

# 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.

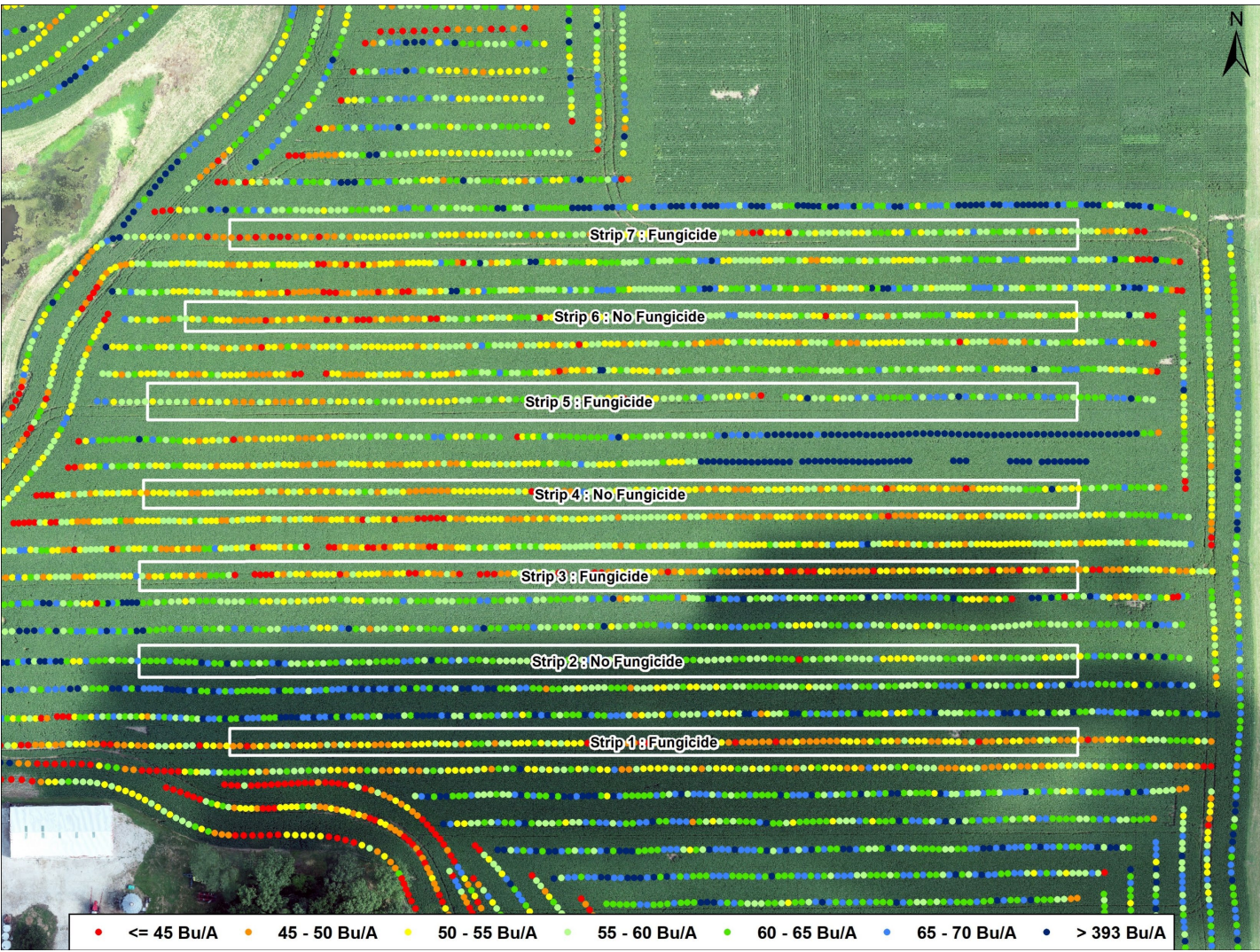
*This on-farm research was supported by the Missouri Soybean Merchandizing Council (award No. 18-415) and University of Missouri Extension.*

*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.*

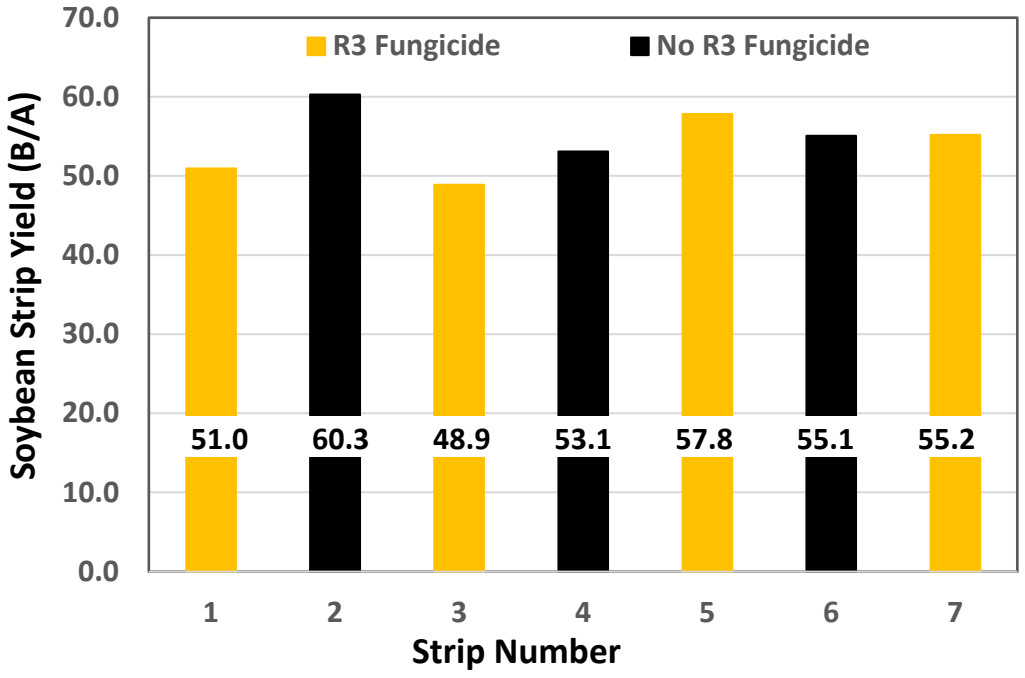
# Soybean R3 Fungicide Trial Site 1801 Ralls County

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



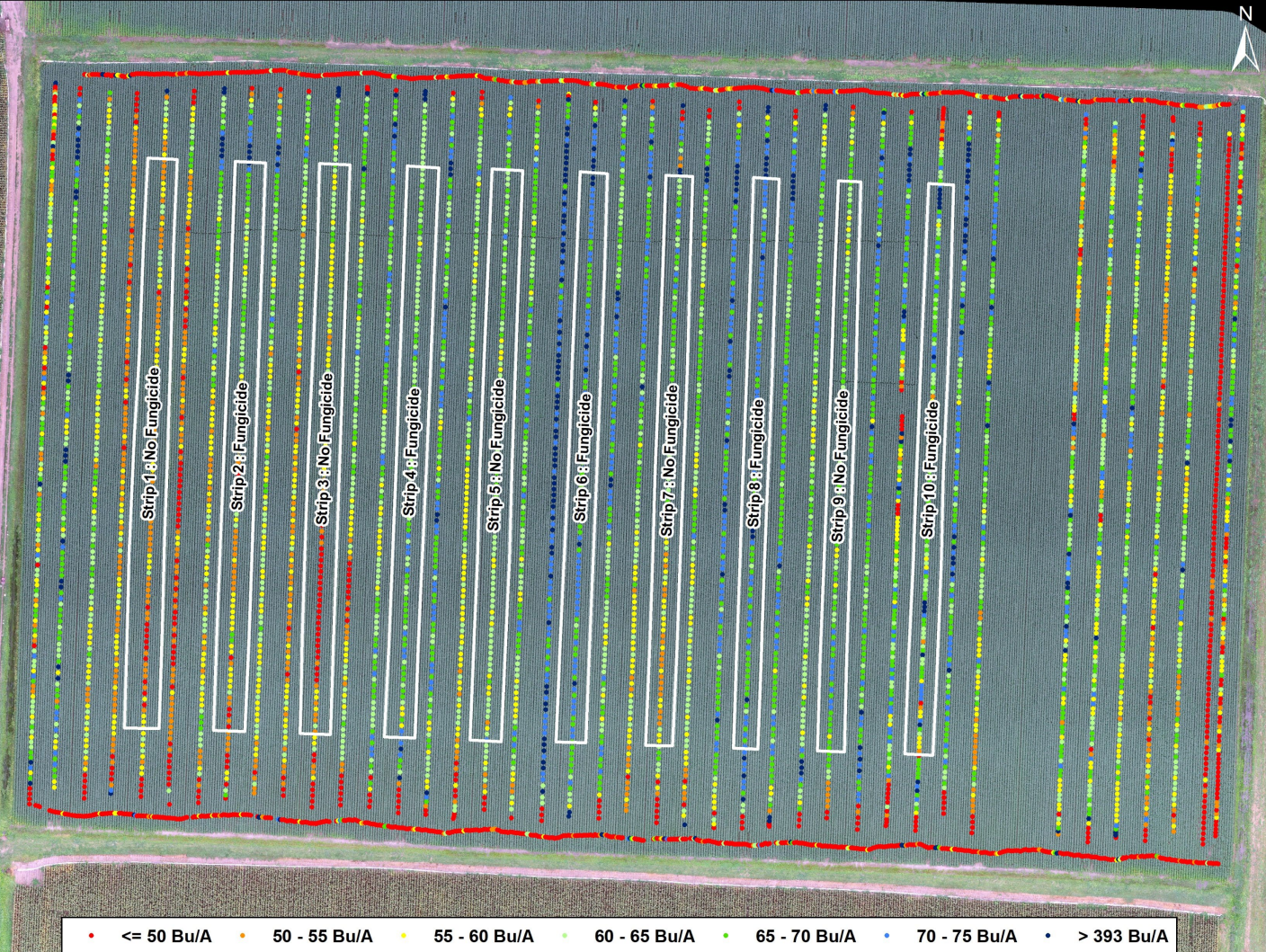
Soybean yield and areas used to determine strip yield. Soybean harvested 10/18/2018; imagery taken at 100m on 8/18/2018.



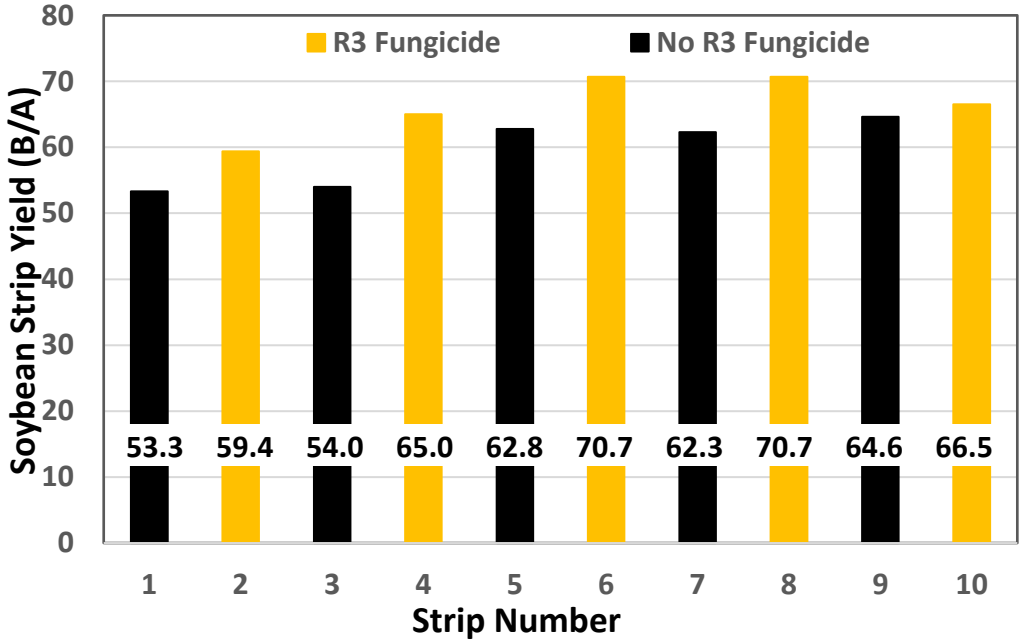
# Soybean R3 Fungicide Trial Site 1802 Barton County

**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



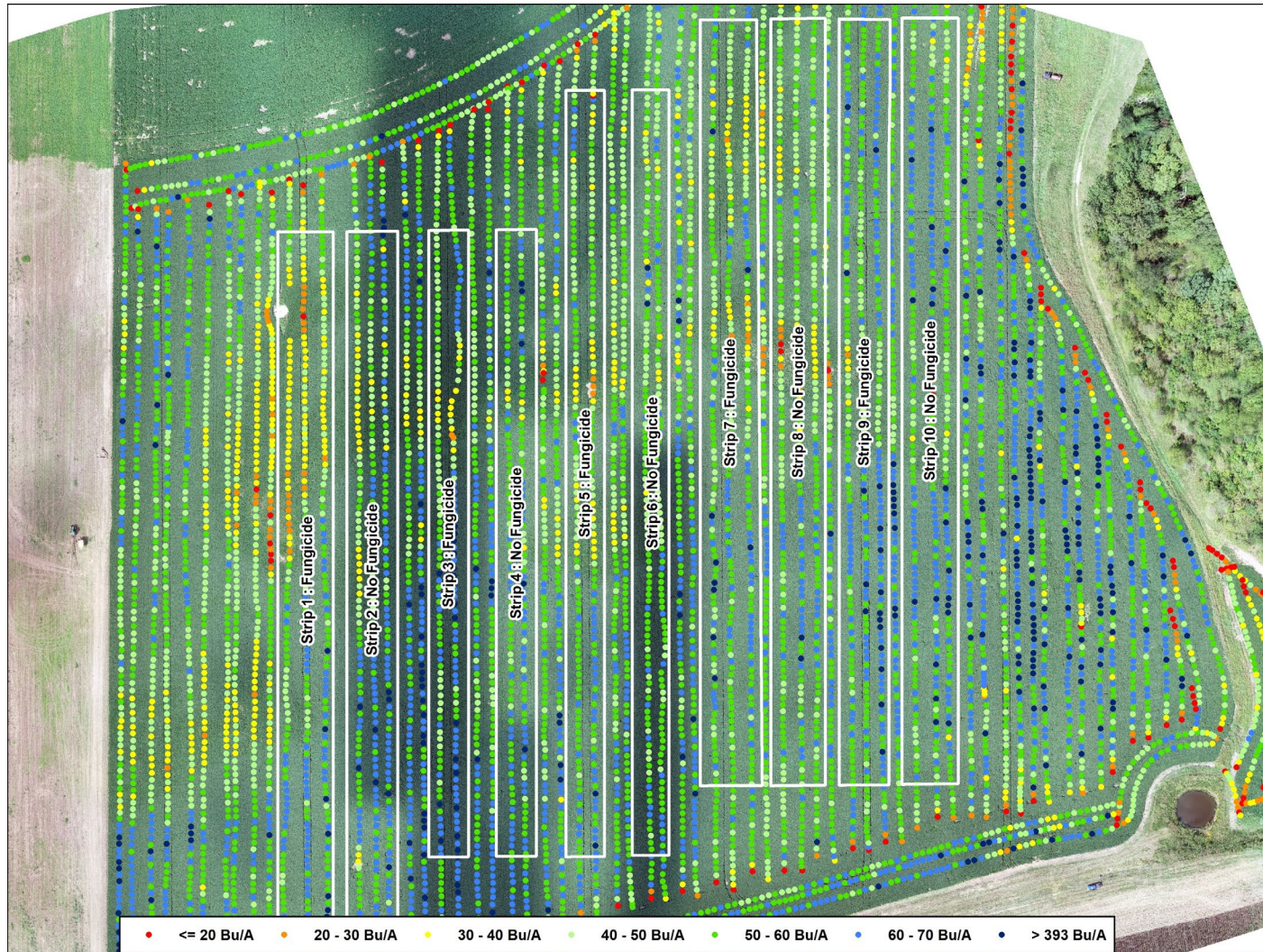
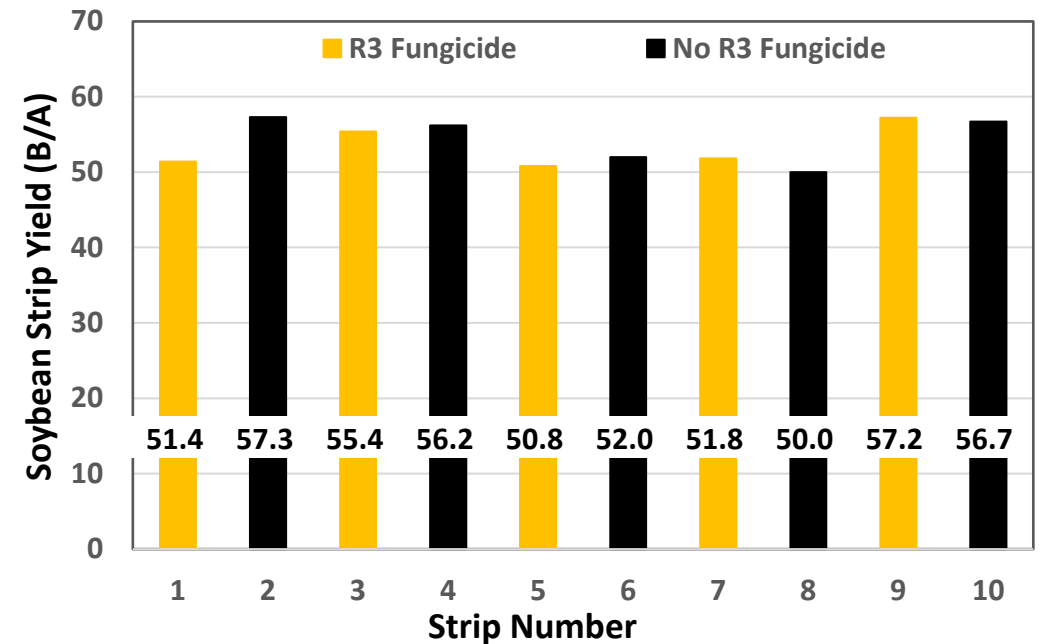
Soybean yield map and areas used to determine strip yield. Soybean harvested 10/22/2018; imagery taken at 100m on 8/17/2018.



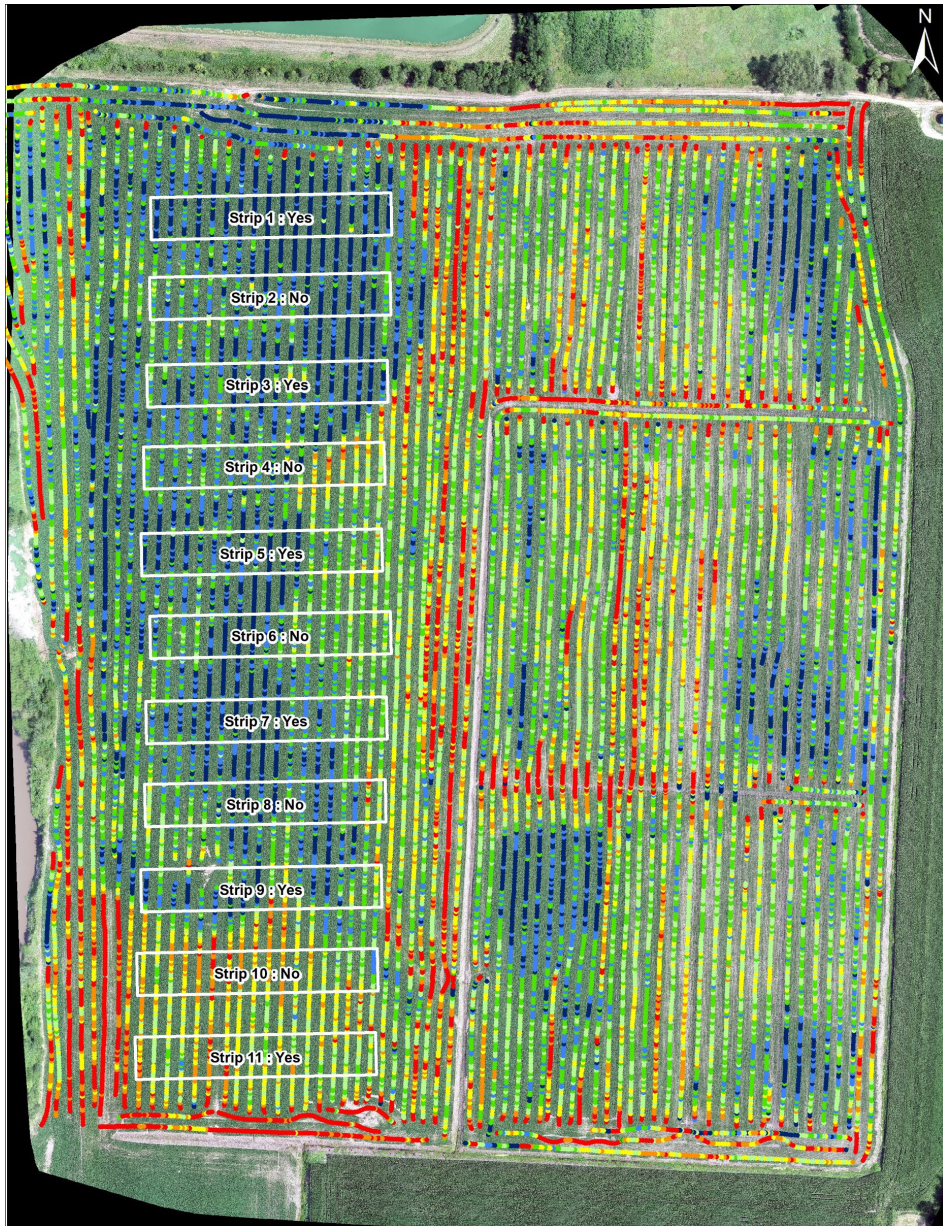
# Soybean R3 Fungicide Trial Site 1803 Polk County

**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.



• <= 35 Bu/A • 35 - 40 Bu/A • 40 - 45 Bu/A • 45 - 50 Bu/A • 50 - 55 Bu/A • 55 - 60 Bu/A • > 393

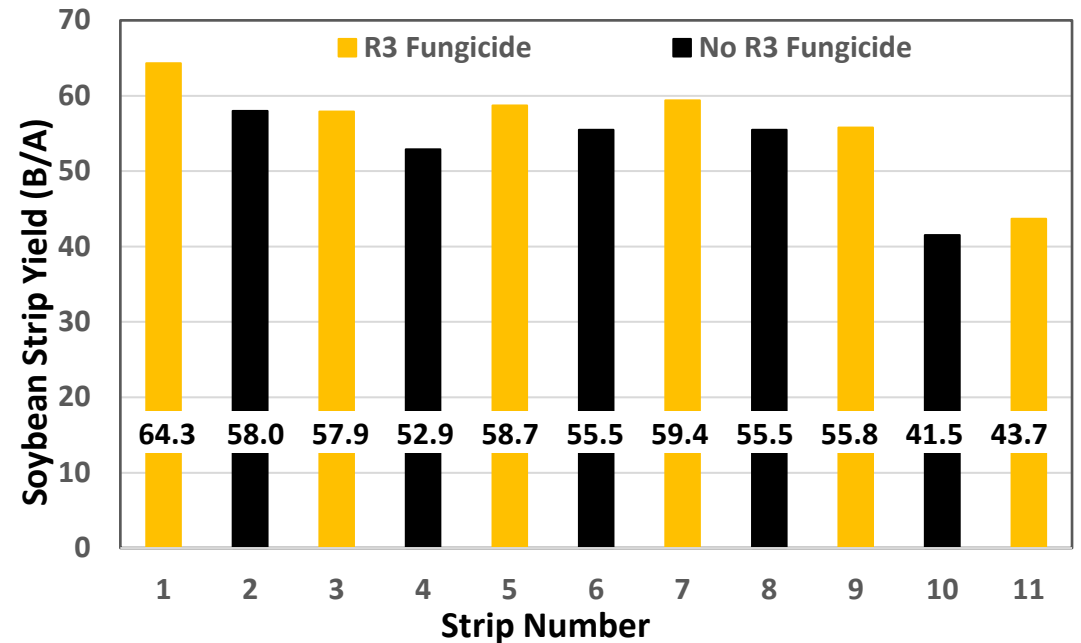
Map of soybean yield and areas used to determine strip yield. Soybean harvested 10/24/2018; imagery taken at 100m on 7/3/2018.

nfarm=4

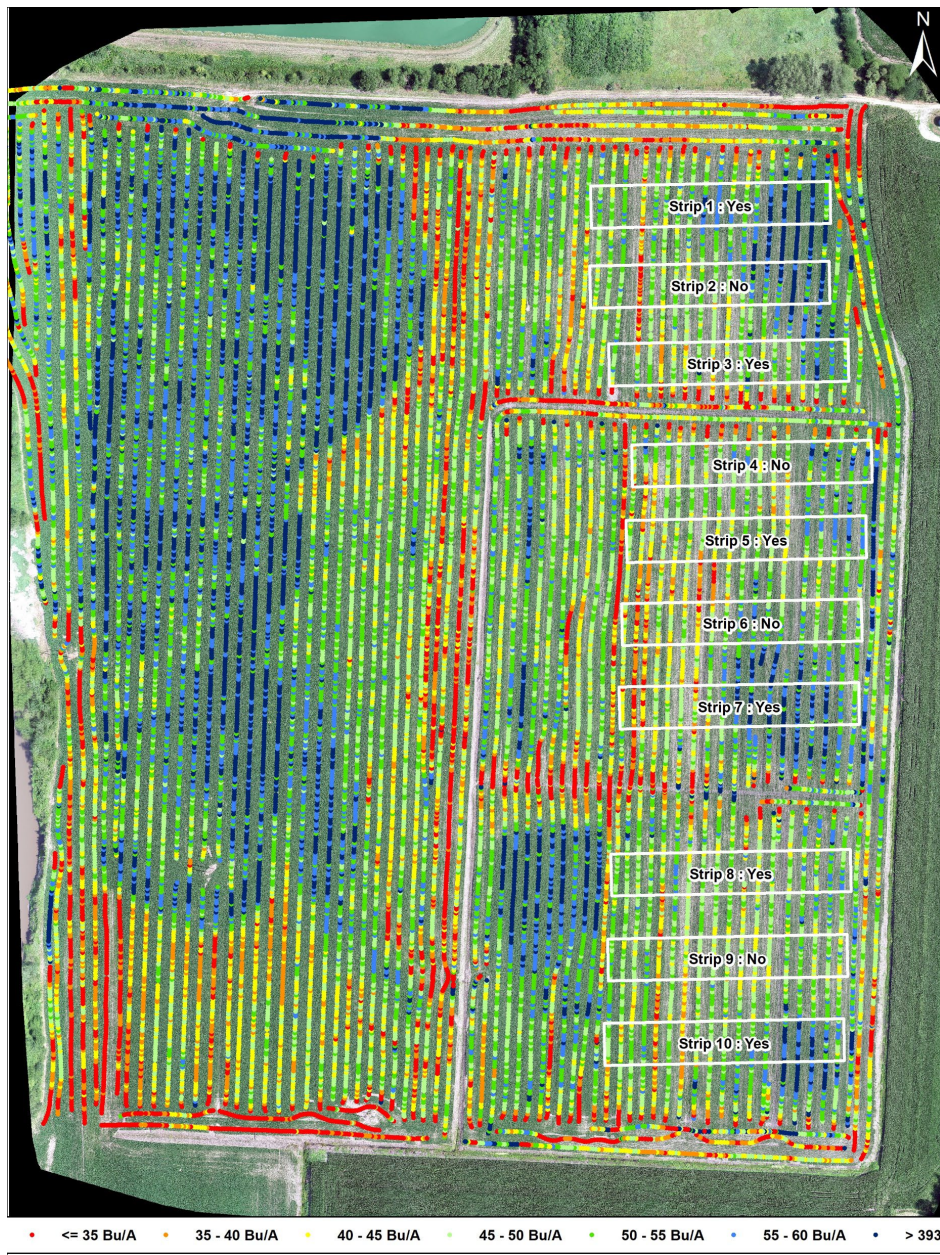
# Soybean R3 Fungicide Trial Site 1805W Nodaway County

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

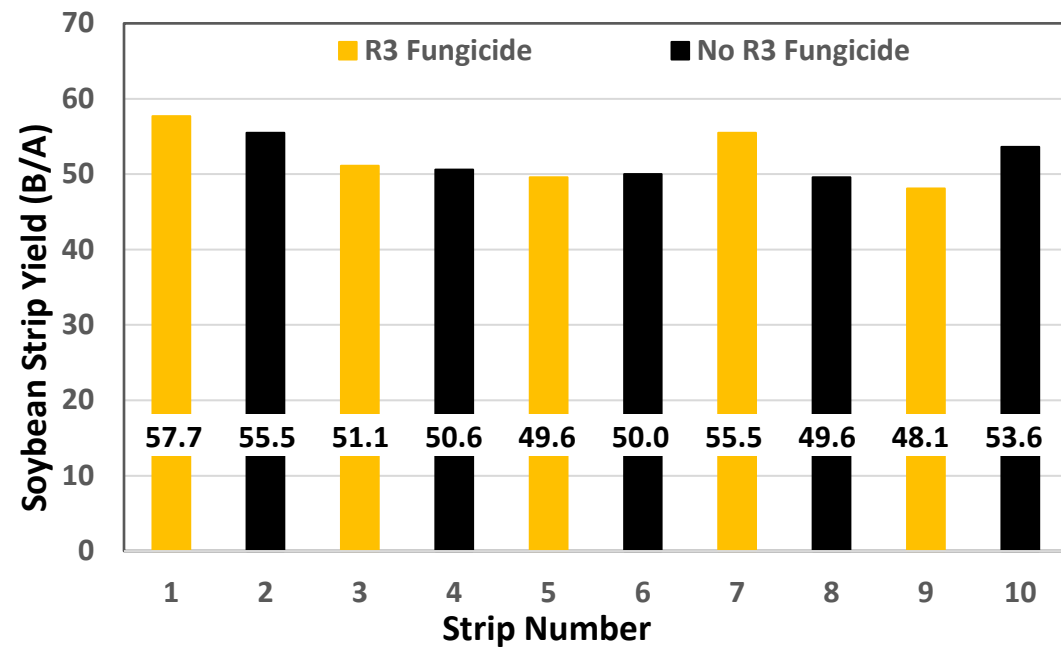
Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	54.8 (6.7)	--
Control (N)	52.7 (6.5)	--
R3 Fungicide (F)	56.6 (6.9)	3.9



# Soybean R3 Fungicide Trial Site 1805E Nodaway County



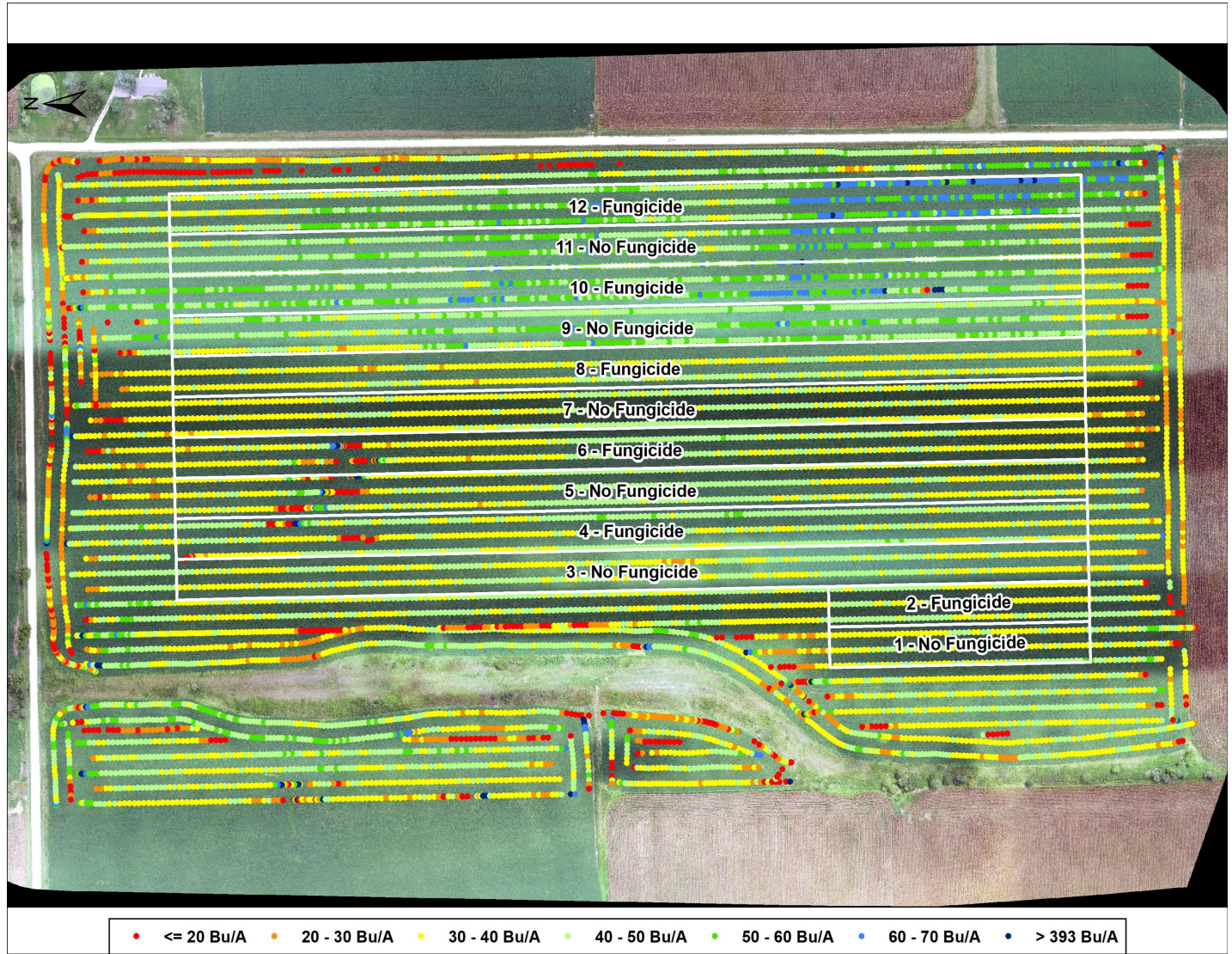
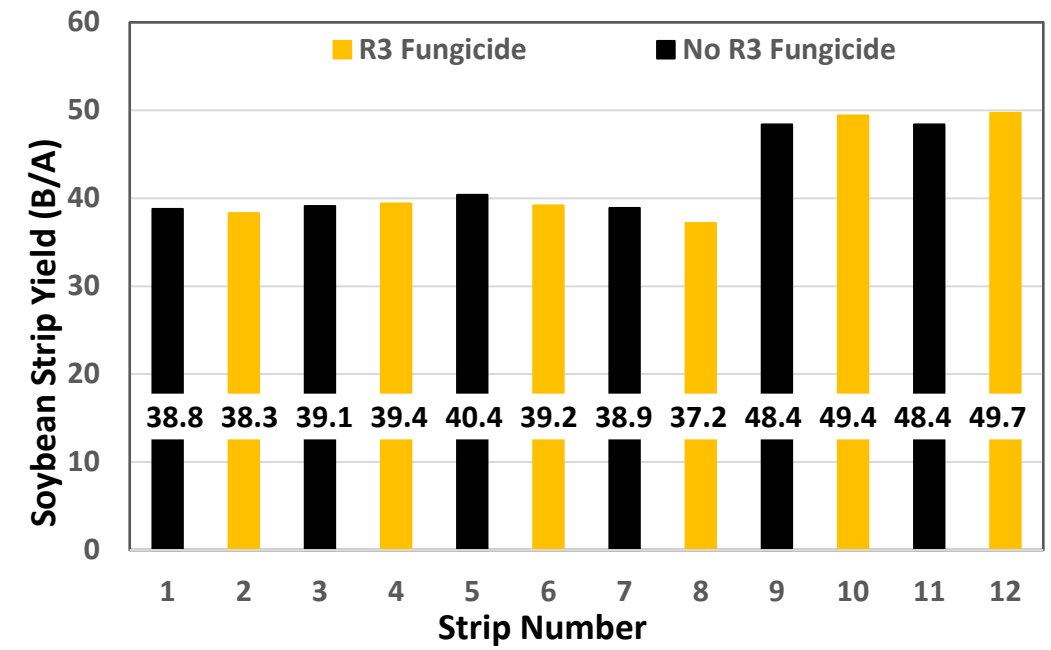
Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	52.1 (3.2)	--
Control (N)	51.1 (3.2)	--
R3 Fungicide (F)	52.9 (3.3)	1.8



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

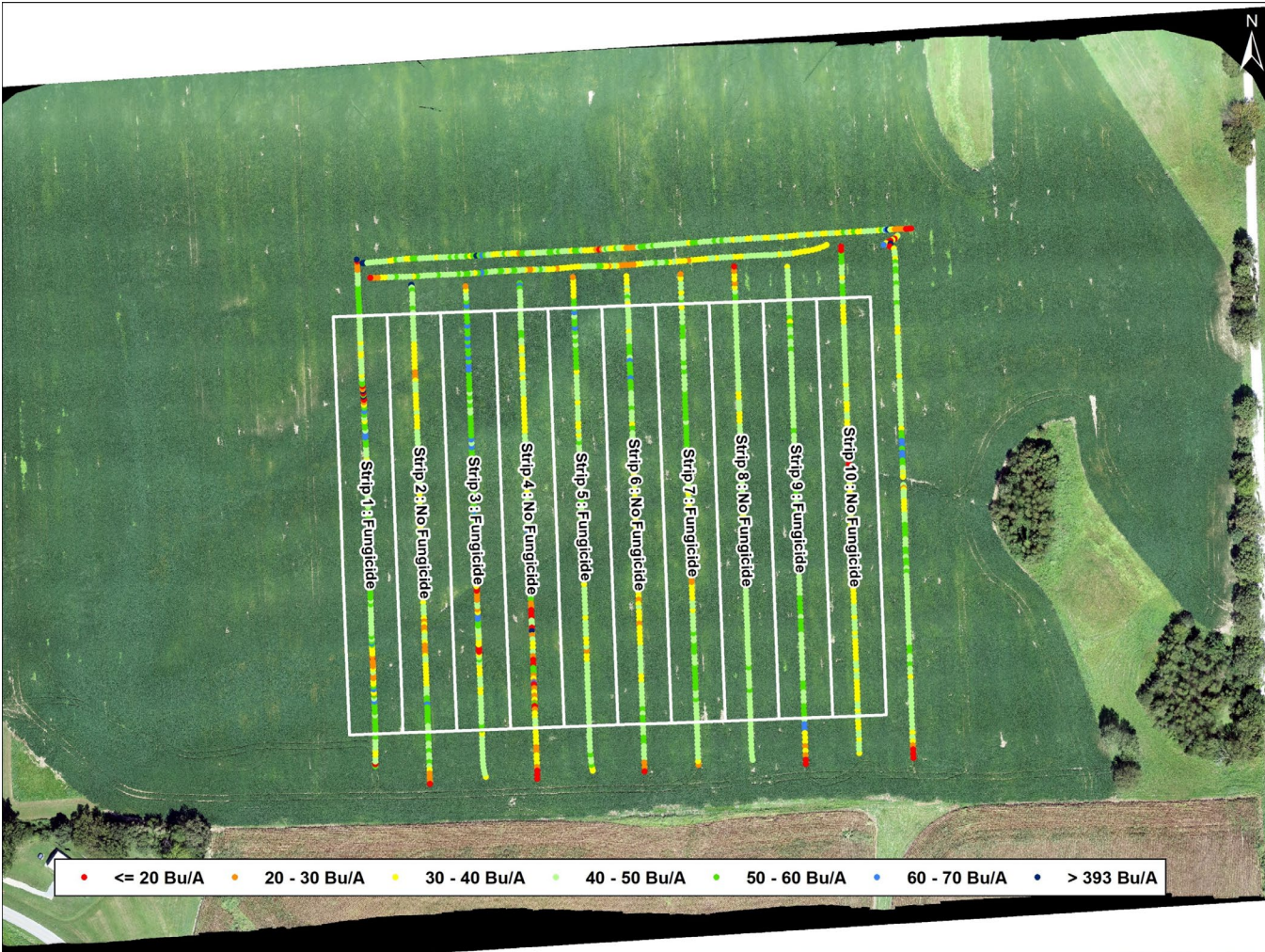
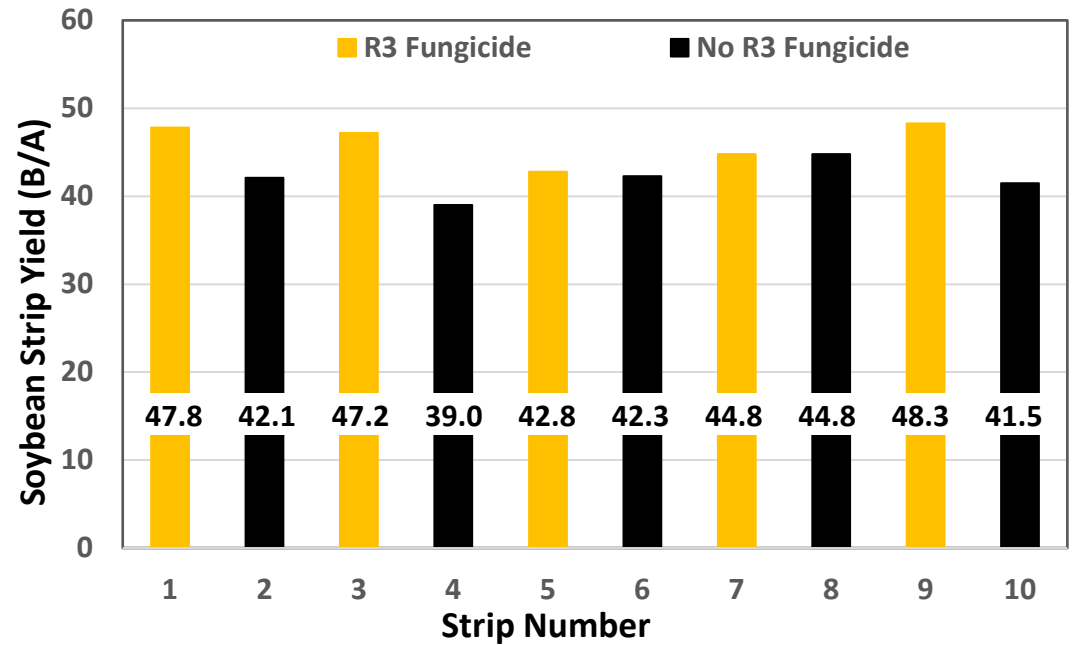
Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	42.3 (5.0)	--
Control (N)	42.3 (4.7)	--
R3 Fungicide (F)	42.2 (5.7)	-0.1



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

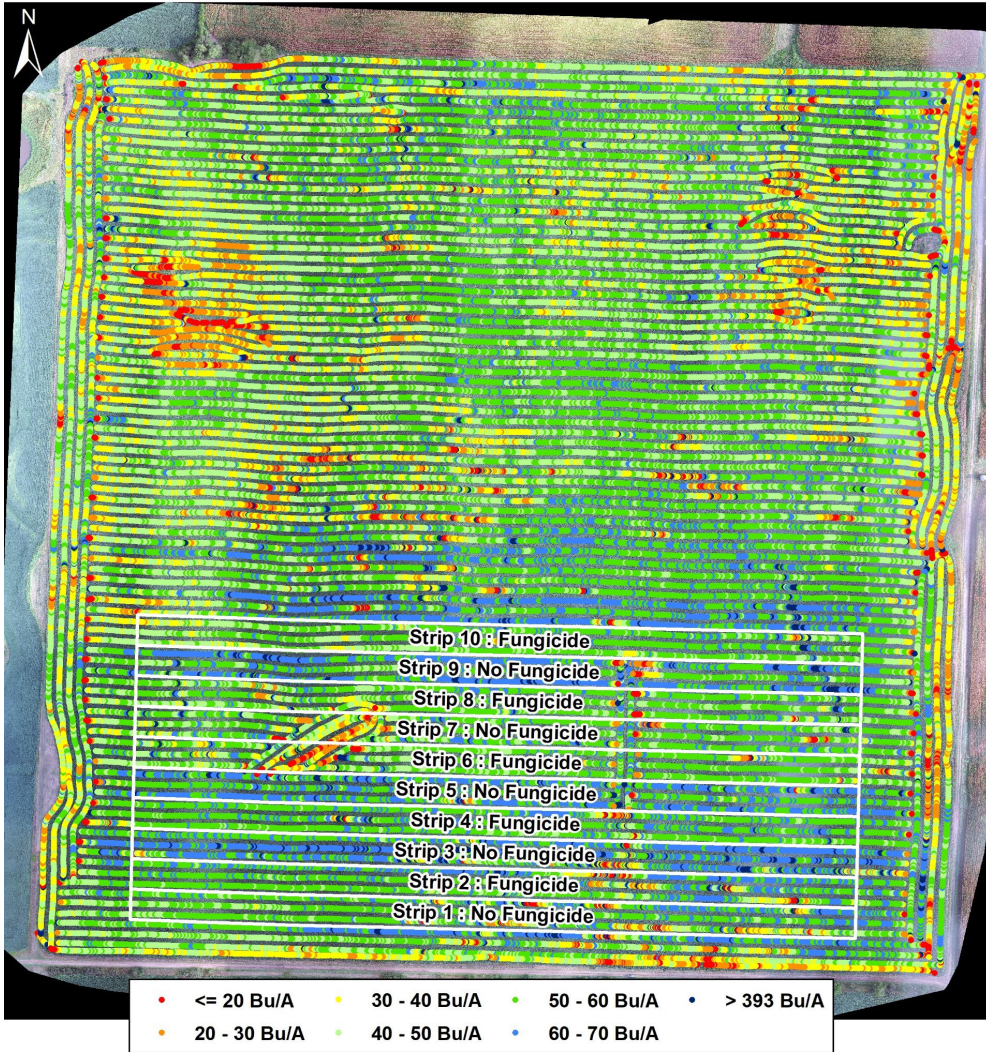
Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	44.1 (3.0)	--
Control (N)	41.9 (2.1)	--
R3 Fungicide (F)	46.2 (2.3)	4.3



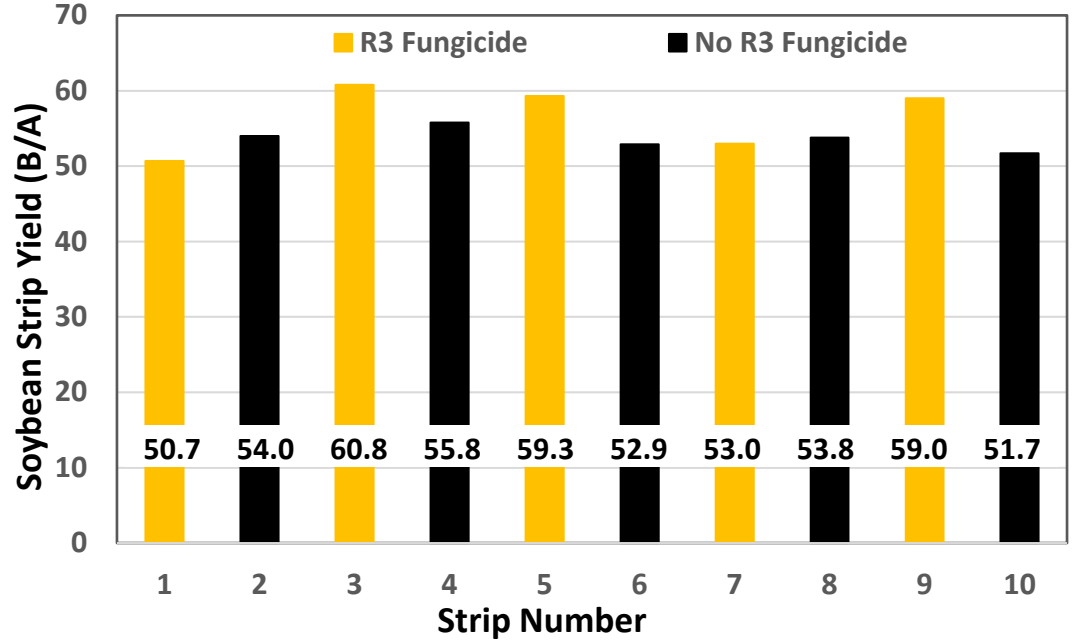
Map of soybean yield and areas used to determine strip yield. Soybean harvested 10/28/2018; imagery taken at 100m on 8/28/2018.



# Soybean R3 Fungicide Trial Site 1809 Holt County



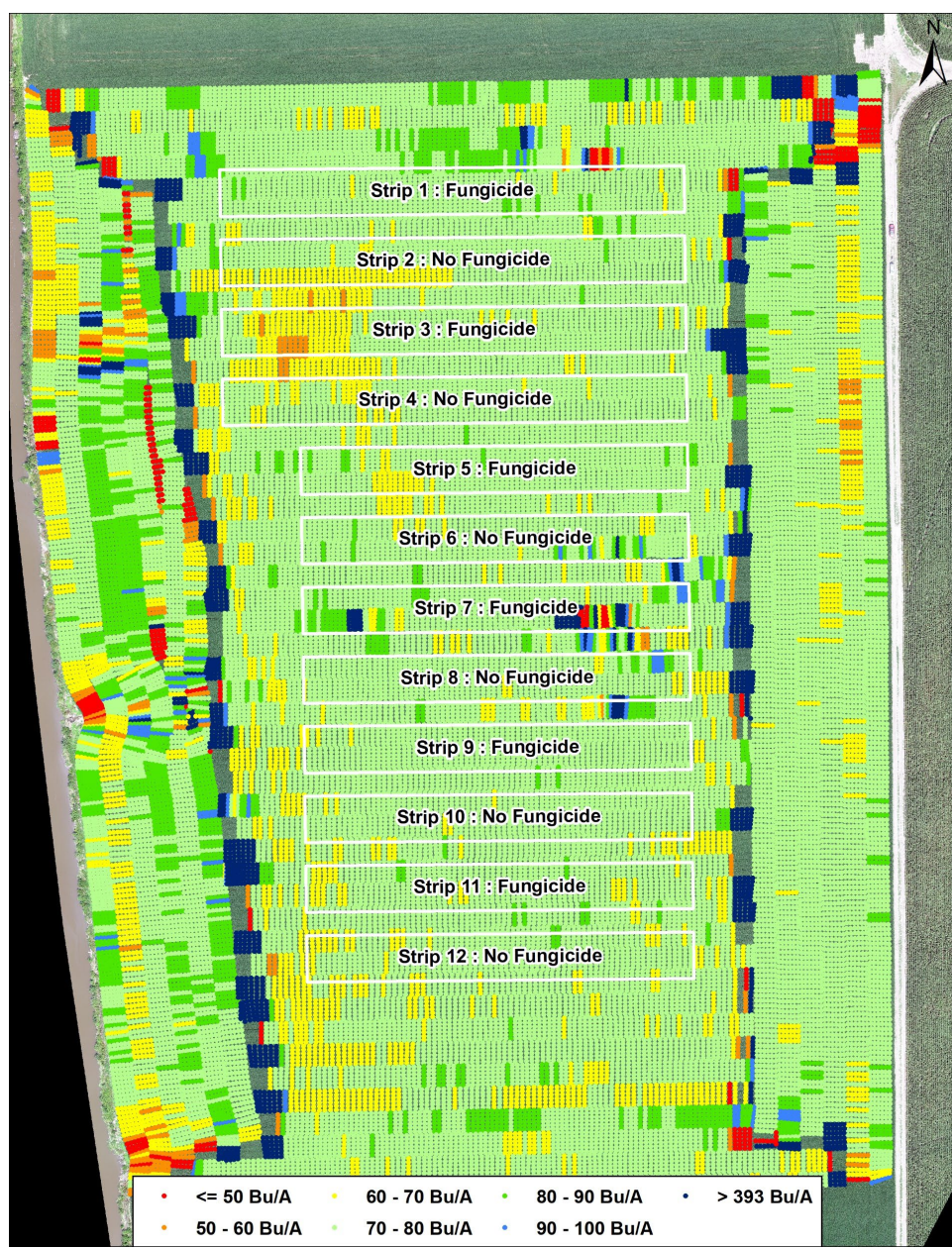
Treatments	Mean (SD)	Delta Control
	<i>bushels/acre</i>	
All strips	55.1 (3.5)	--
Control (N)	53.6 (1.5)	--
R3 Fungicide (F)	56.6 (4.4)	3.0



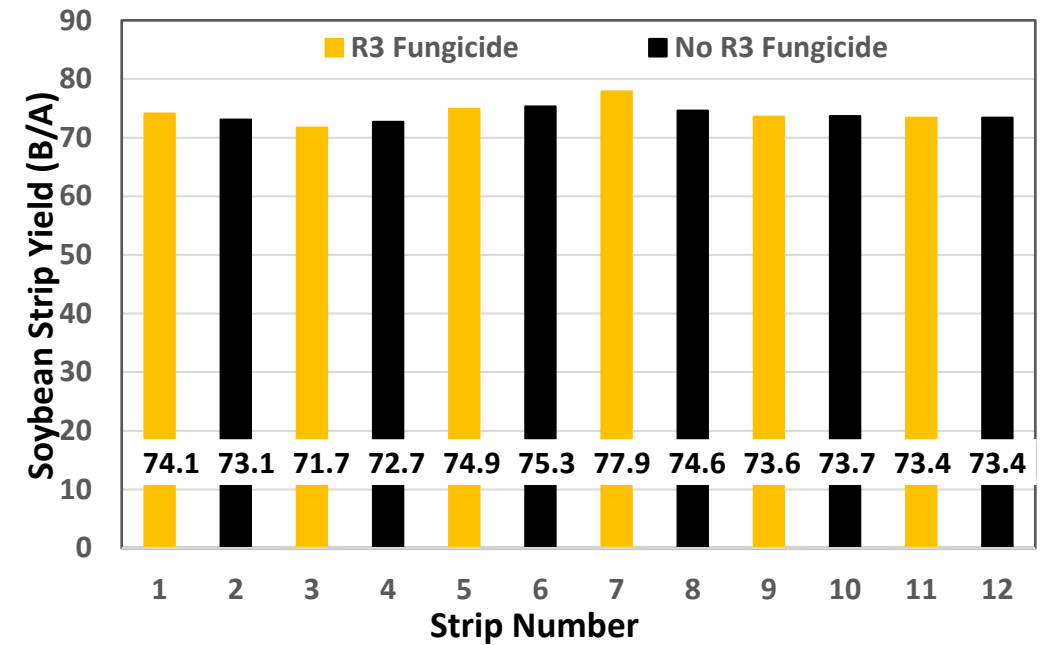
# Soybean R3 Fungicide Trial Site 1810 Marion County

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

