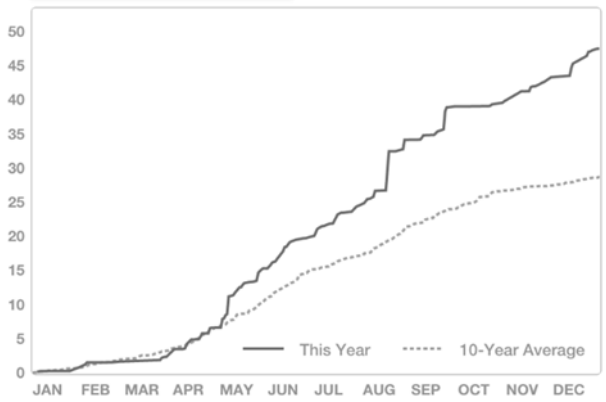
Nebraska On-Farm Research Network

Strip-till Fertilizer Placement in Soybeans

Study ID: 024155201502
County: Saunders
Soil Type: Tomek silty clay loam;
Planting Date: 5/19/2015
Harvest Date: 9/30/15
Population: 140,000
Row Spacing (in.) 30
Hybrid: Fontanelle 64R20
Reps: 7
Previous Crop: Corn
Tillage: Strip-till
Herbicides: ***Pre:*** Burndown 1pt 2,4-D (4lb/gal), 2 oz/ac Authority XL, and 18 oz/ac Authority Elite on 4/24/2015 ***Post:*** 32 oz/ac PowerMax, 1qt/ac Class Act, 6.5 oz/ac Revlolution, and 4 oz/ac Avatar on 6/26/2015
Seed Treatment: Acceleron - Fungicide
Unknown - Insecticide

Foliar Insecticides: Leverage 4 oz/ac on 7/30/15
Foliar Fungicides: Priaxor 8 oz/ac on 7/30/15
Irrigation: Pivot, Total: 1"
Rainfall (in.):



Introduction: Strip tillage is an agronomic practice that prepares the seedbed and offers the opportunity for nutrient placement. This grower typically supplies fertilizer at strip-till in the fall prior to corn production. The purpose of this study was to evaluate placement of nutrients with strip-till prior to soybeans. This study compared an application of 100 lbs/acre MESZ to an application of 100 lbs/acre MESZ plus 50 lbs/acre 0-0-60. MESZ (Micro Essentials SZ) is a 12-40-0-10S-1Zn product. Strip-till and fertilizer application was completed on April 23, 2015. Soil test results are not available for the field.

Results:

	Yield (bu/ac)†	Moisture (%)	Marginal Net Return ($/ac)‡
MESZ (100 lbs)	83 A*	12.2 A	708.95
MESZ (100 lbs) + 0-0-60 (50 lbs)	84 A	12.2 A	706.98
P-Value	0.3039	0.8182	N/A

†Yield data from weigh wagon. Bushels per acre corrected to 13% moisture.
*Values with the same letter are not significantly different at a 90% confidence level.
‡Net Return based on $8.90/bu soybeans, $10.87/acre 0-0-60, and $29.75/acre Mesz.

Summary: The addition of 50/acre of 0-0-60 to the 100 lbs/acre MESZ applied with strip-till did not result in increased yield or net return. There was no difference in grain harvest moisture between the two treatments. Because there was no completely untreated check, it is unknown if the addition of 100 lbs/acre MESZ was of benefit to crop yield and net return.

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