

2-10-2015

Evaluation of Commercial seed treatments on Soybean at Three Locations in Iowa in 2014

Mauricio Serrano

Iowa State University, mserrano@iastate.edu

Stith N. Wiggs

Iowa State University, stithw@iastate.edu

Alison E. Robertson

Iowa State University, alisonr@iastate.edu

Follow this and additional works at: <http://lib.dr.iastate.edu/cropnews>

 Part of the [Agricultural Science Commons](#), [Agriculture Commons](#), and the [Agronomy and Crop Sciences Commons](#)

Recommended Citation

Serrano, Mauricio; Wiggs, Stith N.; and Robertson, Alison E., "Evaluation of Commercial seed treatments on Soybean at Three Locations in Iowa in 2014" (2015). *Integrated Crop Management News*. 317.

<http://lib.dr.iastate.edu/cropnews/317>

The Iowa State University Digital Repository provides access to Integrated Crop Management News for historical purposes only. Users are hereby notified that the content may be inaccurate, out of date, incomplete and/or may not meet the needs and requirements of the user. Users should make their own assessment of the information and whether it is suitable for their intended purpose. For current information on integrated crop management from Iowa State University Extension and Outreach, please visit <https://crops.extension.iastate.edu/>.

Evaluation of Commercial seed treatments on Soybean at Three Locations in Iowa in 2014

Abstract

With funding provided from Iowa Soybean Association, 15 current commercial seed treatments from 8 companies were tested at 3 locations in Iowa: ISU Northeast Research and Demonstration Farm (NERF) near Nashua; ISU Southeast Research and Demonstration Farm (SERF) near Crawfordsville, and a farmer's field in Roland (central Iowa). According to recommended maturity groups, public variety IA2094 was planted in Nashua and IA3014 was planted in Roland and Crawfordsville. Replicated plots of 10 feet wide by 17.5 feet long were planted at each location. Seed treatments were professionally applied by the respective companies.

Keywords

Plant Pathology and Microbiology

Disciplines

Agricultural Science | Agriculture | Agronomy and Crop Sciences

Subscribe to Crop News

Archives

2015

2014

2013

2012

2011

2010

2009

2008

Previous Years

ISU Crop Resources

 Extension Field Agronomists

 Crop & Soils Info

 Pesticide Applicator Training

 Agronomy Extension

 Entomology Extension

 Plant Pathology Extension

 Ag and Biosystems Engineering Extension

 Agribusiness Education Program

 Iowa Grain Quality Initiative

 College of Agriculture and Life Sciences

 ISU Extension

Integrated Crop Management NEWS

Evaluation of Commercial seed treatments on Soybean at Three Locations in Iowa in 2014

By **Mauricio Serrano, Stith Wiggs and Alison Robertson**. Department of Plant Pathology and Microbiology, Iowa State University

With funding provided from Iowa Soybean Association, 15 current commercial seed treatments from 8 companies were tested at 3 locations in Iowa: ISU Northeast Research and Demonstration Farm (NERF) near Nashua; ISU Southeast Research and Demonstration Farm (SERF) near Crawfordsville, and a farmer's field in Roland (central Iowa). According to recommended maturity groups, public variety IA2094 was planted in Nashua and IA3014 was planted in Roland and Crawfordsville. Replicated plots of 10 feet wide by 17.5 feet long were planted at each location. Seed treatments were professionally applied by the respective companies.

Results

- Planting dates are shown in [Table 1](#).
- Soil temperatures at planting were relatively warm (>15C (59F)) except for a few days soon after planting at Roland when temperatures dropped to 10C (55F) at Roland ([Figure 1](#)).
- No effect of seed treatments on stand count or yield was detected at any location ($P < 0.1$) ([Table 2](#), [Table 3](#)).
- The heavy rainfalls observed in June could increase the severity of SDS in the trial at Roland. None of the treatments showed efficacy for control of SDS ([Table 5](#), [Figure 2](#)).
- No differences in soybean cyst nematode (SCN) count at planting, 45 days after planting and after harvest were observed between untreated control and nematicide seed treatments. This may be attributed to low initial SCN counts, thus an effect of the nematicide treatments was difficult to detect ([Table 4](#)).
- Seed treatment trials with commercial seed treatments will be repeated in 2015. All effort will be made to plant the trials earlier (April 15 – 25) in an effort to test the effect of seed treatment on early stand count and yield when soil temperatures are cooler.

Acknowledgements

Funding for this study was provided by Iowa Soybean Association. We thank Bayer CropScience, Syngenta, Valent USA, Winfield, BASF, Monsanto, DuPont Pioneer and Chemtura for taking part in and treating seed for this study.

Mauricio Serrano-Porras, Stith Wiggs and Alison Robertson are graduate student, research associate and associate professor, respectively, in the Department of Plant Pathology and Microbiology at Iowa State University. Mauricio Serrano-Porras can be reached at mserrano@iastate.edu or 515-294-6708. Alison Robertson can be reached at alisonr@iastate.edu or 515-294-6708.

This article was published originally on 2/10/2015. The information contained within the article may or may not be up to date depending on when you are accessing the information.

Links to this material are strongly encouraged. This article may be republished without further permission if it is published as written and includes credit to the author, Integrated Crop Management News and Iowa State University Extension. Prior permission from the author is required if this article is republished in any other manner.

Copyright ©2015 [Iowa State University Extension](#) | [Iowa State University](#)
[Contact us](#) | [For Staff](#) | [Nondiscrimination and Information Disclosures](#) | [CMS Admin](#)
Last Updated 2/10/2015