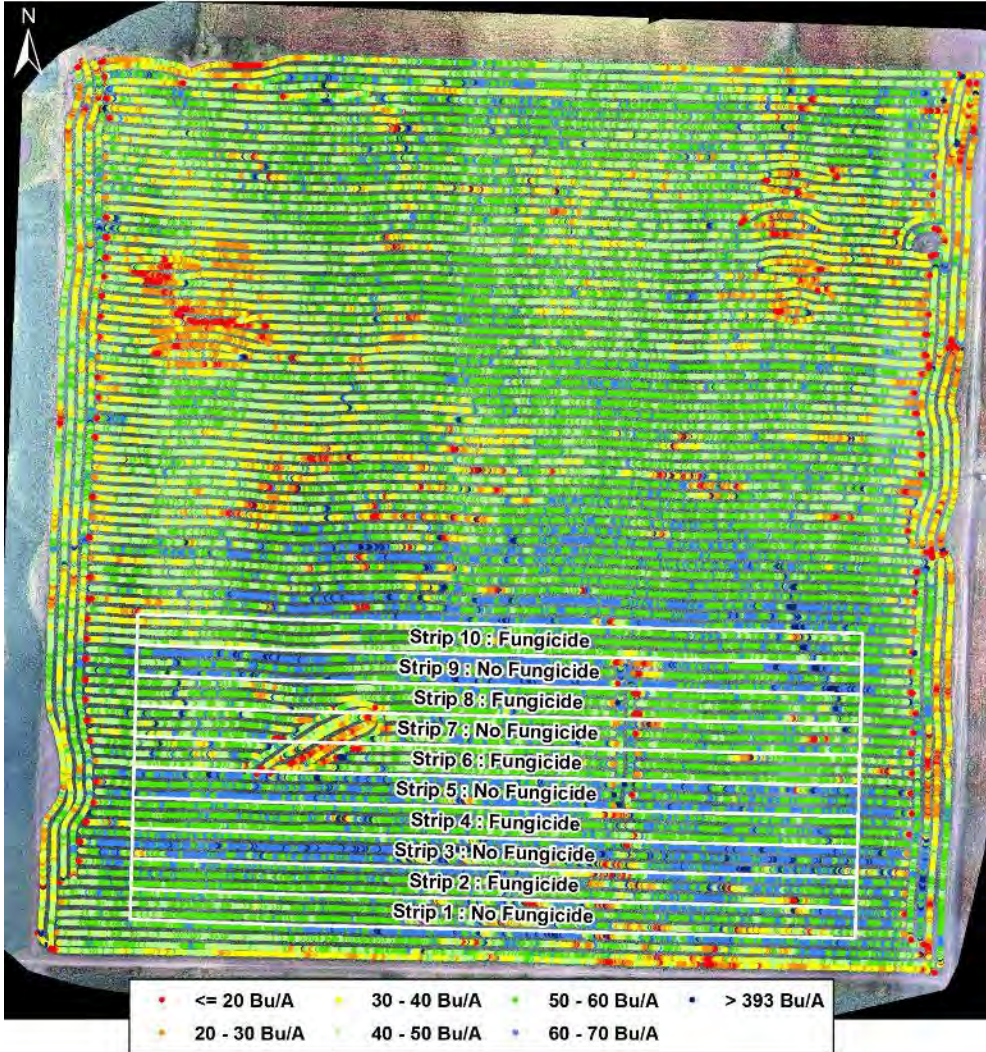
Soybean R3 Fungicide Trial Site 1807 Scott County

Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	44.1 (3.0)	--
Control (N)	41.9 (2.1)	--
R3 Fungicide (F)	46.2 (2.3)	4.3

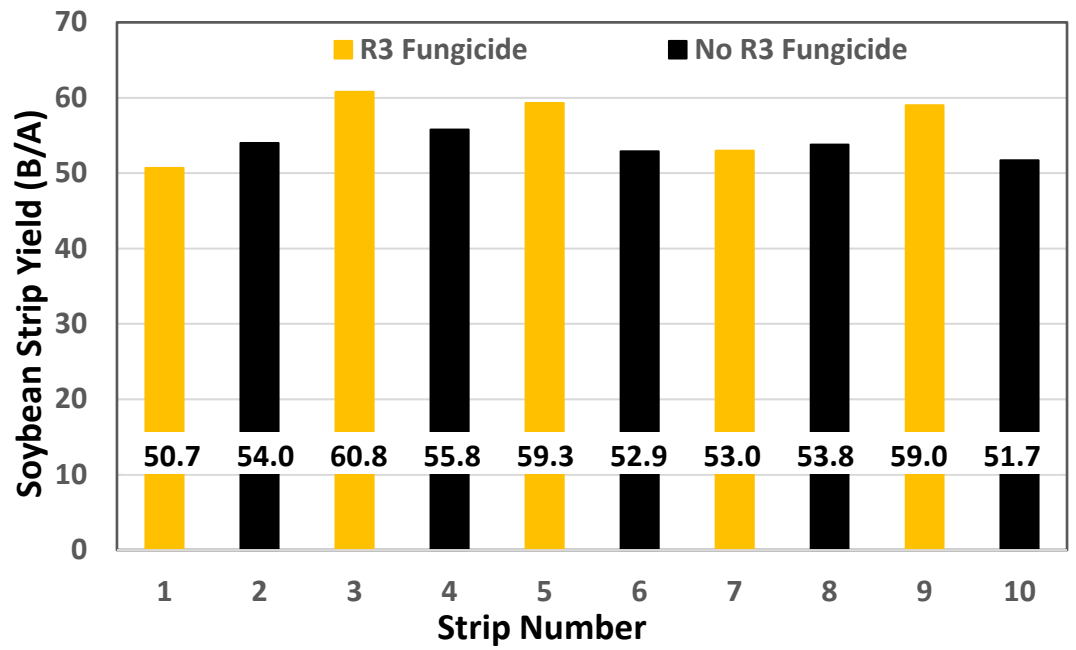


Map of soybean yield and areas used to determine strip yield. Soybean harvested 10/28/2018; imagery taken at 100m on 8/28/2018.

Soybean R3 Fungicide Trial Site 1809 Holt County



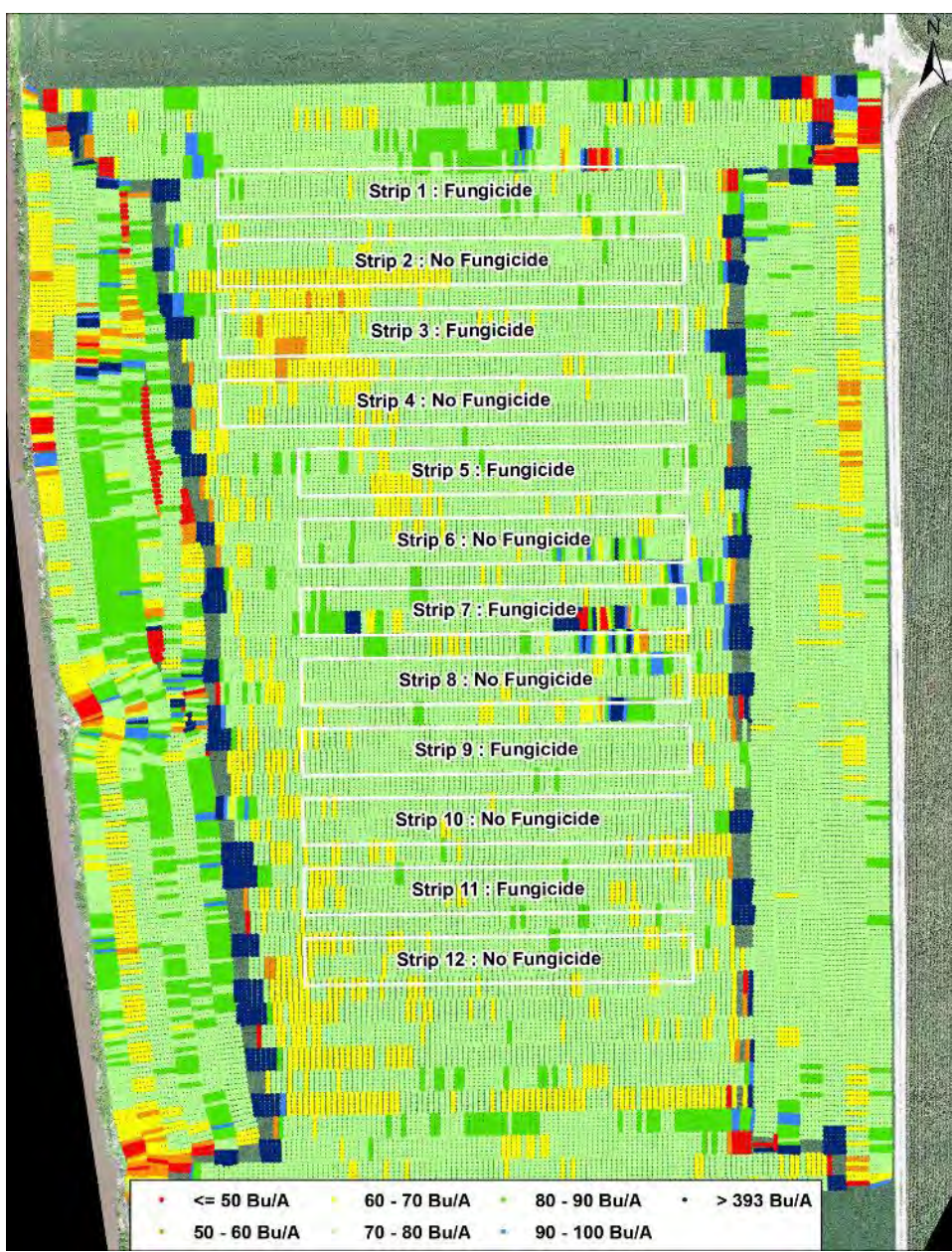
Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	55.1 (3.5)	--
Control (N)	53.6 (1.5)	--
R3 Fungicide (F)	56.6 (4.4)	3.0



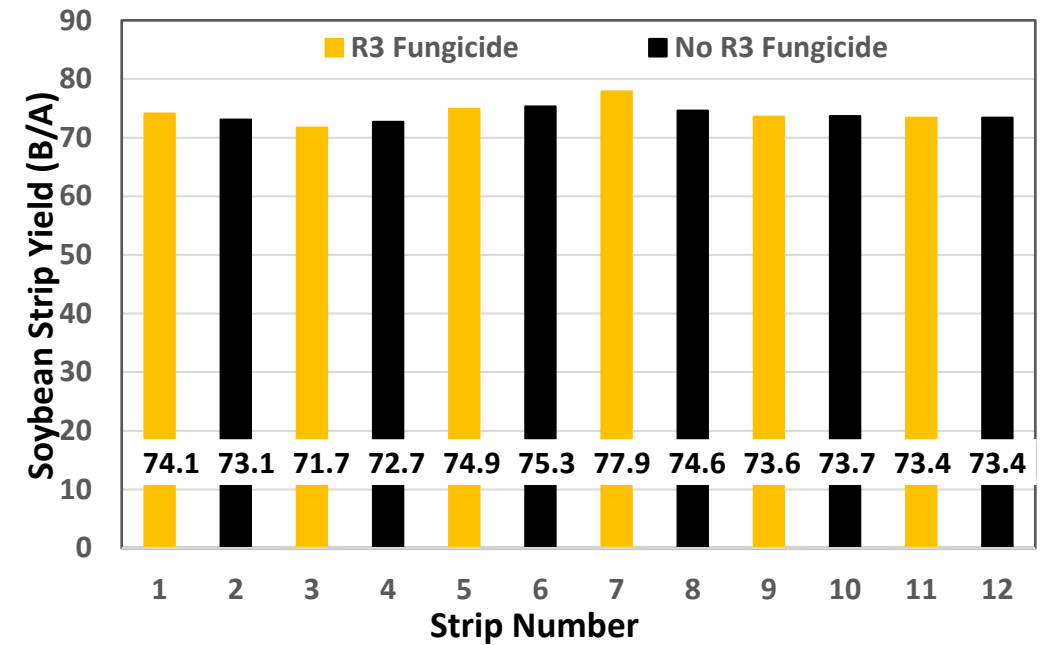
Soybean R3 Fungicide Trial Site 1810 Marion County

A preliminary analysis of the data indicates there is >95% probability that R3 fungicide increased yield.

Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	74.0 (1.6)	--
Control (N)	73.8 (1.0)	--
R3 Fungicide (F)	74.2 (2.1)	0.4



Map of soybean yield and areas used to determine strip yield. Soybean harvested 10/25/2018; imagery taken at 100m on 8/3/2018.



Soybean R3 Fungicide Trial Site 1811 Lincoln County



Map of soybean yield and areas used to determine strip yield. Soybean harvested 10/22/2018; imagery taken at 100m on 8/9/2018.

Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	54.5 (7.0)	--
Control (N)	53.3 (6.4)	--
R3 Fungicide (F)	55.7 (7.9)	2.4

