

**SAMPLE TYPE**

(Check one below)

Predictive/Diagnostic NC  \$3 / Out-of-state  \$13  
 Pinewood/Research NC  \$10 / Out-of-state  \$20  
 Mol. Diag. & Std. Assay NC  \$23 / Out-of-state  \$33

# NEMATODE PROBLEM-DIAGNOSIS INFORMATION

NCD&CS Agronomic Division Nematode Assay Section  
 Mailing Address: 1040 Mail Service Center, Raleigh, NC 27699-1040  
 Physical Address (UPS/FedEx): 4300 Reedy Creek Road, Raleigh, NC 27607  
 Phone: (919) 733-2655 Web Address: www.ncagr.gov/agronomi

FOR OFFICE USE ONLY

REPORT # \_\_\_\_\_

DATE REC'D \_\_\_\_\_

INITIAL \_\_\_\_\_



SAMPLE INFORMATION	PAYMENT	GROWER INFORMATION (please print)	CONSULTANT/OTHER RECIPIENT
FARM ID _____	FEE TOTAL \$ _____	LAST NAME _____ FIRST NAME _____	LAST NAME _____ FIRST NAME _____
SAMPLED BY <input type="checkbox"/> Grower <input type="checkbox"/> NCD&CS Agronomist <input type="checkbox"/> Advisor <input type="checkbox"/> Coop. Ext. Agent	AMT PAID \$ _____	BUSINESS NAME _____	BUSINESS NAME _____
SAMPLE DATE _____	METHOD OF PAYMENT <input type="checkbox"/> CASH/CHECK <input type="checkbox"/> INVOICE <input type="radio"/> Grower <input type="radio"/> Advisor/Consultant <input type="radio"/> _____	ADDRESS _____	ADDRESS _____
COUNTY _____ (where collected) STATE _____	<input type="checkbox"/> ESCROW ACCOUNT: (provide Account Name or Number)	CITY _____ STATE _____ ZIP _____	CITY _____ STATE _____ ZIP _____
NUMBER OF SAMPLES _____	"Reports will appear as "Pay Now" until Payment is applied"	EMAIL ADDRESS _____	EMAIL ADDRESS _____
		PHONE _____ PALS # (if known) _____	PHONE _____ PALS # (if known) _____

Serial #	LAB NUMBER (leave blank)	SAMPLE ID (5 characters only)	CURRENT CROP (include variety, if known)	CROP LAST YEAR (include variety, if known)	NEMACIDE APPLIED LAST YEAR	SOIL TYPE	PLANT APPEARANCE (check any that apply)				SYMPTOM DISTRIBUTION	
							Normal	Stunted	Yellow	Dead	Entire	Patches
1												
2												
3												
4												
5												
6												

*Thank you for using agronomic services to manage nutrients and safeguard environmental quality — Steve Troxler, Commissioner of Agriculture*

## 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.), soil 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.
3. If soil type in the area to be sampled is variable (i.e., heavy clay soil in one portion and a sandy soil in the remainder), take a separate sample from each soil type.

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 tube (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, then 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 Information* form to the Agronomic Division's soil testing laboratory.

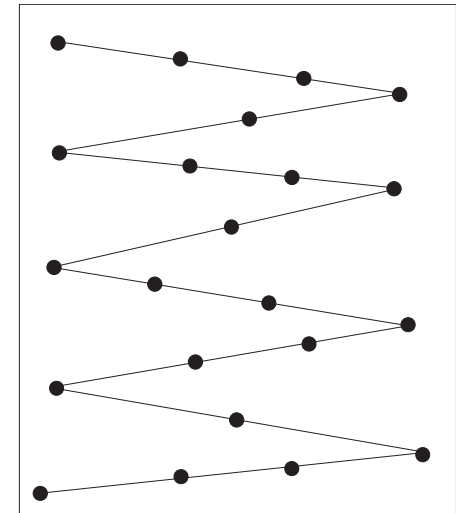
#### For perennial crops

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 Information* 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 Information* 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.