

MU Certified Strip Trial Program

2017 ILeVO® Trial Harvest Report

Site number: 3

County: Ralls

Extension Contact – Charles Ellis, Agricultural Engineer

Results Summary

- Whole strip yields indicate ILeVO increased yield 2.0 bushels/acre but the difference was not statistically significant.
- An assessment of within-strip variability estimated that the benefit of ILeVO was greater than or equal to zero for about 61% of the trial.
- Scouting found no confirmed Sudden Death Syndrome at this location.
- Soil sampling in spring indicated primarily low levels of Soybean Cyst Nematode (SCN). There was little change over the growing season. There was no evidence that ILeVO decreased SCN numbers.

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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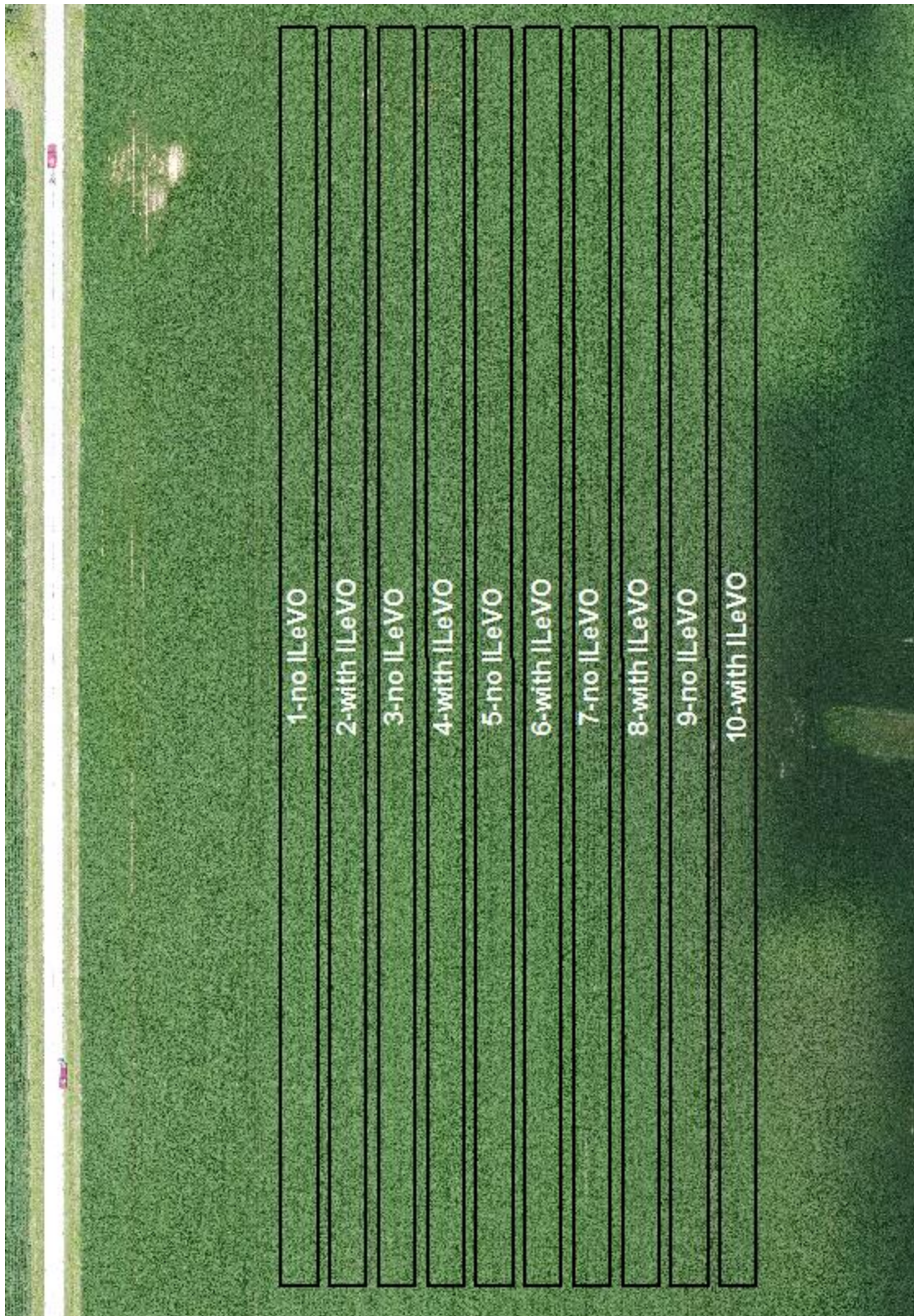
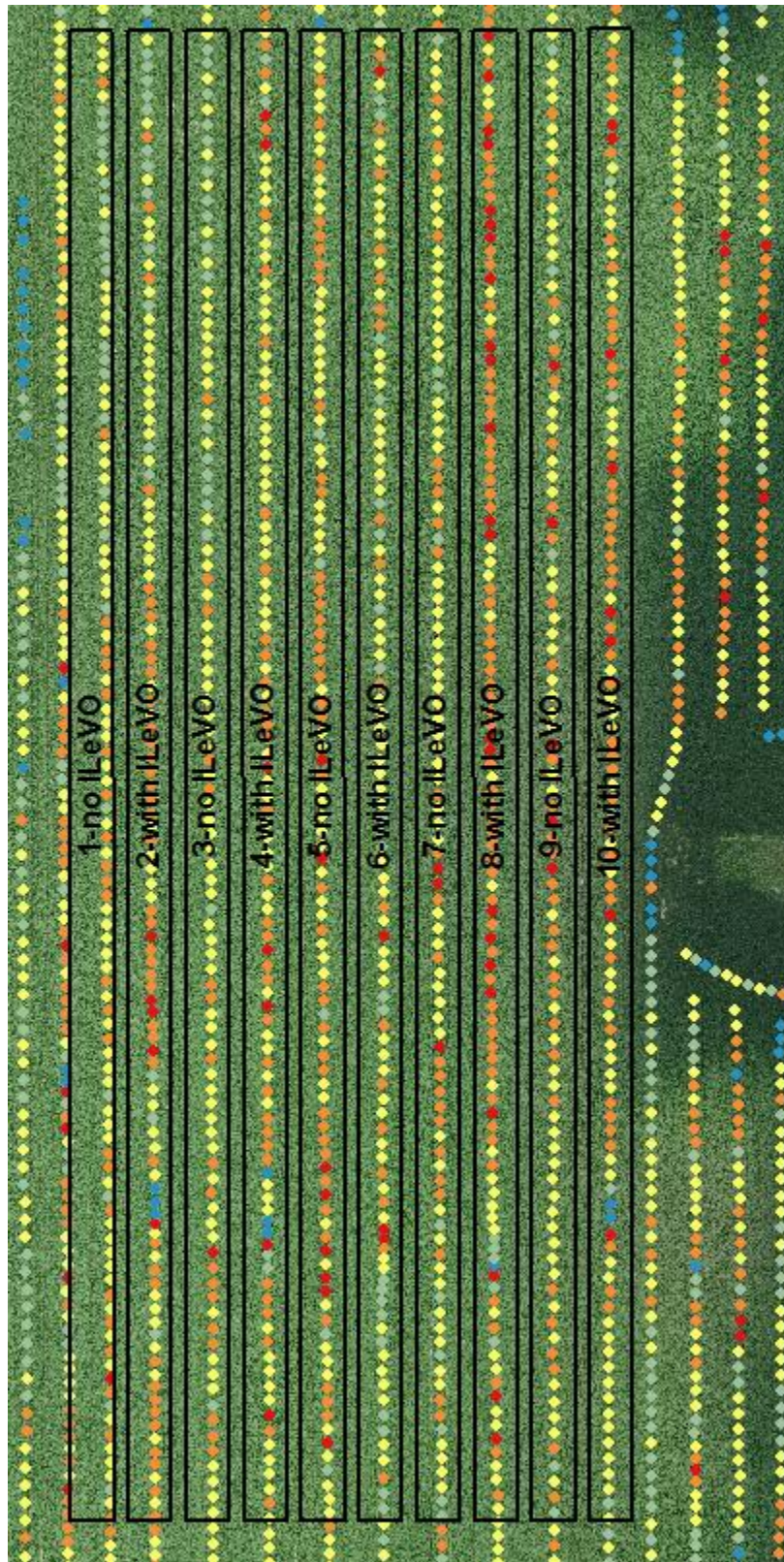


Figure 1. Aerial photography taken August 30, 2017, showing strip trial layout in the field.

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● ≤50 bu/A ● 51 – 60 bu/A ● 61 – 70 bu/A ● 71 – 80 bu/A ● >80 bu/A

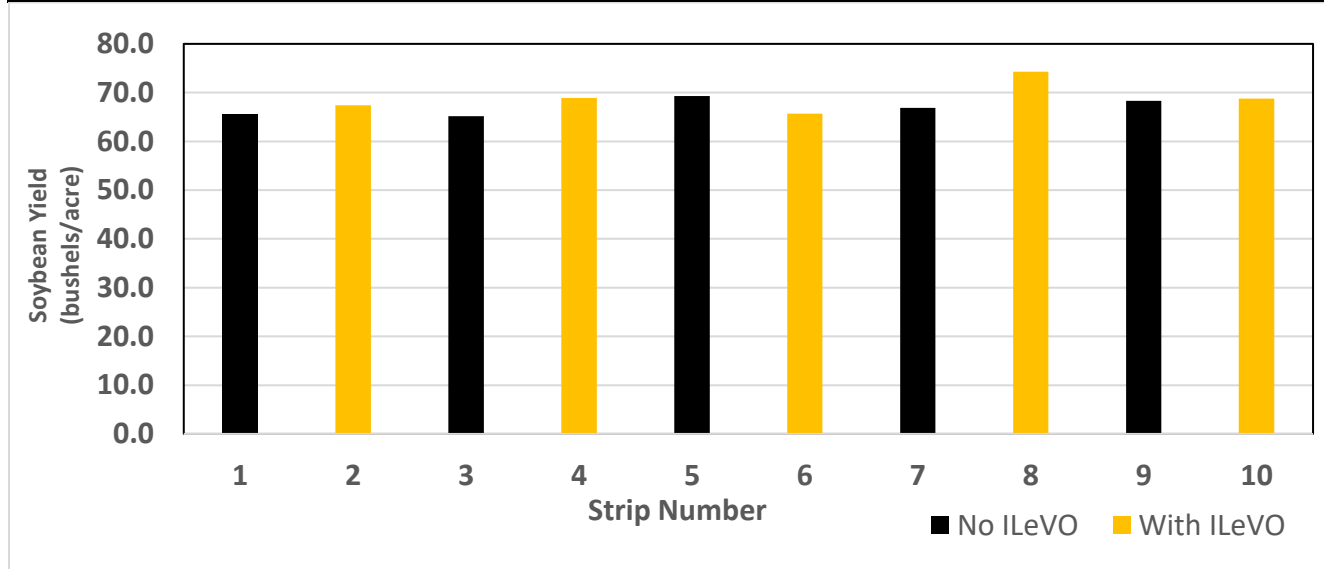
Figure 2. Yield monitor data reported as bushels per acre. Soybeans were harvested October 18, 2017.

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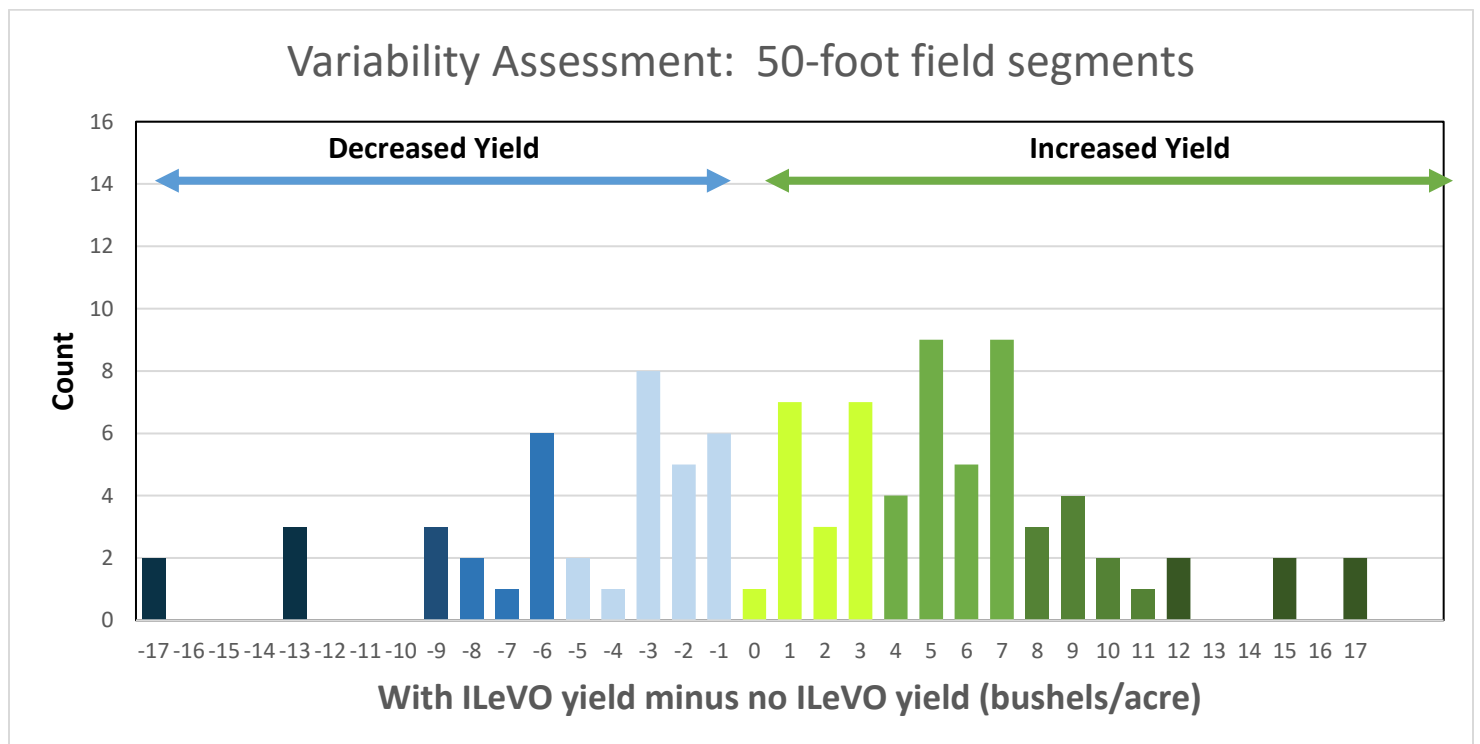
Table/Graph 1. Whole Strip Yields:

Mean yield for all strips was 68.0 bu/A (69.0 bu/A with ILeVO; 67.0 bu/A without ILeVO).

Strip	1	2	3	4	5	6	7	8	9	10
ILeVO?	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Yield (bu/A)	65.5	67.4	65.2	68.9	69.3	65.7	66.9	74.3	68.3	68.8



Graph 2. Field variability: Estimated yield “benefit” of ILeVO.



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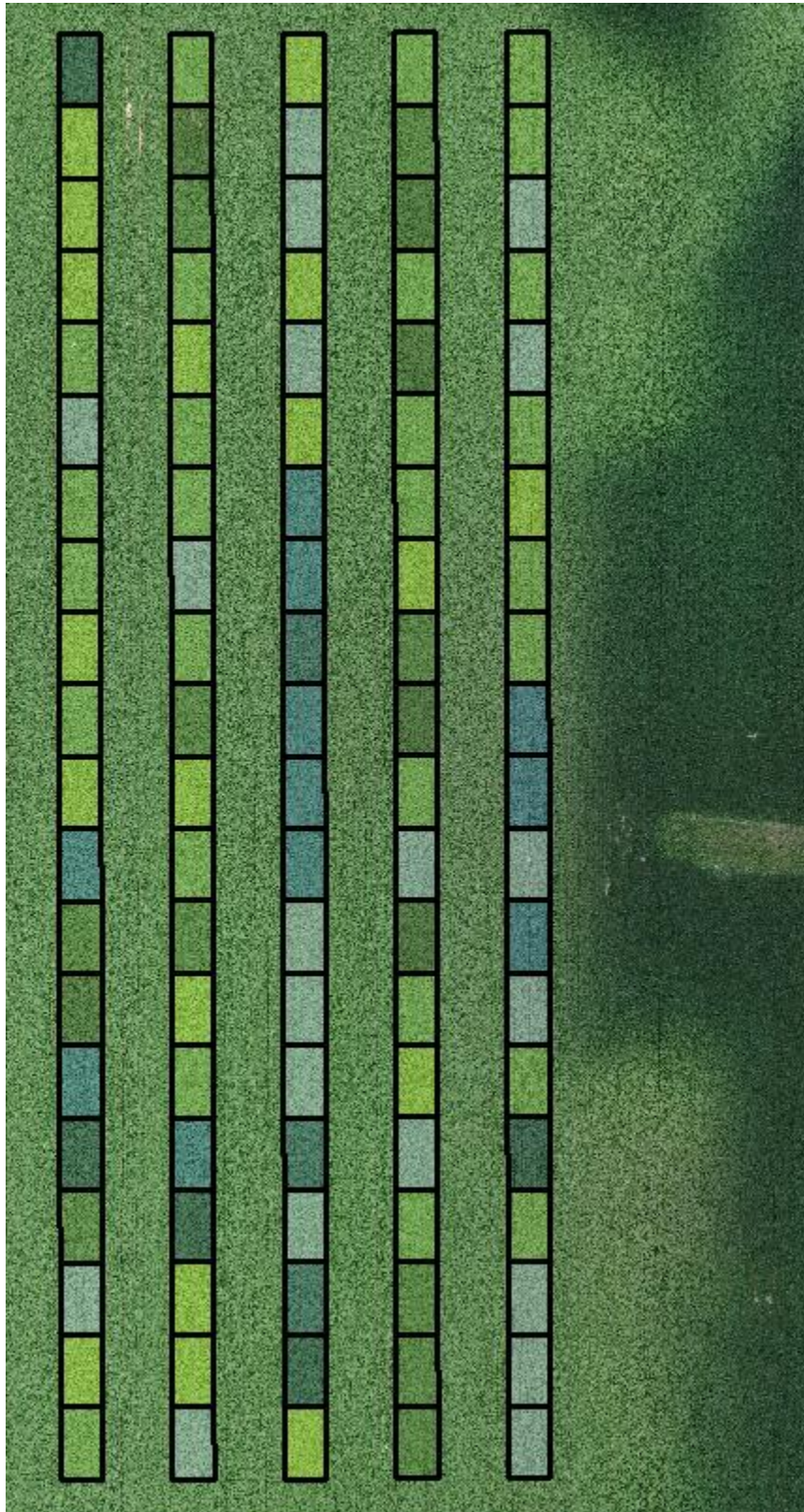


Figure 3. Field variability in the yield effect of ILeVO: Colors match previous figure. Green segments are where the calculated yield difference was ≥ 0 ; blue segments are where yield effect was negative.

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At this location, soil samples were taken before and after a soybean crop and tested for soybean cyst nematode (SCN). Soil samples were taken 4/25/2017 (pre-plant) and 10/24/2017 (post-harvest) from sampling points that were 12 feet circles along transect across the plots about 350 feet from the northern edge of the strips. There was no evidence that ILeVO affected SCN numbers at this low-testing location.

Table 2. Soybean Cyst Nematode (SCN) soil sampling results (eggs/cup of soil).

Pre-Plant		Post-Harvest No ILeVO		Post-Harvest With ILeVO	
SCN (eggs/cup)	SCN Rating	SCN (eggs/cup)	SCN Rating	SCN (eggs/cup)	SCN Rating
0	Low	0	Low	0	Low
0	Low	0	Low	0	Low
0	Low	0	Low	0	Low
0	Low	188	Low	0	Low
138	Low	375	Low	188	Low
28		113		38	

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Management Information

Location characteristics:	Trial size: 10 acres	Dominant soil type: Silt Loam	
Crop rotation:	Previous crop: Corn	Current crop: Soybean	
Soybean variety:	41LF32 Stine	SCN resistant: Yes	SDS resistant: Yes
Agronomic information:	Planted: 5/18/2017	Harvested: 10/18/2017	
Other seed treatments:	Brute TRX (Acceleron) Custom		
SDS history:	History of SDS: No	Confirmed SDS in 2017: No	

Location Notes:

- This field was a no-ILeVO field that had five strips of ILeVO-treated seed.
- There was no evidence of SDS at this location.

