



Evaluation of Monty's Plant Food™ Products On Corn (*Zea mays*) Production.



Roger O. Walker, Thomas Stilwell

Abstract

This test was performed to evaluate the effectiveness of Monty's Liquid Carbon and foliar fertilizers on corn (*Zea mays*) production. Using the manufacturer's recommendations, pre-emerge and foliar fertilizers with soil conditioners were used. The results were analyzed and no significant difference between control and treatments were found.

Introduction

Farmers are always trying to discover some new miracle to make a profit with corn. Fertilizer can be the ticket in many areas where soils are not up to par or conditions are not ideal for nutrient uptake.

This test was requested by a VRT specialist at a chemical company to evaluate the effectiveness of this product on corn. These treatments were the mid-range of recommended applications at the time of application..

Methods and Materials

Farmer Practices

- 1500 lbs/acre 78-126-3 applied preplant, 125 lbs/acre 11-52-0 row fertilizer, 40 gal/acre 28% approx. 2 weeks after planting
- 2.5 Lbs Lumax, 1 lb Atrax, 1 lb Simazine preplant herbicide
- Pioneer 34M78 Non GMO Seed (107 Day)

Soil Amendments

- Treatment 1.) Control (H₂O Only)
- Treatment 2.) Fertilizer (4-15-12 Planting & 8-16-8 Foliar)
- Treatment 3.) Fertilizer & Liquid Carbon (4-15-12/ Liquid Carbon Planting & 8-16-8 Foliar)

Data Recorded

Harvest Moisture, Population, Grain Weight

Data

Treatment	Yield	Treatment	Population
1	231	1	28998
2	231	2	29247
3	227	3	30243
Grand Mean	230	Grand Mean	29496

Discussion

In this trial there were no significant differences among treatments. The coefficients of variation were within acceptable limits for a farm level trial. The soil fertility levels were high as evidenced by the overall mean yields and the level of farmer applied fertilizers.

Conclusion

The Monty's liquid fertilizer program as applied did not make a significant difference in grain yield, plant population or grain moisture at harvest. It is possible that at lower soil fertility levels differences in corn growth could occur.

Since this experiment began, the manufacturers recommendations have changed to a single recommendation of application, not a good, better, best application as before

Literature Review

Allen, Price. 2009. Several Personal Communications. Monty's Plant Food Co. Oct 2009

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Results

No significant differences among treatments were observed for plant populations, grain moisture or grain weights. Mean Grain Yield was 230 bu/acre. Mean Plant Population was 29,296 plants/acre. Mean Grain Moisture at harvest was 26%.