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Soybean Cyst Nematode Sampling

Soybean Cyst Nematode (SCN) has been called a ‘silent yield killer’. Mostly invisible in terms of aboveground symptomology, SCN typically isn’t present in every soybean field and even where found, year to year yield losses can be variable and difficult to discern.

One way you can ‘monitor to manage’ SCN is with a post-harvest soil test to determine population levels. Collection is similar to fertility sampling: divide the field into sampling zones based on soil type or management (or equal sized quadrants in uniform fields) ideally not over 20 acres in size. Using a probe, collect 10-20 cores in a Z pattern per zone to a depth of six to eight inches. Mix cores together submitting a pint of soil in a labeled/sealed plastic bag.

Samples can be submitted to the K-State Plant Disease Diagnostic Lab for a fee of \$35/sample. Private labs may offer testing as well. Whatever lab you use, be sure to store samples properly, keeping them out of the sun and shipping overnight when possible. More about sampling is in this video from K-State Research & Extension Row Crops Pathologist Dr. Rodrigo Onofre: <https://youtu.be/b6Eo0isI110> .

Not sure it’s worth it? Fifty plus samples pulled as part of two separate SCN Sampling grants in the Meadowlark Extension District resulted in mixed news in terms of the potential for soybean yield losses. On the negative side, almost 50 percent of samples had a confirmed presence of SCN at some level. On the positive side, only one of the over fifty samples had reached SCN levels where yield would be potentially limiting.

Why worry about SCN? The sample with yield limiting levels came from a single field sampled in management zones. Levels were yield limiting on one side of the field – and not detected on the other (results *were* validated with a second set of samples). The take home: SCN levels can vary across farms, making a good sampling protocol important.

Confirmation of SCN isn’t ideal, but it *can* help you better manage (hybrid resistance + crop rotation + seed treatments) farms to reduce the damage SCN could be causing. For more information about testing, general management or about sending samples to the K-State Plant Disease Diagnostic Lab, drop me a line. Want a cool way to look at the potential for yield losses once you get your test results using individual farm information? Check out the SCN Profit Checker at: <https://www.thescncoalition.com/profitchecker/calculator/> . It’s a quick way to estimate potential yield losses from this troublesome pest.