

MU Certified Strip Trial Program

2018 Termination Date Trial (Site 4)

Harvest Report

Site Number 4: (Callaway County)

Extension Contact: Rusty Lee

Trial Harvest Summary

This is a cover crop trial comparing the effect of yield on cover crop strips that are terminated on two different dates. The first termination date was May 6th, the second termination date was May 17th, and soybean was planted on May 17th. The second termination date was 11 days after the first termination date. There was a mean yield difference of -1.3 bushels per acre between the two termination dates, this difference was statistically significant. See Table/Graph 1 for a summary of yield results.

Please note the section towards the end of the report that summarizes management information currently known about the trial. Missing information is highlighted in yellow. Please provide your extension contact the missing information as soon as possible and let us know if any other corrections or changes need to be made.

At the end of the report are two tables summarizing results from all of the cover crop termination date trials for the last three years. Please note that all of the analysis is preliminary.

The MU Strip Trial program will have meetings throughout Missouri in February of 2019. *More information on location and dates will be sent out soon.* We encourage you to attend the strip trial meeting that is closest to you. This will be an opportunity for discussion on what was learned across farms and multiple years of trials. It will also be an opportunity for you to give feedback on how the trial worked on your farm and provide ideas for future trials.

Please follow us on Twitter at @MUStripTrials!

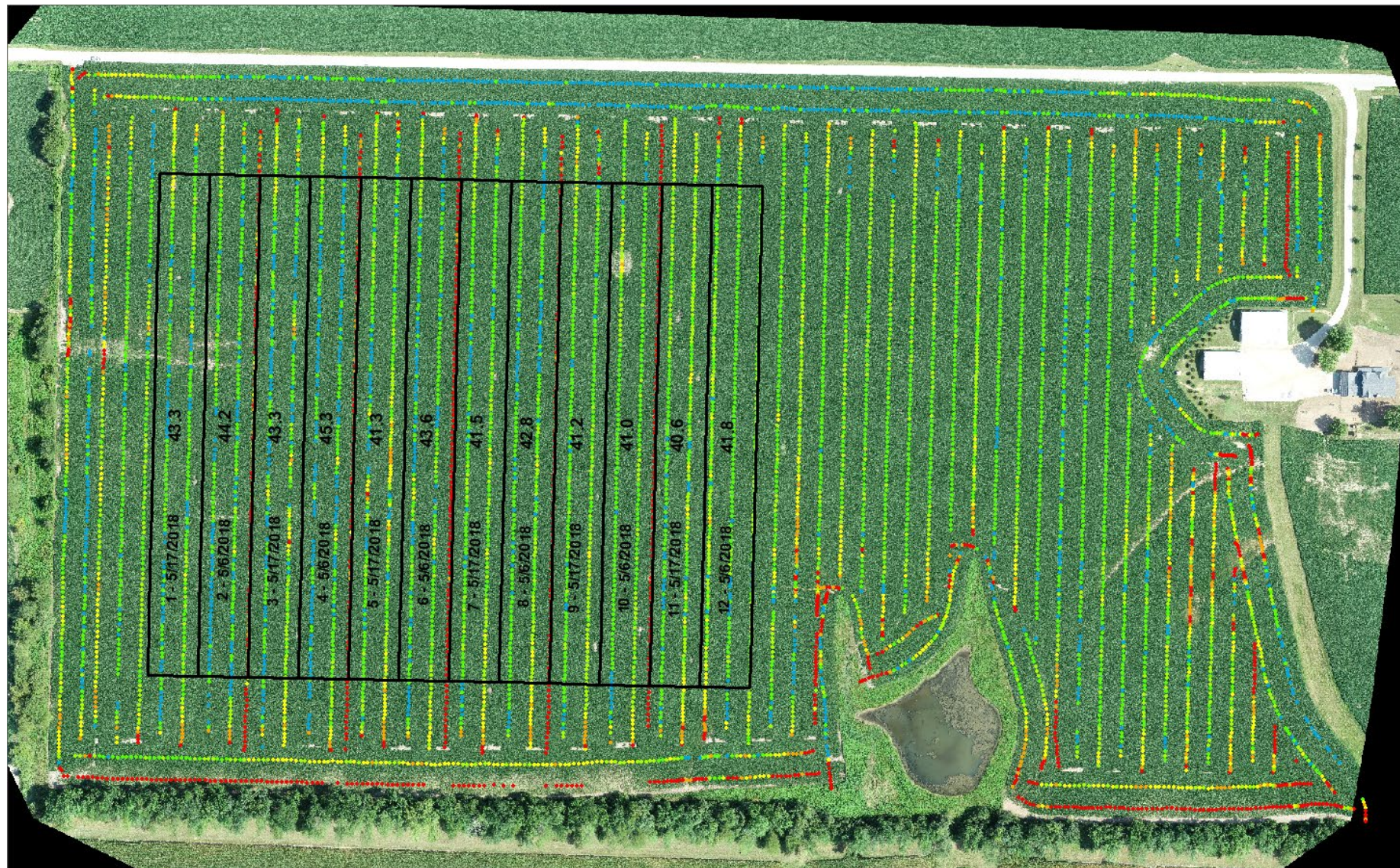
Thank you for agreeing to do this trial! It is one of five termination date trials in 2018.

The mission of the MU Certified Strip Trial Program is to help farmers validate management decisions on their farm and document efficiency and environmental stewardship.

The MU Certified Strip Trial Program is funded by:

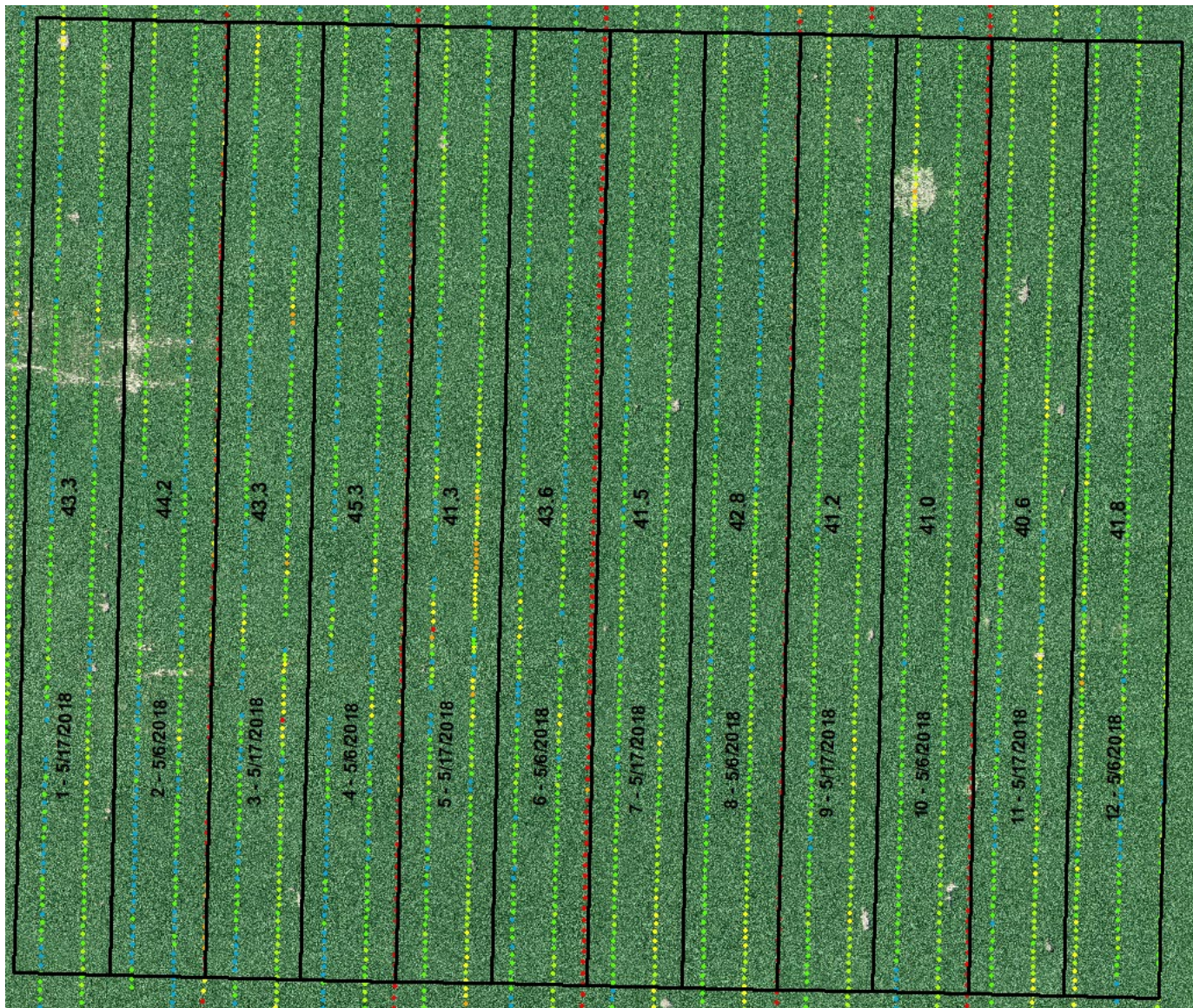
MU Extension, the Missouri Soybean Merchandising Council and the Missouri Corn Merchandising Council.

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● < 25 bu/A ● 25 – 30 bu/A ● 30 - 35 bu/A ● 35 – 40 bu/A ● 40 – 45 bu/A ● >45 bu/A

Figure 1a. Whole field showing soybean dry yield data reported as bushels per acre (bu/A). Strips are labeled with their mean yield and the date of termination. The field was harvested October 22, 2018.



● < 25 bu/A
 ● 25 – 30 bu/A
 ● 30 - 35 bu/A
 ● 35 – 40 bu/A
 ● 40 – 45 bu/A
 ● >45 bu/A

Figure 1b. Close-up of strips showing soybean dry yield data reported as bushels per acre (bu/A). Strips are labeled with their mean yield and the date of termination.

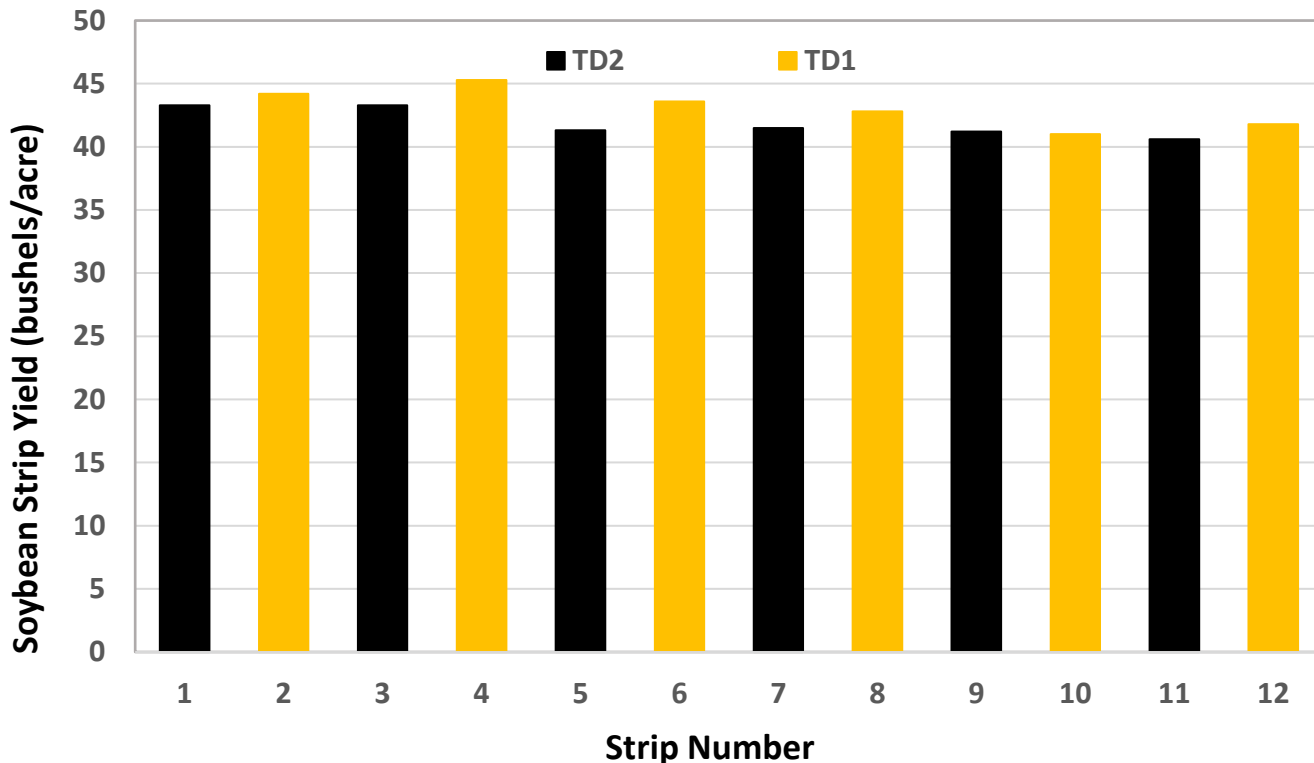
Table 1/Graph 1. Strip means of soybean yield.

Mean soybean yields:

Mean of all Strips: 42.5 bushels/acre
 Termination Date 1 (TD1) 5/6/18 Strips: 43.1 bushels/acre
 Termination Date 2 (TD2) 5/17/18 Strips: 41.8 bushels/acre
 Treatment difference: -1.3 bushels/acre

Preliminary analysis shows that this difference was statistically significant.

Strip	1	2	3	4	5	6	7	8	9	10	11	12
Treatment	TD2	TD1	TD2	TD1	TD2	TD1	TD2	TD1	TD2	TD1	TD2	TD1
Yield (Bushels/Acre)	43.3	44.2	43.3	45.3	41.3	43.6	41.5	42.8	41.2	41.0	40.6	41.8



Cover Crop Management Information

	Termination Date 1	Termination Date 2
Cover crop	Cereal Rye	Cereal Rye
Planting date	11/20/2017	11/20/2017
Seeding rate	40 lbs/acre with no-till drill	40 lbs/acre with no-till drill
Termination date (TD)	5/6/2018	5/17/2018
Height/stage at termination	10", vegetative growth	24", heads starting to emerge
Herbicides applied	AMS 2 lbs /Acre Trivence 8 oz/Acre Compadre 16 oz/100 gal Low Vol 6 11 oz/Acre Abundit 22 oz/Acre	Reign 1 quart/100 gal Warrant 3 pts/Acre Abundit 22 oz/Acre Fexapan 22 oz/Acre Choice Trio 1 quart/100 gal
Herbicide extent	TD 1 Strips only	TD 2 Strips only

Grain Crop Management Information

Planting Date	Variety	Seeding Rate	Harvest Date
5/17/2018	Asgrow Ag 40X6	160,000	10/22/2018
Crop Rotation	Corn and Soybean		
Tillage System	No Till		

Equipment Specifics

Equipment	Type	Width (in feet)
Planter	JD 1790	40
Sprayer	JD 4720	90
Combine	JD S680	40
Yield Monitor	Greenstar	