

Nebraska On-Farm Research Network

Fungicide Applications for Goss's Wilt in Popcorn

Study ID: 005089201401

County: Holt

Soil Type: Boelus loamy sand

Planting Date: 5/10/2014

Harvest Date: 10/25/2014

Population: Unknown

Row Spacing: Unknown

Hybrid: WL310

Reps: 4

Previous Crop: Dry beans

Tillage: Tilled

Herbicides: Pre: Unknown

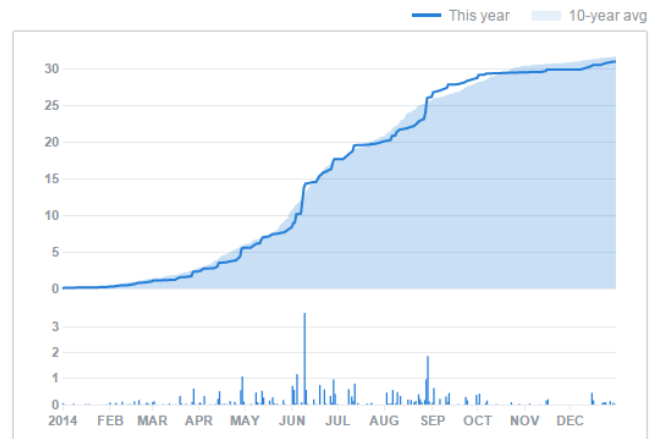
Post: Unknown

Insecticides/Fungicides: Unknown

Note: Hailed on June 3, 2014

Irrigation: Center pivot

Rainfall:



Introduction: After Goss's Bacterial Wilt was found in this popcorn field, the producer decided to test four products for their ability to decrease disease severity and increase yields. Application was with ground rig at tassel on July 23, 2014 at 15 gal/acre.

The four products evaluated were:

EcoAgra™ 300 (a bio-based product) at 5.1 fl oz/acre

Procidic® (3.5% citric acid and 96.5% other ingredients) at 14 fl oz/acre

Badge® SC (16.81% copper oxychloride and 15.36% copper hydroxide) at 1 pt/acre

Sanidate® (23% hydrogen peroxide and 5.3% peroxyacetic acid) at 1:1000 dilution/acre

It should be noted that several of these products recommend applications at different times or different frequencies than what was used in this study. In this study, only one application of each product was made at the time of tassel.

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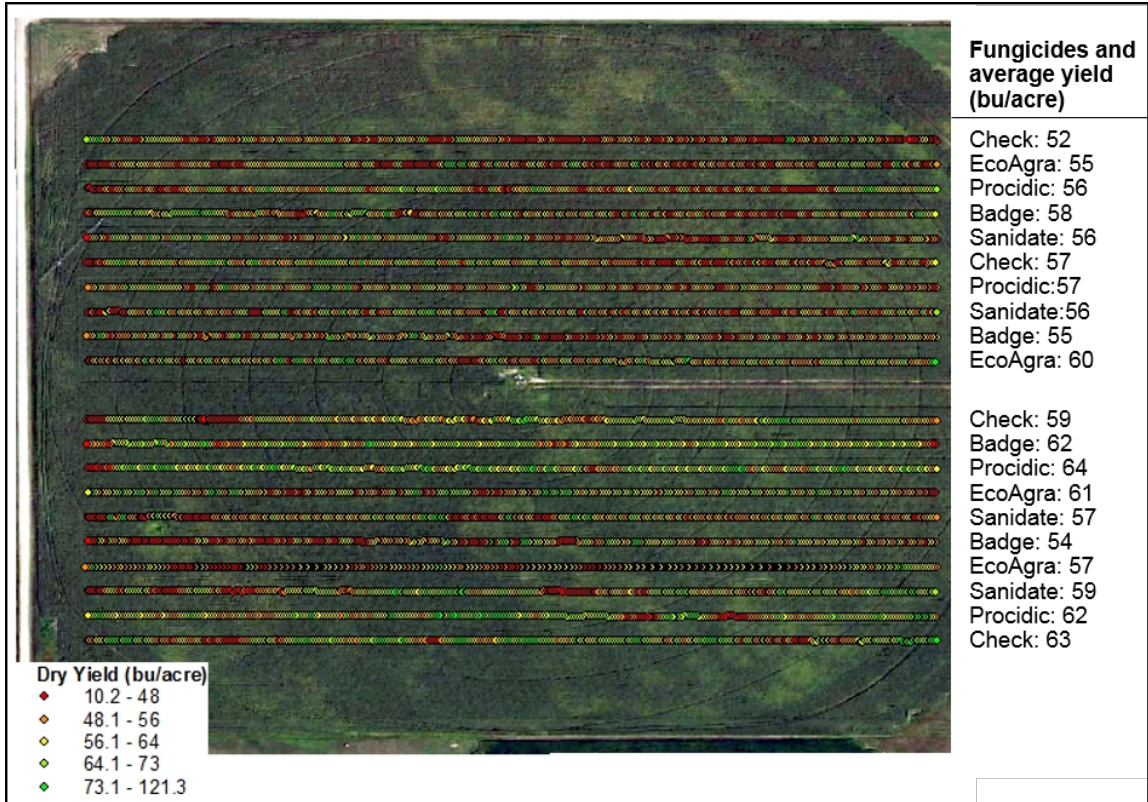


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Results:



	Yield [†] (bu/acre)	Moisture (%)	Net Return [‡]
Check	58 A*	17.1 A	\$617.12
EcoAgra™	58 A	18.1 A	\$604.44
Procidic®	60 A	17.1 A	\$629.09
Badge® SC	57 A	16.8 A	\$595.42
Sanidate®	57 A	16.8 A	\$604.44
<i>P-Value</i>	<i>0.7186</i>	<i>0.2660</i>	--

[†]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 \$0.19/lb for popcorn, \$7.50/ac Sanidate®, \$4.25/acre Badge®, \$2.50/ac Procidic™, \$5.87/ac EcoAgra™ 300, and \$6.81 application cost.

Summary: There was no significant difference in popcorn yield for any of the products tested. Further research should include evaluating the same products from this study, but adjusting to use the application timing and frequency that was recommended for each product.



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