Soybean Cyst Nematode Sampling

Post-harvest is an excellent time to soil sample for the soybean cyst nematode (SCN). Currently, 58 of Kansas’ 105 counties are known to be infested. In those counties, it tends to start in fields next to a river. In fields currently infested, knowing your nematode population numbers is an excellent way to determine if your management plan is working. If numbers are going up, you know that the population of nematodes in your field has overcome the resistance in the most recently planted soybean variety and that use of that variety should be discontinued in infested fields. Many soybeans that offer SCN resistance use the same gene PI88788.

Sampling the soil in a known infested field is very similar to collecting a soil fertility sample. You will need a soil probe, a bucket, and a little elbow grease. Walk a “Z” or “W” pattern across the field. If the field was soybeans in 2020, collect the cores from directly in the row since that is where the nematodes are most likely to be found. One difference from fertility sampling is that the probe should be inserted to a depth of 6–8 inches. Collect 18–24 cores in the bucket. Mix the soil thoroughly, and then remove about a pint for the actual sample. Soil can be placed into the same type of white sampling bag used for fertility samples or into a re-sealable, gallon-size plastic bag. Avoid freezing the soil or exposing it to excessive heat after collection. Make sure you send it in that day to avoid disturbing the nematodes in the sample.

For fields with no history of SCN, you should concentrate on areas of the field that might be hot spots. Other than targeting potential hot spots, the sampling procedure is the same as outlined above.

Sample Bags can be picked up at any K-State Research and Extension county office and dropped off for shipping. They can also be sent directly to the K-State Plant Disease Diagnostic Laboratory:

1712 Claflin Rd
4024 Throckmorton PSC
Manhattan, KS 66506

Keep in mind that if you are too busy to sample this fall, any time is a good time to sample for SCN. Unlike other nematodes that move up and down in the soil profile depending on the season, the cysts are always there and move only with tillage. For more information, visit the SCN Coalition website at https://www.thescncoalition.com.

If you have any questions contact Rebecca Zach at the Belleville Office 785-527-5084 or zrebecca@ksu.edu.

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