

RESEARCH FOR RESULTS



Soil Boost Six Year Trial 2013-2018

(Data provided by grower Steve Ashwood and summarized by researcher Andy Clayton)

- OVERVIEW:** This is a six-year trial on **Soil Boost** that followed the program of 200 pounds per acre the first year, 150 pounds per acre the second year and 100 pounds per acre the third year. Years four, five and six, the farmer did not apply the **Soil Boost**, but continued recording the treated vs control areas to gather this information.
- LOCATION:** 120-acre field in southeast McDonough County, IL
- SOIL TYPE:** Ipava and Sable (flat and black)
- PATTERN TILED:** 4" tile on 100' centers
- FERTILITY:** Levels were adequate prior to applying the **Soil Boost** but did not seem available enough to the plants to provide good yields.
- TREATMENTS:** Control strips: 2 (10 acre) strips
Treatment: **Soil Boost** on the remaining 100 acres. Rates vary throughout 6-year trial.

Year	Rate of Organic 2r - Soil Boost	Crop	Yield (bu/ac)		Yield increase	% increase	Crop \$/bu	Extra revenue/acre	Cost of product/acre	Net profit/acre	Net profit for field
			Treated acres	Control							
2013*	200 lbs/ac	Soybeans	80	70	10	14%	\$13.20	\$132.00	\$55.00	\$77.00	\$7,700.00
2014**	150 lbs/ac	Corn	205	195	10	5%	\$3.80	\$38.00	\$42.00	-\$4.00	-\$400.00
2015***	100 lbs/ac	Soybeans	70	60	10	17%	\$9.30	\$93.00	\$27.50	\$65.50	\$6,550.00
2016	0	Corn	230	215	15	7%	\$3.70	\$55.50	\$0.00	\$55.50	\$5,550.00
2017	0	Soybeans	68	65	3	5%	\$9.50	\$28.50	\$0.00	\$28.50	\$2,850.00
2018	0	Corn	235	220	15	7%	\$3.50	\$52.50	\$0.00	\$52.50	\$5,250.00
Estimated Six-Year Net Profit for 100 treated acres =			\$27,500.00								

SUMMARY: This on-farm trial was established by applying 200 lbs/ac of **Soil Boost** over the 120-acre field in the fall of 2012, except for 2 (10 acre) control strips. The plots were located in representative areas of the field. Soybeans were planted in this field in 2013 and yielded over 80 bu/ac where **Soil Boost** was applied and the 2 control strips yielded an average of around 10 bu/ac less. **Soil Boost** was applied again over the same areas in the fall of 2013 at 150 lbs/ac and corn was planted in 2014. The areas that received the product resulted in an average of 10 bu/ac higher corn yield than the control plots. **Soil Boost** was applied at 100 lbs/ac in the fall of 2014, which completed the full program of 450 lbs/ac. Steve was not able to collect any plot yield data in 2015, due to a combine fire, and those yields are assumed to be similar to the previous 2 years. However, he continued to observe yields in the previously treated and control areas for 3 years (2016-2018) following the last application of the product and has noted a residual yield benefit in the **Soil Boost humate treated areas of about 5% for corn and 7-8% for soybeans**. Steve also mentioned that the soil structure seems to have improved significantly since using the product and this field even yielded over 230 bu/ac corn during the 2019 season, which was one of the wettest seasons in many decades.

*2013 yield data was provided by Steve; however, subsequent years were based on county averages. Steve provided information on the yield increases each year, which was used to estimate the calculations.

**10 bu/ac yield increase reduced effect of sharp price swings.

***2015 yields were based on other years that were observed in the trial.