Nebraska On-Farm Research Network

Procidic® on Corn

This study was conducted by the Kornhusker Kids 4-H Club as part of the Innovative Youth Corn Challenge.

Study ID: 103053201501
County: Dodge
Soil Type: Unknown
Planting Date: 5/19/15
Harvest Date: 10/24/15
Population: 32,000
Row Spacing (in.) 30
Hybrid: Fontanelle 09D623
Reps: 5
Previous Crop: Soybean
Tillage: No-Till
Herbicides: ***Pre:*** 5.6 oz/ac Corvus, 1 qt/ac Atrazine, and 24 oz/ac PowerMax ***Post:*** unknown

Seed Treatment: Unknown
Foliar Insecticides: Unknown
Foliar Fungicides: Unknown
Fertilizer: 100 lb/ac 11-52-00 preplant;
4 gal/ac starter at planting;
120 lb N/Ac 32-0-0 at sidedress
Note: Planted 12 row treatments, harvested 4 rows at center of each treatment to determine yields.
Irrigation: None

Introduction: Procidic® is used as a broad spectrum bactericide and fungicide (product ingredient table at right). The objective was to evaluate Procidic® to determine if it would have any impact on potential outbreaks of Goss's Bacterial Wilt and other disease. The field did not have a history of Goss's Bacterial Wilt and no symptoms were seen this year.

Three treatments were evaluated: Control, Procidic® applied in furrow at planting at 2 oz/ac, and Procidic® applied in furrow at planting at 2 oz/ac followed by another 2 oz/ac application prior to tasseling.

ACTIVE INGREDIENTS:	
Citric acid	3.5%
OTHER INGREDIENTS:	96.5%
TOTAL	100%

Product information from:
http://www.greenspireglobal.com/pdf_docs/2012-Procidic-Row-Crop-Flyer.pdf

Results:	Yield (bu/ac)†	Moisture (%)	Test Weight	Marginal Net Return ($/ac)‡
Check	228 A*	16.2 A	58 A	832.20
Procidic in Furrow (2 oz)	225 A	16.4 A	58 A	816.25
Procidic in Furrow (2 oz) and Foliar (2 oz)	227 A	16.3 A	58 A	818.55
P-Value	*0.5921*	*0.5718*	*0.2648*	*N/A*

*Values with the same letter are not significantly different at a 90% confidence level.
†Bushels per acre corrected to 15.5% moisture.
‡Net Return based on $3.65/bu corn and $2.50/oz. Procidic® cost. It is assumed both applications could be made with another operation, therefore an additional cost of application is not included.

Summary: There were no differences in yield, test weight or moisture between the three treatments evaluated. The control treatment resulted in the highest net return.

"In summary we concluded that without the evidence of Goss's Wilt we did not see any advantage to using Procidic® . We were also hoping to see additional plant health benefits but with the yield results we did not see any economic advantage. Most importantly we learned that when trying a new practice or product it is a good practice to limit the exposure because we cannot control how it will affect the bottom line profit margin." - Kornhusker Kids 4-H

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