

**\* REQUIRED**

# NEMATODE ASSAY — RESEARCH

Lab Use Only

Date Rec'd \_\_\_\_\_

Initial \_\_\_\_\_



<b>*</b>	In State	\$15
	Out of State	\$25
Add Molecular Diagnosis + \$30		

**NCDA&CS Agronomic Division [Nematode Assay Lab](#)**  
 Mailing Address (USPS): 1040 Mail Service Center, Raleigh NC 27699-1040  
 Physical Address (UPS/FedEx/DHS): 4300 Reedy Creek Rd, Raleigh NC 27607  
 Phone: (919) 664-1600

CLIENT				ADVISOR			
Farm ID	Amt Due \$ _____	* Last Name	* First Name	Last Name	First Name		
S )	Amt Paid \$ _____	Business Name		Business Name			
* County (WHERE COLLECTED)	Payment Method: <input type="checkbox"/> Check <input type="checkbox"/> Pay Online <input type="checkbox"/> Escrow Account: (provide Account Name or #) _____	Mailing Address		Mailing Address			
* State		City	State	Zip	City	State	Zip
N o		* Party Responsible for Payment :	* Email		Email		
		Phone	<a href="#">PALS Account #</a>	Phone	<a href="#">PALS Account #</a>		

Box #	Lab Number <i>(lab use only)</i>	* Sample ID	Crop to Be Grown		Crop Last Year	Crop Before Last Year	Field Acres	Nematicide Applied (Last Year)	Soil Type
			* Ist Choice	Alternate					
1									
2									
3									
4									
5									
6									

## TAKING SOIL SAMPLES FOR NEMATODE ASSAY

Reliable nematode assay test results depend on good sampling procedures. Follow these directions for collecting and handling samples.

### WHEN TO SAMPLE

For annual crops (corn, peanut, soybean, tobacco, tomato, etc.), collect samples in late summer or early fall. Samples collected at this time provide more reliable information for predicting nematode development and crop response than those collected in the spring. For established perennial plants (ornamentals, turfgrasses, peach, etc.), samples can be collected throughout the year.

### TAKING SAMPLES

Take samples only when the soil is in good condition: not too wet, not too dry, not frozen.

#### *For annual crops*

1. In each field to be sampled, take the sample from an area with common crop history.
2. If the soil is fairly uniform and the area to be sampled is four acres or less in size, one sample will suffice. If the field is larger than four acres but less than eight, divide the field into two blocks of approximately equal size and take one sample from each block. When fields are larger than eight acres, select four-acre blocks representing at least 50 percent of the field and take a sample from each block.

4. Collect cores from the plowed layer of soil (four inches deep for no-till crops; eight inches deep for conventional crops) with a soil sampling probe (one-inch diameter core). Take at least 20 cores in a systematic pattern for each sample area (see diagram). Collect the cores in a plastic bucket, mix thoroughly, and fill the plastic bag that comes with the nematode assay box. If you want a soil fertility analysis, you can submit the remaining soil along with a Soil Sample Submission form to the Agronomic Division soil testing laboratory.

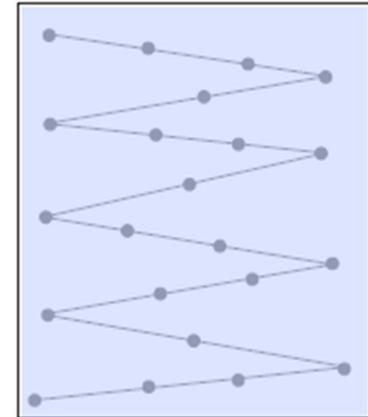
#### *For perennial crops*

1. Send in separate soil samples for each crop or plant species.
2. Take soil from the root zone of declining plants. Do not sample directly around dead plants. Turfgrass samples should come from the edge of damaged areas and to a depth of 4 inches.
3. Soil samples should be collected and mixed as previously described for annual crops.

### HANDLING SAMPLES

1. Place each soil sample for nematode assay in a plastic bag, seal the bag tightly to keep soil moist, and put it in a nematode assay sample box. Write the sample identification number in the space provided on each box. This number identifies your sample, and it must correspond to the number in the SAMPLE ID column on the Nematode Assay Submission form.

2. Protect samples from overheating and freezing. Do not place samples in direct sunlight, the trunk of a car, or a freezer.
3. Record field history on the Nematode Assay Submission form. This information, including the variety grown, is essential for accurate prediction of nematode hazard levels.
4. Send samples to the laboratory immediately.



*Diagram to follow when collecting samples.*

**CAUTION:** Populations of nematodes are not uniformly distributed. A good sample will come from a mixture of multiple soil cores collected randomly from an area with consistent soil type and planting history.