

# NEMATODE PROBLEM-DIAGNOSIS INFORMATION

FOR OFFICE USE ONLY
REPORT # _____
DATE REC'D _____
PAID _____



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

Sample from N.C. Resident (\$3)
Research (\$10)    Out of State (\$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](http://www.ncagr.gov/agronomi)**

SAMPLE INFORMATION		GROWER INFORMATION <i>(please print)</i>			CONSULTANT/OTHER RECIPIENT		
FARM ID	SAMPLED BY	LAST NAME	FIRST NAME	PHONE	LAST NAME	FIRST NAME	PHONE
	DATE			( ___ ) ___ - ____			( ___ ) ___ - ____
NO. OF SAMPLES _____		ADDRESS			ADDRESS		
COUNTY <i>(where collected)</i> _____							
PAYMENT ↕ AMOUNT _____		CITY                      STATE                      ZIP			CITY                      STATE                      ZIP		
indicate TYPE <b>(fee information above)</b>							
<input type="checkbox"/> CHECK (payable to NCDA&CS) <input type="checkbox"/> MONEY ORDER <input type="checkbox"/> CASH <input type="checkbox"/> ESCROW ACCOUNT <b>(enter account name)</b>		PLEASE PROVIDE E-MAIL ADDRESS			E-MAIL ADDRESS		

Samples have also been sent to     NCDA&CS Soil Test Lab     NCDA&CS Plant Analysis Lab     NCSU Plant Disease and Insect Clinic

FIELD HISTORY     **Please notify me by e-mail when my report is ready.**     **Do not notify me. I will check for my report online at [www.ncagr.gov/agronomi](http://www.ncagr.gov/agronomi).**

LAB NUMBER <small>(leave blank)</small>	SAMPLE ID	CURRENT CROP <small>(include variety, if known)</small>	DATE PLANTED	CROP LAST YEAR <small>(include variety, if known)</small>	NEMATICIDE APPLIED LAST YEAR	SOIL TYPE	PLANT APPEARANCE <small>(check any that apply)</small>				SYMPTOM DISTRIBUTION	
							Normal	Stunted	Yellow	Dead	Field	Patches
1		1 <sup>st</sup>		1 <sup>st</sup>								
		Comments										
2		1 <sup>st</sup>		1 <sup>st</sup>								
		Comments										
3		1 <sup>st</sup>		1 <sup>st</sup>								
		Comments										
4		1 <sup>st</sup>		1 <sup>st</sup>								
		Comments										
5		1 <sup>st</sup>		1 <sup>st</sup>								
		Comments										
6		1 <sup>st</sup>		1 <sup>st</sup>								
		Comments										

## TAKING FIELD SAMPLES FOR DIAGNOSTIC NEMATODE ASSAY

Use this sample information form to supply detailed information about the suspected nematode problem in your field. Then collect and package the sample according to the instructions given below. For accurate diagnosis, the laboratory needs good background information and a good sample.

### COLLECTING ROOT AND SOIL SAMPLES

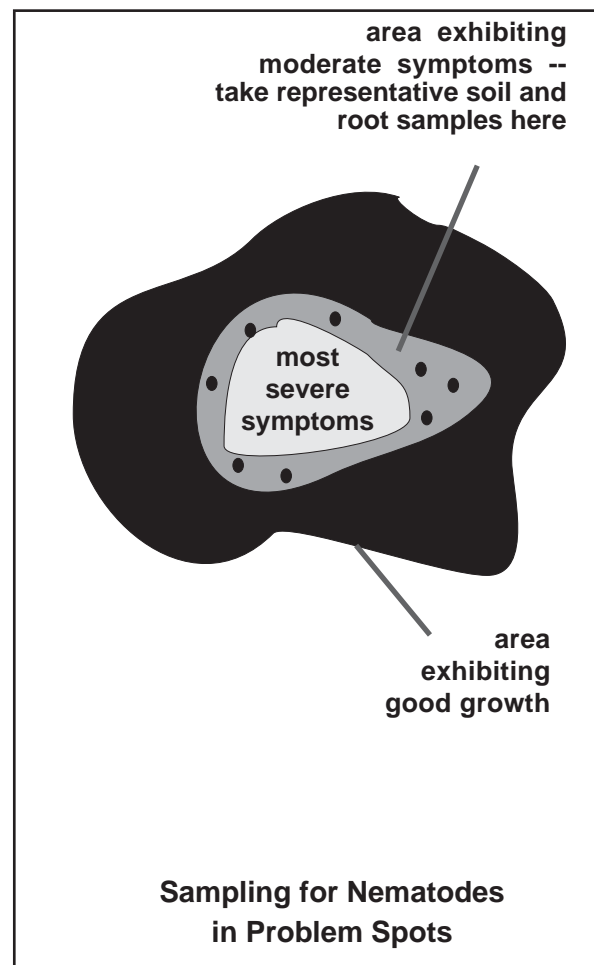
Soil samples for problem diagnosis should be collected from around the margin of the affected area, where plants are exhibiting moderate to severe symptoms. Samples should not be collected from the most severely affected area when these plants are dying or dead. If the field has more than one affected area, collect samples from several such areas.

For each sample, collect at least 20 soil cores from the root zone (0–4 inches deep in no-till areas, 0–8 inches in conventional crops). Fill a one-quart plastic bag approximately three-quarters full with soil that has been thoroughly mixed.

Problem diagnosis requires a plant root sample in addition to the soil sample. Collect root samples from plants exhibiting moderate to severe symptoms but *not* from dead plants. In collecting the roots, remove the plant carefully from the soil with a shovel or spade; do not pull it from the ground. After carefully shaking off the adhering soil, collect some of the smallest fibrous roots.

Collect roots from at least five plants in the same area of the field where soil samples were collected. Place a small handful of roots in the plastic bag with the corresponding soil sample, covering the roots with a small amount of soil. Take care to prevent root samples from drying out; be sure to seal the plastic bag tightly.

After collecting root and soil samples for nematode assay, put excess soil in a standard soil sample box and send it along with the *Diagnostic Soil Sample Information* form to the Agronomic Division's soil testing laboratory for fertility analysis.



### HANDLING SAMPLES

1. Place each sample in a plastic bag, *seal the bag tightly* to keep soil moist, and put it in the Division's standard nematode assay sample box. Write the appropriate field number in the space provided on each box. This number identifies your sample in the laboratory, and it must correspond to the number in the SAMPLE ID column on the *Nematode-Problem Diagnosis Information* form. Send samples to the laboratory *promptly*.
2. *Keep samples out of the direct sunlight to avoid overheating*. Samples may also be damaged by heat if they are kept in the trunk of a car.
3. Record *all* information requested regarding field history, crop variety, symptoms, and pattern of affected areas on the information form. This information is absolutely necessary for accurate diagnosis of the problem. If you have also sent samples from the same field to the soil testing laboratory, plant tissue analysis laboratory, or N.C. State University's Plant Disease and Insect Clinic for diagnosis, please make a note of this on the information form. Then we can compare the results of all tests and make a more accurate diagnosis of the problem.

**For more information,**  
visit the Agronomic Division Web site  
[www.ncagr.gov/agronomi](http://www.ncagr.gov/agronomi)  
or call us at  
919-733-2655.