IOWA STATE UNIVERSITY Digital Repository

Integrated Crop Management News

Agriculture and Natural Resources

2-10-2014

Be Wary of High SCN Numbers in 2014

Gregory L. Tylka *Iowa State University*, gltylka@isastate.edu

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

Part of the <u>Agricultural Science Commons</u>, <u>Agriculture Commons</u>, and the <u>Plant Pathology</u> <u>Commons</u>

Recommended Citation

Tylka, Gregory L., "Be Wary of High SCN Numbers in 2014" (2014). *Integrated Crop Management News.* 12. http://lib.dr.iastate.edu/cropnews/12

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 Users are hereby notified that the content may be inaccurate, out of date, incomplete and/or may not meet the needs and requirements of the user.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/.

Be Wary of High SCN Numbers in 2014

Abstract

It is hard to think about planting crops with the brutally cold weather we have been experiencing in Iowa the past several weeks. But warm weather and planting season will be here in a matter of weeks.

As plans are being made for the 2014 crops, farmers and agronomists should be aware that fields planted to soybeans this year may have unusually high soybean cyst nematode (SCN) numbers if soybeans were grown in the fields in 2012. The number of SCN eggs in the soil at the time of planting is a major factor determining how much damage and yield loss SCN will cause.

Keywords

Plant Pathology and Microbiology

Disciplines

Agricultural Science | Agriculture | Plant Pathology

Rights

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.

ICM Home

ISU Extension Calendar

Publications

Extension News

County Offices

Contact Us

search

Subscribe to Crop News

2014	

2013

2011

2010

2009

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





Be Wary of High SCN Numbers in 2014

By Greg Tylka, Department of Plant Pathology and Microbiology

It is hard to think about planting crops with the brutally cold weather we have been experiencing in lowa the past several weeks. But warm weather and planting season will be here in a matter of weeks.

As plans are being made for the 2014 crops, farmers and agronomists should be aware that fields planted to soybeans this year may have unusually high soybean cyst nematode (SCN) numbers if soybeans were grown in the fields in 2012. The number of SCN eggs in the soil at the time of planting is a major factor determining how much damage and yield loss SCN will cause.

Extremely high SCN reproduction was observed in lowa in 2012 on both susceptible soybean varieties and SCN-resistant soybeans with the PI 88788 source of resistance. The very large increases in SCN numbers in 2012 are believed to be somehow related to the extremely dry soil conditions that occurred that year. The situation was discussed in an ICM News article, Soybean Cyst Nematode Reproduction High in 2012, in December 2012.

Won't extreme winter temperatures kill SCN?

It's intuitive to think (and hope) that extreme cold temperatures might cause increased death of SCN over winter. But unfortunately, that is not what happens. There is almost 100 percent survival of SCN over the winters here in the Midwest - no matter how cold. The nematode seems to survive extreme low soil temperatures very well.

What to do?

What should farmers do if they fear that SCN numbers may be unusually high in fields slated for soybean production in 2014? There is no reason to shift planting plans from soybeans to corn. It's extremely valuable for pest management purposes to have soybeans and corn rotated in fields.

In order to grow soybeans profitably in fields infested with medium or high population densities of SCN, one must use good SCN-resistant soybean varieties with high yield potential and good nematode control. Nematode-protectant seed treatments may provided added yield and/or protection from nematode feeding on the resistant soybean varieties.

To help with decisions on what SCN-resistant soybean varieties should be grown, the annually updated list of SCN-resistant soybean varieties for lowa is available <u>online</u>. There are more than 670 varieties listed in the publication for 2014.

Also, the results of the lowa State University SCN-resistant Soybean Variety Trial program are available <u>online</u>, too. The results of these experiments, funded by the soybean checkoff through a grant from the lowa Soybean

Association, show the agronomic performance and nematode control provided by many different SCN-resistant varieties in a set of locations throughout lowa. Results of SCN-resistant soybean variety testing from 2013 and previous years also are available at www.isuscntrials.info.

More information about SCN

Additional information about the biology, scouting, and management of SCN is available at www.soybeancyst.info and www.planthealth.info/scn basics.htm.

Greg Tylka is a professor with extension and research responsibilities in management of plant-parasitic nematodes. He can be reached at gltylka@iastate.edu or 515-294-3021.

This article was published originally on 2/10/2014 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 ©2014 <u>lowa State University Extension</u> | <u>lowa State University</u>
<u>Contact us | For Staff | Nondiscrimination and Information Disclosures | CMS Admin</u>
Last Updated 2/10/2014