# **Nematode Sample Submission Form**



# **Plant and Insect Diagnostic Clinic**

Iowa State University–2445 ATRB, 2213 Pammel Drive, Ames, IA 50011-1101 515-294-0581

515-294-0581

For Laboratory Use Only

Sample Number\_\_\_\_\_

Date Received \_\_\_\_\_

yardandgarden.extension.iastate.edu/pidc

#### Instructions

- 1. The quality of the diagnosis is dependent on the quality of the sample and submission form. Write legibly and fill out as much information as possible.
- 2. If you have a different billing office/person, include them as the billing contact so they receive the bill.
- 3. If mailing, mail the samples early in the week with overnight or two-day shipping to limit potential spoilage in the mail, especially for complete nematode counts.

### Submitter Contact

#### (Please print, (\*) are required fields)

Name*
Signature*
Company
Address*
City, State, Zip*
Phone*
mail*

# **Billing Contact**

(Will also receive the diagnostic report
--

Same as above

Name\*\_\_\_\_

Company (if applicable)\*\_\_\_\_\_

Address\*\_\_\_\_\_

City, State, Zip\* \_\_\_\_\_

Phone\*\_\_\_\_\_

Email\* \_\_\_\_\_

# Internal Billing

Department worktag \_\_\_\_\_

Account contact \_\_\_\_\_

#### Service Requested (check requested service)

DO NOT SEND PAYMENT with your sample. Fees are subject to change. Visit our <u>website</u>: yardandgarden.extension.iastate.edu/pidc.

#### **Given Solution** Solution Solu

Cost per sample: \$30 in-state/\$35 out-of-state

#### **Complete Nematode Count**

Cost per sample: \$40 in-state/\$45 out-of-state

Complete nematode counts are primarily for nematodes that feed on corn or turfgrass. Please contact us about samples from fruits or vegetables for specific sample instructions.

**Out-of-state sample**: contact the clinic before submitting an outof-state sample.

By submitting a sample or image along with this form, you signify that you have **read and agree to our** <u>Terms and Conditions</u> found at yardandgarden.extension.iastate.edu/pidc/terms\_and\_conditions.

See our website for sampling instructions. Fees are assessed for insufficient samples.

Fill out all required fields (\*) or processing of your sample will be delayed/refused.

ISU Accounts Receivable Office will issue a monthly billing statement. Late fees may be assessed on charges more than 60 days delinquent and customer shall be responsible for collection costs if account is referred to collection.

County/state					
Field ID					
County/state (if different for each sample)					
Current crop/plant species					
		Lab use only			
Clinic identification (lab use only)					

# **Nematode Soil Samples**

#### Procedures

Soil samples should NOT be collected when the soil is wet or frozen.

# Soybean Cyst Nematode (SCN) Egg Count

**WHEN:** In fall: after harvest and before the soil freezes. In spring: before planting, after the ground has thawed and drained. During growing season: from near stunted and/or yellow soybeans.

**HOW:** Collect a soil core or 1/4 cup of soil (a subsample) from ten to twenty different locations within an area no larger than 10 to 20 acres using a soil sampling probe, hand trowel, or shovel. Define the sampling areas within a field by agronomic, cropping history, or other logical features (see figure) or divide the field to be sampled into evenly sized areas if conditions are similar throughout the field.

Take care not to sample only from "hot spots" or areas of severely damaged plants. Collect soil from the top eight inches, directly in the root zone (if in season and soybeans are being grown).

Combine all of the subsamples in a bucket and mix the soil thoroughly. From the mixed soil sample, place approximately one to two cups of soil into a plastic bag or paper soil test bag.

#### **Nematodes on Corn**

WHEN: For fields with sandy soils (>70% sand content), soil samples should be collected in the spring, before planting, to check for the needle and sting nematodes. For all soils, if stunting, leaf yellowing, and/or mid-day wilting are observed during the growing season, samples should be collected, but only through the R3 corn growth stage (milk stage).

**HOW:** Collect 10 or more twelve-inch-deep soil cores from the root zone of unthrifty plants. Do not mix, break up, or otherwise disturb the soil cores. If before the V6 corn growth stage, also collect 5 to 10 root masses from plants; the tops of the plants can be cut off and discarded.

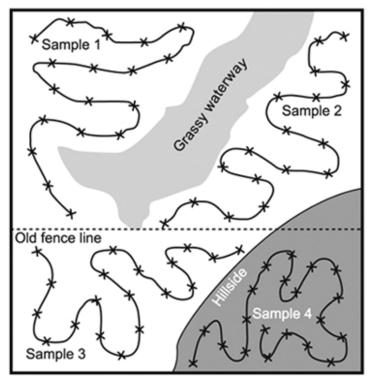
#### Nematodes on Other Plants (i.e. Vegetables, Turf Grass)

**WHEN:** Soil samples can be taken any time of the growing season, but the greatest numbers of nematodes are typically found around the roots of annual plants from mid-summer through fall.

**HOW:** Collect ten to twenty 6-inch-deep soil cores from the root zone of unthrifty plants. Do not mix, break up, or otherwise disturb the soil cores. Also collect some fibrous or feeder roots from the plants showing damage symptoms.

# **Shipping Samples**

- Place each soil sample in a separate, sealed plastic or paper soil sample bag.
- · If roots are being collected, place in a separate plastic bag.
- Use a permanent marker to label each bag with grower's name and either a field name or sample number that corresponds to the information on the front of this form.
- Protect the samples from temperatures above 80 degrees.
- Do not be physically rough with the samples (by dropping or throwing them into a box or cooler, for example).
- Deliver or send the samples for processing as quickly as possible; avoid shipping samples on Thursdays and Fridays so that samples do not sit in delivery trucks over the weekend.



Nematode soil sampling patterns for crop fields with unique features.

# IOWA STATE UNIVERSITY Extension and Outreach

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