# MU Certified Strip Trial Program 2017 ILeVO® Trial Harvest Report

Site number: 12 County: Audrain

Extension Contact - Charles Ellis, Agricultural Engineer

### **Results Summary**

- Due to problems with the yield monitor there were no yield results for this location.
- Scouting found no confirmed Sudden Death Syndrome at this location.
- Soil sampling in spring indicated moderate to high levels of Soybean Cyst Nematode (SCN). Mean SCN numbers after harvest were 15 times higher than prior to planting. There was no evidence that ILeVO affected this increase.

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.







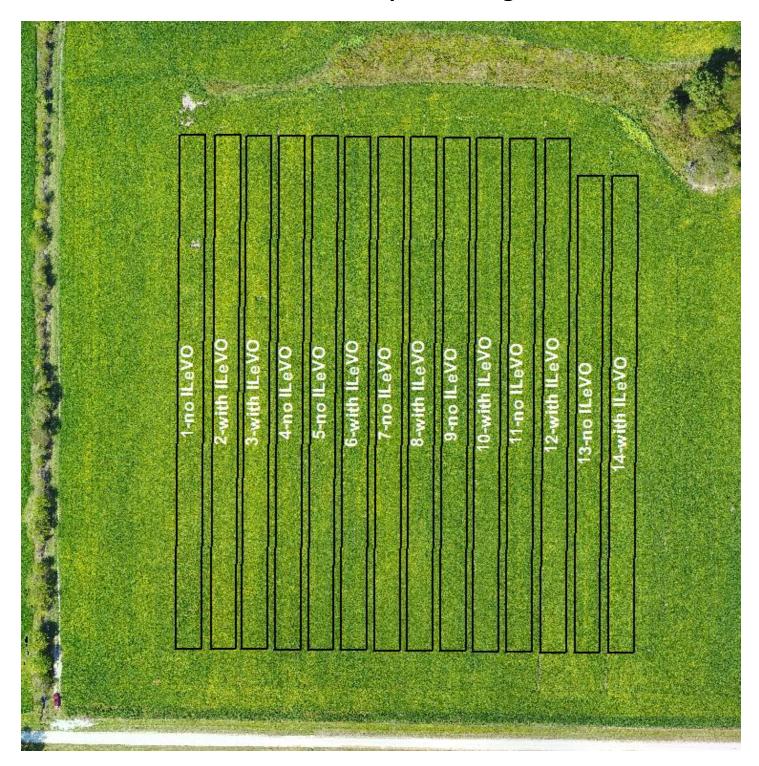


Figure 1. Aerial photography taken September 7, 2017, showing strip trial layout in the field.



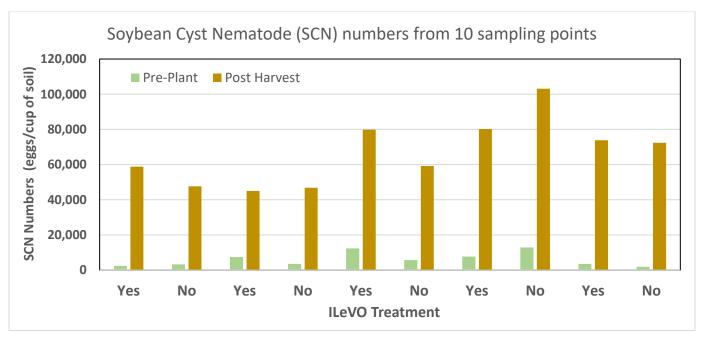




Table 1. Soybean Cyst Nematode (SCN) soil sampling results (eggs/cup or soil).

	Pre-Plant		Post-Harvest	
Treatment	SCN (eggs/cup)	SCN Rating	SCN (eggs/cup)	SCN Rating
With ILeVO	2,475	Moderate	58,875	High
No ILeVO	3,300	Moderate	47,625	High
With ILeVO	7,425	Moderate	45,000	High
No ILeVO	3,575	Moderate	46,875	High
With ILeVO	12,375	High	79,875	High
No ILeVO	5,775	Moderate	59,250	High
No ILeVO	7,700	Moderate	80,250	High
With ILeVO	12,925	High	103,125	High
With ILeVO	3,575	Moderate	73,875	High
No ILeVO	1,925	Moderate	72,375	High
Means	6,105		66,608	

Graph 1. Graphical representation of Soybean Cyst Nematode (SCN) numbers pre-plant and post-harvest from 10 sampling points in the field.



Samples were taken 5/9/2017 (pre-plant) and 10/5/2017 (post-harvest) in the same 10 locations in the field. Sampling points were 12 feet circles along transect across the plots about 250 feet north from the southern edge of the strips.



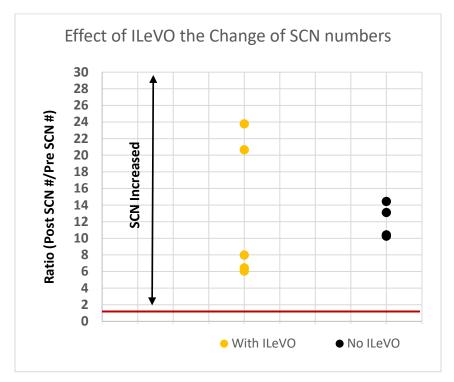




To assess the effect of ILeVO on SCN numbers, the ratio of SCN numbers were calculated at post-harvest divided by SCN numbers at pre-plant (Post-harvest SCN #/Pre-plant SCN #) for each of the 10 sampling points.

In the figure below, no change in SCN numbers =1. Above 1, SCN numbers increased over the growing season.

**Graph 2.** Increase in SCN numbers between pre-plant and post-harvest samplings.



SCN numbers averaged 15 times higher in fall compared to spring. There was no evidence that ILeVO affected this change (13 times higher with no ILeVO; 17 times higher with ILeVO).







#### **Management Information**

Location characteristics: Trial size: 11 acres Dominant soil type: Silt Loam

Crop rotation: Previous crop: Corn Current crop: Soybean

Soybean variety: Beck's 394L4 SCN resistant: Yes SDS resistant: Yes

Agronomic information: Planted: 5/16/2017 Harvested: 10/3/2017

Other seed treatments: **Escalate** 

SDS history: History of SDS: Unknown Confirmed SDS in 2017: No

#### **Location Notes:**

- This field was an ILeVO treated field that had seven strips of no-ILeVO seed.
- There were some areas of concern in this field from images taken September 7th that at this point are attributed to beginning of senescence.







