

THE 2014 OHIO SOYBEAN FOLIAR TREATMENT TRIAL

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AND ENVIRONMENTAL SCIENCES

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.

<u>DATA USE</u>. 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

BASF www.agproducts.basf.us

Priaxor Fungicide R3

Conklin Company, Inc. www.conklin.com V3-V5 Feast 3-18-18 Fertilizer Foliar X-CYTO Growth Regulator V3-V5 Stoller USA www.stollerusa.com Bio-Forge Fertilizer V3 + R3Wellman Seeds, Inc. www.wellmanseeds.com Unspecified R1 Spunk Prudent Presto

V3 & R1

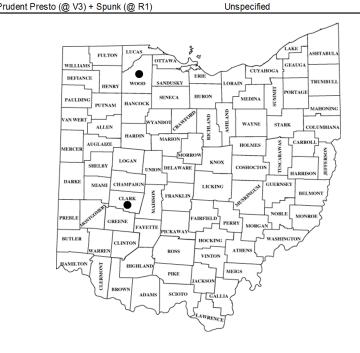


Table 3. Yield results for Wood County and Clark County, 2014.

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