

# NEMATODE ASSAY INFORMATION

**SAMPLE TYPE**  
*[circle one / see instructions]*

Sample from N.C. Resident (\$3)

Out of State/ Pine Wood/ Research/ PCR (\$10)

**NCDA&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 <i>(please print)</i>	CONSULTANT/OTHER RECIPIENT
FARM ID _____	FEE TOTAL _____ AMT PAID _____	LAST NAME _____ FIRST NAME _____	LAST NAME _____ FIRST NAME _____
SAMPLED BY <input type="checkbox"/> Grower <input type="checkbox"/> NCDA&CS Agronomist <input type="checkbox"/> Advisor <input type="checkbox"/> Coop. Ext. Agent	METHOD OF PAYMENT ( ) CASH ( ) CHECK <b>(payable to NCDA&amp;CS)</b> ( ) MONEY ORDER ( ) ESCROW <b>(provide account name below)</b>	ADDRESS _____ -----	ADDRESS _____ -----
SAMPLE DATE _____		CITY _____ STATE _____ ZIP _____	CITY _____ STATE _____ ZIP _____
COUNTY <i>(where collected)</i> _____		PHONE (____) _____ - _____	PHONE (____) _____ - _____
NUMBER OF SAMPLES _____		E-MAIL ADDRESS _____ <input type="checkbox"/> Do Not notify me when report is available.	E-MAIL ADDRESS _____ <input type="checkbox"/> Do Not notify me when report is available.

Serial #	LAB NUMBER (leave blank)	SAMPLE ID (5 characters only)	CROP TO BE GROWN (list an alternative crop, if you desire)				CROP GROWN LAST YEAR		CROP <i>before</i> LAST YEAR	FIELD ACRES	NEMATICIDE APPLIED (last year)	SOIL TYPE
			1st Choice	Variety	Alternate	Variety	Crop	Variety				
1												
2												
3												
4												
5												
6												
7												

*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.

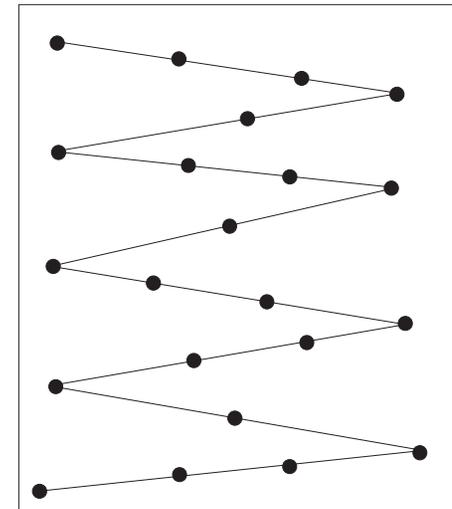
#### *For perennial crops*

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.