

# Evaluation of GreenYields™ Effect on Wheat Yields

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## Objective

To evaluate an application of GreenYields™, a bio-based cleansing wash, on the effect of wheat yield in two field locations and two wheat varieties.

## Background

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Crop Year:	2009	Nitrogen:	Fall: 250 lbs 10-26-26 w/ 20 lbs AMS, Mar 24: 15 gal 28% N, April 25: 15 gal 28% N
Cooperator:	Louis Shininger	Previous Crop:	Soybeans
County/Town:	Defiance/Ney	Row Width:	7.5 inches
Soil Type:	Paulding clay Roselms silty clay	Planting Rate:	Branson 150 lbs/acre Pioneer 25R62 106 lbs/acre
Drainage:	Systematic subsurface	Planting Date:	Field 1: 9-26-08 Field 2: 9-23-08
Tillage:	No-till	Harvest Date:	Field 1: 7-7-09 Field 2: 7-9-09
Soil Tests:	Field1, pH 6.4, P 35 ppm, K 199 ppm, 08/11/2009 Field 2, pH 6.6, P 24 ppm, K 229 ppm, 08/11/2009		

## Methods

This study was a split plot design with the number of treatment replications varied by field location and size. Plots were grouped by wheat variety at each field location with split plot treatments replicated within each group. Split plot treatments included GreenYields™ and non-treated control.

- 1) Field 1 - Variety; Branson - 4 reps of GreenYields™ and non-treated control
- 2) Field 2 - Variety Pioneer 25R62 – 3 reps of GreenYields™ and non-treated control
- 3) Field 2 - Variety Branson - 3 reps of GreenYields™ and non-treated control

GreenYields™ was applied on April 24, 2009 at Feekes wheat growth stage 4-5 at a product rate of 8 oz/acre with 10 gallons of water. The cooperator used an ATV, pull-type sprayer with a 45-foot boom, making two passes for a 90 foot treatment plot. Applicator was equipped with a GPS guidance system and flat fan nozzles. Harvest width was the center 30 foot of the treatment plots. Yield was measured using the cooperator's combine equipped with an Ag Leader™ yield monitor and by the OSU Extension office using SMS Ag Leader™ software. Grain moisture was taken from the yield monitor average readings for each plot. All yield data were adjusted to 13.5% moisture.

## Results

This study found no significant yield differences among treatments across wheat variety or field location. The GreenYields™ treatment produced no yield significantly greater than the non-treated control.

Wheat Yields (bu/acre)	Treatment		
	Control	GreenYields™	
Field 1 Branson	82.25	79.42	NS
Field 2 Pioneer 25R62	82.99	81.91	NS
Field 2 Branson	81.56	81.88	NS
LSD (0.05)			

NS = not significant

## Summary

GreenYields™ is a foliar liquid surfactant and “just food” in a unique form as described by the manufacture. The product cost of GreenYields™ was reported by the cooperator at \$140.00/gallon or \$8.75/acre at the application rate of 8 oz/acre. The 2009 growing conditions for wheat were favorable (cool with timely rainfall) with county yields above the 5 year average. Multiply year testing is recommended to further study the yield effects.

## Acknowledgement

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