



# THE 2014 OHIO SOYBEAN FOLIAR TREATMENT TRIAL

**THE OHIO STATE UNIVERSITY**

COLLEGE OF FOOD, AGRICULTURAL,  
AND ENVIRONMENTAL SCIENCES

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## INTRODUCTION

The purpose of the Ohio Soybean Foliar Treatment Trial is to evaluate soybean foliar treatments for yield. This evaluation gives soybean producers comparative information for selecting soybean products for their unique production system.

## FIELD PLOT DESIGN

The entries for each test site were planted in a randomized complete-block design. Each entry was replicated four times and planted in plots 28 ft. long and 5 ft. wide containing six rows seeded at 15-inch row width. The center four rows were harvested for yield. Seeding rate was 150,000 seeds per acre. All sites had corn as the previous crop and were no-till. Trials were located at the OARDC's Northwest Agricultural Research Station (Wood County) and Western Agricultural Research Station (Clark County).

## METHOD OF CONDUCTING TRIALS

**Entries in Trials.** All 2014 entries were submitted voluntarily by companies. Entry fee charges were paid per treatment. Application protocol and product rate were provided by the company. All products were tested on Asgrow 3231 seed treated with Acceleron (metalaxyl + pyraclostrobin + fluxapyroxad + imidacloprid).

**LSD.** Least Significant Difference (LSD) for yield was computed for both trial location. LSD's are reported in bushels per acre at 13% moisture. Yields of two products are significantly different 90% of the time if their yields differ by more than the LSD value shown for that trial location.

## MEASUREMENTS AND RECORDS

**Yield.** Soybeans were harvested when the moisture content was between 8 and 12% and yields reported in bushels per acre at 13% moisture.

**DATA USE.** Inclusion of entries in the Ohio Soybean Performance Trials does not constitute an endorsement of a particular entry by the Ohio State University, Ohio Agricultural Research and Development Center, or Ohio State University Extension.

**TABLE 1: The 2014 Ohio Soybean Seed Treatment Trial, Site Descriptions**

	Wood Co.	Clark Co.
Soil type	Hoytville silty clay loam	Strawn silty clay loam
Soil pH	6.7	5.5
Soil Test P (ppm)	30	19
Soil Test K (ppm)	208	110
Organic Matter (%)	3.5	2.7
CEC (meq/100 g)	17.7	18.3
Plant Date	29-May	31-May
Harvest Date	10-Nov	4-Nov

**TABLE 2: Directory of Companies Listed by Treatment, Product Type, and Application Timing**

Company/Treatment	Product Type	Application Timing
<b>BASF</b> Priaxor	<a href="http://www.agproducts.basf.us">www.agproducts.basf.us</a> Fungicide	R3
<b>Conklin Company, Inc.</b> Feast 3-18-18 Foliar X-CYTO	<a href="http://www.conklin.com">www.conklin.com</a> Fertilizer Growth Regulator	V3-V5 V3-V5
<b>Stoller USA</b> Bio-Forge	<a href="http://www.stollerusa.com">www.stollerusa.com</a> Fertilizer	V3 + R3
<b>Wellman Seeds, Inc.</b> Spunk Prudent Presto Prudent Presto (@ V3) + Spunk (@ R1)	<a href="http://www.wellmanseeds.com">www.wellmanseeds.com</a> Unspecified Unspecified Unspecified	R1 V3 V3 & R1



**Table 3. Yield results for Wood County and Clark County, 2014.**

Treatment	Company	Entry Type	Application Time	Wood Co. Yield	Clark Co. Yield
Priaxor	BASF	Fung	R3	51.6	45.0
Feast 3-18-18	Conklin Company, Inc.	Fert	V3-V5	55.4	50.1
Foliar X-CYTO	Conklin Company, Inc.	GrowReg	V3-V5	49.4	50.1
Bio-Forge	Stoller	Fert	V3+R3	51.1	50.9
Stimulate	Stoller	GrowReg	V3+R3	50.6	50.4
Spunk	Wellman Seeds, Inc	Unspecified	R1	50.0	47.2
Prudent Presto	Wellman Seeds, Inc	Unspecified	V3	50.8	44.5
Prudent Presto@ V3, Spunk @ R1	Wellman Seeds, Inc	Unspecified	V3 & R1	52.6	47.5
Untreated Control	Untreated Control	Control	None	50.1	47.1
			LSD (0.1)	6.95	5.17
			CV	12.0	8.6