

Sub-Surface Drip Tape Irrigation Study

SOYBEAN

PURPOSE:

To evaluate the return on investment when using sub-surface drip tape irrigation

Treatment	Final Stand Count	Percent Moisture	Test Weight	BU. / A.	BU. / A. Difference	ROI
Water Only	158,000	11.2	55.1	95.1	+ 8.1	+ \$79.30
Control: No Water	156,000	12.0	56.7	87.0	--	--
High Management	157,500	11.4	55.4	103.0	+ 16.0	+ \$156.64

ROI does NOT include cost of Drip Tape, Water Source, or installation of system

Additional cost of High Management (injected products): \$32.00/A. Restore™ - IPE (N,P,K irrigation product) \$15.75/A.

OBSERVATION:

We used the Sub-Surface Drip Tape system to apply water only to the water only zone, and water and nutrients to the High Management zone. Total amount of water applied to the zones was 3.5 inches of rain equivalent. 1 inch was applied after planting to saturate the seed zone, establishing a quick emergence, and the remainder applied in August during pod fill. A total of 5 applications were made. The High Management nutrients included, Restore™ applied at V1 and IPE 3-15-0 applied at R3.

2 Year Average ROI

Water Only	High Management
+ \$65.78	+ \$126.05

Location	New Ulm
Planting Date	5/30/2017
Harvest Date	10/20/2017
Hybrid	234L4
Population	165,000
Row Width	15
Previous Crop	Corn
Tillage	N0-Till
Herbicides	29 oz. Liberty®, 2 oz. Anthem®

Soil Type	Silty Clay Loam			
Soil Test Values	pH	%O.M.	CEC	
	6.6	4.1	13.4	
% Base Saturation	%Ca	%Mg	%K	%H
	60.2	20.8	4	15
Parts Per Million	P	K	S	Zn
	35.3	207	14.6	1.1

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