Post Rock Extension District Column

Week of November 6-10, 2023
By Sandra L. Wick
K-State Research and Extension-Post Rock District
Crop Production Agent

Sampling for the Soybean Cyst Nematode is important!

Now that our soybean crop is harvested, it is a good time to evaluate your fields to determine if any diseases or insects might have affected your yield. A couple of diseases or insects may have been lurking in your soybeans without you knowing it. One of them is the **soybean cyst nematode**. In Kansas, the SCN was first reported in 1985 and since then, the range of the nematode has continued to expand to fifty-nine counties that produce approximately 85% of the Kansas soybean crop.

So exactly what is a soybean cyst nematode? The soybean cyst nematode or commonly known as SCN, is a microscopic, worm-like organism and is the number 1 yield-grabbing insect of soybeans! They burrow into the roots and begin feeding on young root cells. The females become immobile and continue to feed and mature. There are about 3 to 6 generations during the summer with a new generation about every 24 days! The most commonly observed symptom associated with SCN is reduced yield. The visible symptoms of SCN injury that do occur can easily be confused with other soybean production problems including herbicide injury, seedling blight damage, iron chlorosis, different root diseases, drought or even soil compaction. Yield loss may occur for several years before any visible symptoms may actually appear. The first noticeable symptoms are rough circular spots in the field in which soybean plants may show signs of stunting, yellowing or nutrient deficiency. Roots have fewer feeder roots and nitrogen-fixing root nodules. Accurate diagnosis of the problem may be delayed several years because of the similarity of symptoms to these production problems. Frequently, SCN is suspected only after eliminating all other possibilities.

So how can I test for the soybean cyst nematode? The only sure way to identify SCN damage is by a soil test. When sampling, it is best to use a soil probe and many county/district extension offices have soil probes available to loan if you do not have your own. Collect 10 to 20 soil cores, about 6-8 inches deep, in a zig-zag pattern across the entire area to be sampled. The Post Rock Extension District has a soil probe in all our offices for checkout.

When is the best time to test for the soybean cyst nematode? Soil samples can be collected throughout the year, but immediately following soybean harvest is the optimum time since SCN numbers tend to be highest when the plants are almost mature to shortly after harvest. Fortunately, there is still plenty of time to test this winter before the ground freezes.

Lastly, what can I do to prevent or minimize the soybean cyst nematode? Resistant varieties are the best way to manage SCN. If SCN are present for several years, the sudden death syndrome can also start showing up in your soybean crop.

There is an excellent (free of charge) publication, **"Soybean Cyst Nematode (SCN) Management Guide"** available ONLINE at https://soybeanresearchinfo.com/pdf_docs/SCNGuide_5thEd.pdf from the NC Soybean Research Program and is funded by the Soybean Checkoff. This is an extensive resource for managing the soybean cyst nematode in crop fields. This is available online or at any of our Post Rock Extension District Offices upon request.

If you have more questions on sampling for the Soybean Cyst Nematode, stop by or give me a call at any of our Post Rock Extension District Offices in Beloit, Lincoln, Mankato, Osborne, or Smith Center.

*Post Rock Extension District of K-State Research and Extension serves Jewell, Lincoln, Mitchell, Osborne, and Smith counties. Sandra may be contacted at swick@ksu.edu or by calling Smith Center, 282-6823, Beloit 738-3597, Lincoln 524-4432, Mankato 378-3174, or Osborne 346-2521. Join us on Facebook at "Post Rock Extension" along with our Ag News Roundup every Friday ONLINE. Also remember our website is **www.postrock.ksu.edu** and my twitter account is @PRDcrops.*