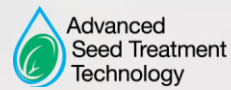


Nematode Sampling Guidelines

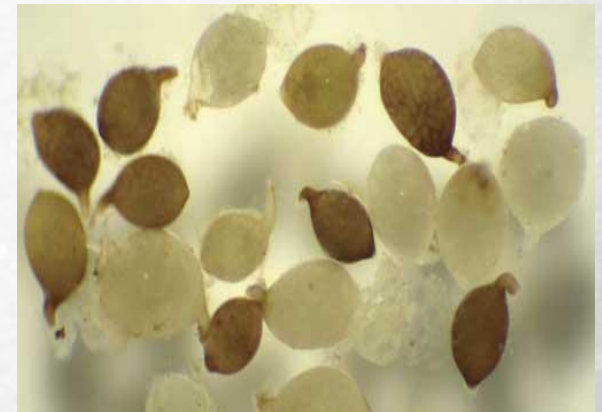


Why Sample for Nematodes

- You can't see them
- Often nematode damage mimic's other problems
- Nematode population increase
 - Industry shift away from soil insecticides to insect-resistant corn has increased all secondary pests
 - Shift back to more continuous cropping patterns
- Smart practice to periodically sample fields and maintain a record of populations by field



Lance nematodes in root
Photo courtesy of Iowa State University



Soybean Cyst females and cysts
Photo courtesy of Iowa State University

Sampling for Nematodes

- Accuracy of results are only as accurate as the sample
- Corn Timing
 - 4-6 weeks after emergence
 - June timeframe
 - Sample sooner/deeper for Needle and Dagger
 - Goes deeper into the soil as temperatures increase
- Soybean Timing
 - Fall prior to planting optimum
 - Oct.-May
 - 6-8 inches soil samples



If plants are not present,
sample in the row

Corn nematode
sampling should include
feeder roots

—

If plants are present,
sample just outside the
row (drip line)

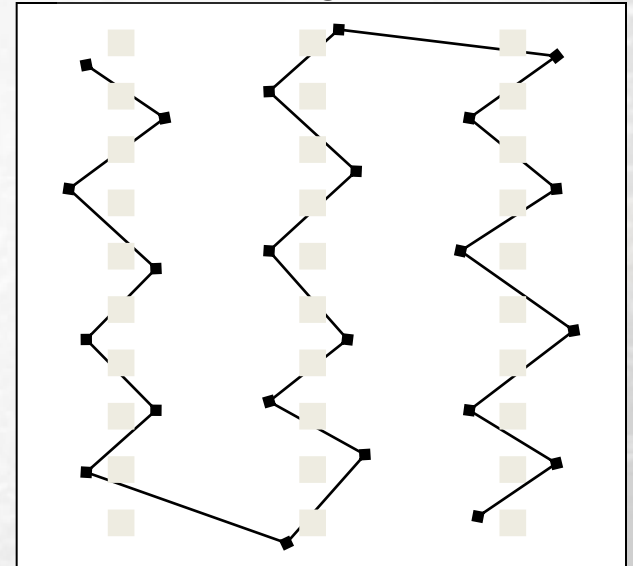


Sample as deeply as
possible, given soil
conditions. 8-12" is
recommended for
corn.

—

For SCN, 6-8" is
sufficient.

Sampling pattern



Photos courtesy of University of IL



Take at least 20 cores per sample.

—

Gently break cores up by hand before mixing soil*

*For corn samples:
treat the soil *very gently*

Photo courtesy of University of IL

Endoparasites (lesion and lance) will be found inside the roots. So to get an accurate count, samples **must** include feeder roots.

Gently shake off the original soil from the roots and include the roots in the soil sample package.



Photo courtesy of Iowa State University



Take about a quart sub-sample and place it in a plastic bag (no paper, please!).



Photos courtesy of University of IL



Label each sample directly on the bag with a permanent marker, including field location, date, tillage history and rainfall to-date.

Don't leave bagged samples out in the sun. If necessary, store in a cool, dry place.

Pack samples in a cooler for transport or an insulated box for shipping.

Speed is essential – ship as soon as possible.



Photos courtesy of University of IL

Sampling for Corn Nematodes

- Tips
 - Collect from the root zone of live plants
 - Collect from the edges of hot spots
 - Do not sample from sick/dead plants in center of hot spots
 - Samples must include roots
 - Must arrive at lab alive, so handle samples carefully
 - Refrigerate, if possible
 - Do not add water

Sampling for Corn Nematodes

- Must specify that test is for CORN nematodes (Vermiform test)
 - SCN tests do not collect corn nematodes
- Most agricultural universities can conduct tests for corn nematodes
 - There is a service charge for analysis of soil samples
 - Check with your nearest Extension office for current prices

Sampling for Soybean Cyst Nematodes

- Tips

- Collect samples in the fall prior to planting in the spring
- Collect from the edges of hot spots
 - Where yields were lower than expected in previous soybean crops
- Samples soil in top 6-8 inches
- Keep the sample out of your hot vehicle and out of direct sun
 - Keep at room temperature
 - Do not add water

Next steps

- Once you have your results back from the university:
 - Contact your Bayer CropScience representative to determine if your nematode populations hit the economic threshold
 - Work together to build a management program based on your results

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