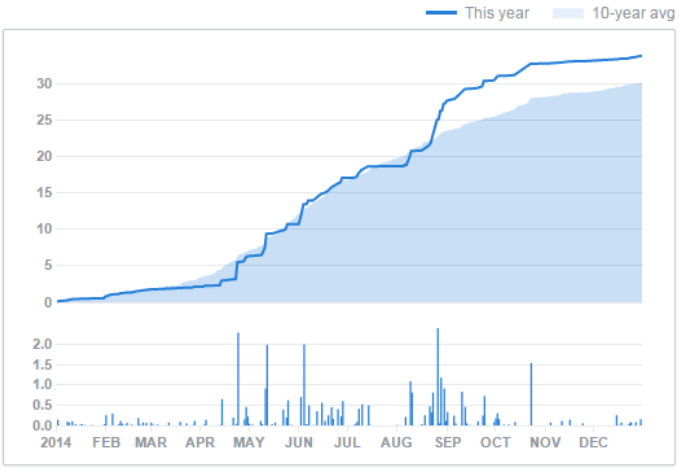
Nebraska On-Farm Research Network

Sugar on Corn: A Comparison to Fungicide

Study ID: 026185201403
County: York
Soil Type: Hastings silt loam
Planting Date: 4/23/2014
Harvest Date: 10/24/2014
Population: 34,000
Row Spacing: 30”
Hybrid: Pioneer 1105
Reps: 4
Previous Crop: Soybeans
Tillage: Ridge till
Herbicides:
Pre: 2.1 qt/ac Bicep II Magnum FC of Bicep II Magnum on 4/23/2014
Post: 32 oz/ac Glyphosate on 6/10/2014
Fertilizers: 180# N/ac as Anhydrous ammonia in Fall, 3 gal/ac 10-34-0 at planting.

Note: Hailed on 6/4/2014
Irrigation: July: 3.5" Aug: 0.9" Total: 4.4"
Rainfall:



Introduction: This study is looking at the effects of fungicide or sugar applications on corn yields and profitability. This is the 3rd year these producers have conducted this study. In 2012 and 2013 the three treatments were check, sugar, and 2 oz/acre Stratego® YLD. In 2012 the sugar treatment was 3 lb/acre of granular sugar. In 2013 the sugar treatment was 3 qt/acre Plen-T-Sweet by Sure Crop™ Liquid Fertilizers. In 2012 the crop was sprayed at V5-V6 and in 2013 the crop was sprayed at V7. 2012 results showed no difference in grain moisture or harvest population for any of the three treatments. Yield for the Stratego® YLD treatment was not significantly different than the check or sugar treatment. The sugar treatment was significantly higher yielding than the check treatment. In 2013 there was no difference among the three treatments in terms of moisture, harvest population or percent lodging. Yield for the sugar treatment was not significantly different than the check or Stratego® YLD treatment. The Stratego® YLD treatment was significantly higher yielding than the check.

The study was repeated in 2014 using granular sugar for the sugar treatment. The treatments were applied to corn on 6/20/14. The treatments were Stratego® YLD at 2 oz. acre and granular sugar at 3 lbs/acre. Corn was at approximately V7 growth stage at the time of foliar application.

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Results:

	Yield† (bu/acre)	Moisture (%)	Pinch Test (%)	Harvest Pop	Net Return ‡
Check	249 B*	17.8 A	3.3 A	27,000 A	$871.50
Stratego® YLD at 2 oz/ac	254 A	17.8 A	2.5 A	29,000 A	$875.94
Sugar - 3 lbs/ac granular	251 B	17.9 A	1.7 A	29,000 A	$870.19
P-Value	*0.0023*	*0.7345*	*0.5443*	*0.7809*	--

†Bushels per acre corrected to 15.5% moisture.

*Values with the same letter are not significantly different at a 90% confidence level.

‡Net return based on $3.50/bu, $6.25/ac Stratego® YLD at 2oz/ac, $0.50/lb Sugar, and $6.81/ac application cost.

Summary: Stratego® YLD had a significantly higher yield than the check or the sugar. This increased yield resulted in higher net returns for the Stratego® YLD treatment. There was no significant difference between treatments for the pinch test.

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