

DIAGNOSTIC SERVICES

578 Wilson Rd.
East Lansing, MI 48824-6469
Office:517-355-4536 FAX:517-432-0899
www.pestid.msu.edu



Case No.: _____
Date Received: _____
Amount Paid: _____
Check/Receipt No.: _____
MSU Account #: _____
Diagnostic Fee: _____

Name: _____
Business Name: _____
Address: _____
City/State/Zip: _____
Work: _____ FAX: _____ Home: _____
Email: _____ Cell: _____
Sample Reference: _____

Plant Disease Diagnosis Fees

Plant health analysis: \$20
Bacterial ID (BIOLOG™): \$25

Insect Identification Fees

Common ID: N/C
Keyout ID: \$20

Plant Identification Fee \$10

Nematode Sample Fees (see below)

Out of State Fees Triple / Fees subject to change

SEND RESULTS TO: CLIENT COUNTY Email: _____
Extension Educator: _____ County: _____ Fax: _____

SAMPLE (ex. Tomato, Insect, Pine, etc.): _____

GENERAL INFORMATION (indicate all that apply)

PLANT PARTS AFFECTED	TYPE OF PLANTING	PROBLEM DISTRIBUTION	CHEMICAL HISTORY
Entire Plant Stems	Field Garden	Upland Near Drive/Road	HERBICIDE: _____ _____
Leaves/Needles Trunk	Nursery House Plant	Slopes Edge of Field	
Flowers Roots	Greenhouse Pasture	Low Areas Near Residence	
Twigs/ Limbs Fruit	Orchard Natural Area		
	Turf/Lawn City/Recreation		INSECTICIDE: _____ _____

NATURE OF THE INJURY	PREVALENCE	OTHER BACKGROUND	FUNGICIDE: _____ _____
Poor or Abnormal Growth	Entire Planting	How long at site?	CROP HISTORY
Spots Yellowing	Single Localized Area	Height of plant?	
Wilting Boring	Several Localized Areas	How many plants affected?	
Plant Death Cupping	Few Scattered Plants	How often watered?	Last year: _____
Chewing Dieback		How fertilized?	This year: _____
Galls/Cankers Rot		Sunny or Shaded?	Next year: _____
Leaf/Needle Drop			

SOIL TYPE	DRAINAGE	
Sandy Clay	Good Fair Poor	
Muck Silt Loam		

INSECT / ARTHROPOD ID SAMPLES ONLY (indicate all that apply)
Where was the insect found? _____ What was the insect doing there? _____
How many insects are there? One Few Several Hundreds Do you have small children living with you? _____

PLANT / WEED ID SAMPLES ONLY (indicate all that apply)				
PLANT TYPE	PLANT SIZE	GROWTH HABIT	FLOWERS	PLANT AGE
Tree Groundcover	Height: _____	Upright/Erect	Color: _____	Annual: _____
Shrub Herbaceous	Width: _____	Prostrate/Low-Growing	Size: _____	Perennial: _____
Vine Aquatic		Climbing	List any unique features: _____	

NEMATODE SAMPLES ONLY (indicate type of analysis requested)
Soil and root analysis (\$25/sample) Foliar nematode analysis (\$25/sample) No. of samples: _____
Total nematode community structure analysis (\$50/sample) Sample/Field ID: _____
Full SCN Type Test (\$75/sample) Mini SCN Type Test (\$40/sample)
Verticillium dahliae analysis (potato soil / stem only) Dilution (\$20/sample) Wet-sieving (\$25/sample) Both (\$40/sample)

Collecting and Submitting Wheat Samples

The Michigan Wheat Program is providing funds for the diagnostic evaluation of wheat samples. Funds provided will cover general health analysis, where appropriate additional testing may include culturing for fungal and bacterial pathogens, virus testing, nematode analysis, nutrient testing, and detection and identification of insect pests. Below are instructions for sampling and submitting wheat samples in order to best take advantage of this opportunity.



Sample Collection

- Select plants that are symptomatic but not dead. Try to pick from the edge of the symptomatic areas in the field. Submitting plants that show a range or progression of symptoms is helpful.
- Send entire plants, including roots. Plants should be carefully dug, do not pull them out of the ground.
- Excess soil can be gently shaken off the root zone of the plants and put in a separate bag. This is a good way to collect soil for nematode analysis when a nematode problem is suspected.
- Send a minimum of 5-10 plants to ensure there is enough tissue for analysis.
- Wrap the plants in dry newspaper before putting them in a plastic bag; do not add moisture to the samples.
- Include samples of soil from both the “good” and “bad” areas of the field. Soil samples should contain approximately 4-5 cups of soil. Soil should be put in sealable plastic bags; please do not use paper bags.
- Keep the collected materials cool prior to shipping.

Insect Samples

- Kill and ship specimens in a small, leak proof container filled with white vinegar.
- Whenever possible, soft-bodied larvae should be lightly boiled for a few minutes before placing them in vinegar. This prevents the specimens from shriveling and becoming discolored, however this only works if the larvae are alive when placed in the boiling water.

Images

- If possible take pictures of the distribution of the symptoms in the field. These are very helpful to show stunting, poor stand issues, differences in color, etc.
- Images can be emailed to pestid@msu.edu or printed and included with the physical sample.

Paperwork

- Complete a copy of the MSU Diagnostic Submittal form. Copies are available online at: <http://tinyurl.com/czcgvy3> or www.pestid.msu.edu.
- Please be sure to include your email address or fax number - this will be used to communicate diagnostic results and related information.

Shipping

- Package the sample in a box; do not send samples in an envelope.
- Overnight or priority delivery is recommended. Do not ship samples on a Friday. Samples can also be delivered in person to the diagnostic lab. Ship samples to: Diagnostic Services, Michigan State University, 578 Wilson Road, East Lansing, MI 48824-6469.

Questions

- Contact the lab at 517-355-4536 or pestid@msu.edu.
- Martin Nagelkirk, Senior Wheat Extension Educator, 810-404-3400 or nagelkir@msu.edu
- Dennis Pennington, Wheat Systems Specialist, 269-838-8265 or pennin34@msu.edu