6-27-2005

Now's the time to scout for soybean cyst nematode

Gregory L. Tylka
Iowa State University, gltylka@iastate.edu

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

Part of the Agricultural Science Commons, Agriculture Commons, and the Plant Pathology Commons

Recommended Citation
http://lib.dr.iastate.edu/cropnews/1478

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 Users are hereby notified that the content may be inaccurate, out of date, incomplete and/or may not meet the needs and requirements of the user.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/.
Now's the time to scout for soybean cyst nematode

**Abstract**
Soybean cyst nematode (SCN) is an important, widespread soybean pest in Iowa that often goes undetected. To date, the nematode has been discovered in all but Adams, Allamakee, Ida, and Lyon counties in Iowa. The only consistent and reliable sign of an SCN infestation in the field during the growing season is the presence of adult SCN females and cysts (dead females) on the roots of infected soybean plants. Adult SCN females and cysts are small, round, and white to yellow, each approximately the size of a period at the end of a sentence.

**Keywords**
Plant Pathology

**Disciplines**
Agricultural Science | Agriculture | Plant Pathology
Now's the time to scout for soybean cyst nematode

Soybean cyst nematode (SCN) is an important, widespread soybean pest in Iowa that often goes undetected. To date, the nematode has been discovered in all but Adams, Allamakee, Ida, and Lyon counties in Iowa. The only consistent and reliable sign of an SCN infestation in the field during the growing season is the presence of adult SCN females and cysts (dead females) on the roots of infected soybean plants. Adult SCN females and cysts are small, round, and white to yellow, each approximately the size of a period at the end of a sentence.

SCN females have begun to be observed on the roots of soybean this season. Consequently, now is the time to begin scouting fields for SCN by checking soybean roots for females and cysts. These females and cysts will be apparent on roots of infected plants until late summer or early fall, when the plants begin to mature. However, it is much easier to observe the nematodes on soybean roots in the first half of the season because they form on new roots that can be easily dug from the soil surrounding the base of the stem of the plant. Later in the season, adult SCN females and cysts occur on new roots that form deeper in the soil as well as farther laterally from the stem of the plant.

To scout for SCN in fields where the nematode has not yet been found, you may target fields in which soybean has been grown frequently in the past and fields where soybean yields have declined over time for no apparent reason. SCN is more prevalent in greater numbers in areas of fields with high pH (greater than 7.5). Because SCN is spread by the movement of infested soil, checking roots of plants near the entrance of fields where farm equipment enters and along fence lines where windblown soil accumulates also may increase the likelihood of finding SCN-infected plants.

Collecting soil samples from fields suspected of being infested with SCN is an alternative to digging soybean roots and looking for adult females and cysts. Soil sampling can be done at any time during the growing season. Soil samples should be submitted to a private soil testing laboratory that offers nematode testing or to the Iowa State University (ISU) Plant Disease Clinic for extraction and counting of SCN eggs. Samples sent to the Iowa State University Plant Disease Clinic should be accompanied by a completed Plant Nematode Sample Submission Form, Iowa State University Extension publication PD 32, available at www.extension.iastate.edu/Publications/PD32.pdf or by calling (515) 294-5247. There is a $15 charge for processing each sample. Detailed instructions on how to collect a representative soil sample for detection of SCN can be found on the back of PD 32 (also see general tips on page 133).

ISU Extension publication IPM 47s, Scouting for Soybean Cyst Nematode, illustrates the recommended procedures for scouting for SCN. Single copies of this publication are available free of charge from county extension offices or from the Extension Distribution
Center by calling (515) 294-5247. Additional information about SCN can be found on the web at www.soybeancyst.info [1].

Soybean cyst nematode females on soybean roots. The upper (blue-handled) pointer is indicating SCN females and the bottom pointer is indicating a nitrogen-fixing nodule. (Greg Tylka)

An aerial view of damage to soybeans from soybean cyst nematode. (Greg Tylka)

This article originally appeared on pages 129-130 of the IC-494(16) -- June 27, 2005 issue.

Source URL:
http://www.ipm.iastate.edu/ipm/icm//ipm/icm/2005/6-27/scn.html

Links: