

## Sugar Application in Corn

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### Objective

To determine the yield response and economic impact of applying sugar to corn at V5.

### Background

Crop Year:	2017	Tillage:	Conventional
Location:	Williams Farms	Planting Date:	4/30/2017
County/Town:	Ross/Chillicothe	Application Date:	6/5/2017
Soil Type:	Gessie-Eldean-Ross	Nitrogen:	180 lbs/acre
Drainage:	Surface only	Seeding Rate:	36,500
Previous Crop:	Soybeans	Harvest Date:	10/31/2017

### Methods

This was a block design with three replications. Each plot was 90 ft wide and 450 ft long with the center 30 ft being harvested. Holding all other variables consistent, the treatments consisted of a control and a 2 lbs/acre table sugar application tank mixed with round-up herbicide application applied at V5. This is being promoted locally by a seed dealer as a method to increase yields with Seed Consultant varieties.

### Results

Corn Yield Response to Sugar Application at V5

<u>Treatment</u>	<u>Yield (lbs/A)</u>
Control	192.42
Sugar	199.74
<b>ANOVA</b>	<b>p=0.10    Not Significant    LSD 23.32</b>

### Summary

There was no consistency in yield response in the field trial. Even though there was an observed increase in mean yield of 7.32 bushels per acre in the treatments receiving sugar application, the increase was not statistically significant and field data showed in one replication the untreated plot yielded higher than the treated plot. More research needs to be conducted to determine if this was a field variation problem, or an ineffective treatment issue.

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