

University of Missouri Corn 2010-2011

Objective: To examine the effects of OceanSolution™ protocols on corn yields. Emphasis was placed on combining OceanSolution (OS) with varying N rates.

Trial Location: University of Missouri Delta Research Center

Principal Investigator: David Dunn Ph.D.

Methods: This experiment was conducted by the University of Missouri Delta Research Center in southeastern Missouri. It was conducted using a Bosket sandy loam soil with replicated 10 by 50 foot plots. In these experiments, three rates of NPK inputs were compared with and without the addition of OceanSolution. Based on the success of the 2010 experiment, the trial was expanded to a second location at Lee Farm in Portageville, MO in 2011. In both locations corn was grown under the standard cultural practices for Southeast Missouri with the exception of irrigation at the Clarkton location, where the crop was grown dry-land with no supplemental irrigation.

Results:

Rhodes Farm Clarkton, MO Bosket Loamy sand			
Treatment	NPK rate	2010 Yield (bu/a)	2011 Yield (bu/a)
0 NPK	0-0-0	92.5c	88.1d
50% NPK	100-25-50	118.5b	107.3c
100% NPK	200-100-50	114.8b	114.7bc
0 NPK + OG	0-0-0	105.2bc	100.1cd
50% NPK + OG	10/25/50	115.5b	126.6ab
100% NPK+OG	200-100-50	143.2a	137.7a

Lee Farm Portageville, MO Tiptonville Silt loam		
Treatment	NPK rate	Yield (bu/a)
0 NPK	0-0-0	146.0c
50% NPK	100-25-50	164.4b
100% NPK	200-100-50	168.7b
0 NPK + OG	0-0-0	149.5c
50% NPK + OG	100-25-50	169.8b
100% NPK+OG	200-100-50	187.8a

Conclusions: This data appears to indicate that OceanSolution protocols have the potential to dramatically increase corn yields. In fields that added OS on top of a 50% NPK program, OS increased overall yield by 6%, and when OS was added to fields with 100% NPK, average yield was increased by over 22%.