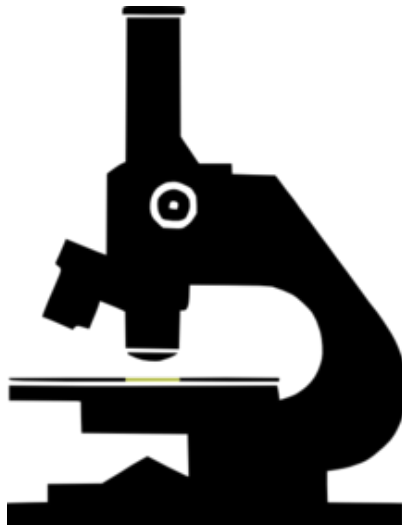




College of Agriculture, Food and Environment
Cooperative Extension Service

University of Kentucky Plant Disease Diagnostic Laboratory

INFORMATION FOR COUNTY EXTENSION OFFICES



Revised May 2018

Where to Send What

Guide to Agricultural Diagnostic Services

To prevent unnecessary delays when specimens must be re-routed, please be sure to use the appropriate form and mail samples or inquires directly to the correct Department or Laboratory.

Type of problem/Test		Where to send it
Identifications	Plant disease identification on all crops Mushroom identification Identification of homeowner flowers, trees, shrubs & other ornamentals	UK Plant Disease Diagnostic Laboratory (*) University of Kentucky Agricultural Science Center - North Lexington KY 40546-0091 or UK Research & Education Center PO Box 469, 1205 Hopkinsville Street Princeton, KY 42445-0469
	Insect identification Insect injury suspected Insect management information	UK Department of Entomology Extension Entomologist S-225 Agricultural Science Center - North Lexington, KY 40546-0091
	Weed identification Weed management information Herbicide injury suspected	UK Department of Plant & Soil Sciences Extension Weed Specialist 117 Plant Science Building 1405 Veterans Drive Lexington, KY 40546-0312 or UK Research & Education Center PO Box 469, 1205 Hopkinsville Street Princeton, KY 42445-0469
	Woody plant & wildflower identification	UK Herbarium Forestry Department, Lexington KY TP Cooper Building Lexington KY 40546-0073
Soil Testing	Soil for SCN analysis (\$) (soybean fields and nursery crops)	SCN Diagnostics Plant & Nematode Screening Services
	Soil test for nutrients (\$)	UK Division of Regulatory Services (*) 103 Regulatory Services Building Lexington KY 40546-0275 or UK Research & Education Center PO Box 469, 1205 Hopkinsville Street Princeton, KY 42445-0469
	Soil test for triazines (herbicide)	UK Division of Regulatory Services
	Endophyte testing (\$)	103 Regulatory Services Building Lexington KY 40546-0275
	Seed germination test (\$)	Lexington KY 40546-0275

Notes:

(*) All plant/soil samples should be sent to the laboratory that has been designated by their county

(\$) A fee will be charged for these services

Where to Send What

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Type of problem/Test		Where to send it
Plant Tissue Testing	Plant tissue analysis for nutrients (\$)	Private labs only (service not available at UK) Waters Agricultural Lab (Owensboro KY) Waypoint Analytical (Memphis TN) Spectrum Analytic (Washington Court House OH)
	Mycotoxin test (\$) (e.g., aflatoxin, fumonisin, zearalanone, vomitoxin)	UK Veterinary Diagnostic Lab Laboratory Services 1490 Bull Lea Rd. Lexington, KY 40511
	Test for nitrate levels in corn (\$) Test for prussic acid levels in sorghum (\$)	Murray State University Breathitt Veterinary Center PO Box 2000, 715 North Drive Hopkinsville KY 42241-2000
	Hay and forage quality testing (\$)	Kentucky Department of Agriculture (KDA) Forage Testing Program
	Household molds on wood	KY Energy and Environment Cabinet Kentucky Department of Air Quality

Notes:

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(\$) A fee will be charged for these services

Extension Plant Pathology – Contact Information

Personnel	Office phone	Area of specialty/Title
Extension Specialists		
Carl Bradley	270-365-7541 ext 215	Soybeans, small grains, canola
Nicole Gauthier	859-218-0720	Ornamentals (landscape, nursery, greenhouse), fruit crops, hemp
Emily Pfeufer	859-218-0721	Tobacco, vegetables (field & greenhouse production systems)
Paul Vincelli		Turfgrass, forest trees
Kiersten Wise	270-365-7541 ext 203	Corn, forages, sorghum
Plant Disease Diagnostic Laboratory		
Julie Beale	859-257-8949	Diagnostician, Lexington
Brenda Kennedy	270-365-7541 ext. 228	Diagnostician, Princeton
Sara Long	859-257-8949	Diagnostic Assistant, Lexington

County:
County Extension Agent:
County sample number: (county use—optional)

Lab use only:	Lab file no.:
	Date received:
	Diagnostician:
	Date completed:



Plant Disease Identification Form

Send plant sample with completed form to:

Plant Disease Diagnostic Laboratory
Ag Science Building North
Lexington, KY 40546-0091

OR Plant Disease Diagnostic Laboratory
P.O. Box 469
Princeton, KY 42445

Grower: _____

Plant name: _____

Address: _____

Variety: _____

City: _____ Zip: _____

Date collected: _____

Email: _____

Phone: _____

Commercial sample: ☐ Yes ☐ No

Parts diseased:

- | | | |
|---|---|----------------------------------|
| ☐ buds | ☐ fruit | ☐ flowers |
| ☐ leaves/needles | ☐ roots | ☐ stems |
| ☐ trunk | ☐ twigs/branches | |

Symptoms:

- | | | |
|---|---|------------------------------------|
| ☐ burn or scorch | ☐ galls or swellings | ☐ stem rot |
| ☐ canker | ☐ mottling | ☐ stunting |
| ☐ dieback | ☐ root rot | ☐ wilt |
| ☐ distortion | ☐ shot hole | ☐ yellowing |
| ☐ fruit decay | ☐ spot | |
| ☐ other: _____ | | |

Location of plant:

- | | | |
|-------------------------------------|------------------------------------|---|
| ☐ field | ☐ indoors | ☐ orchard |
| ☐ garden | ☐ landscape | ☐ outdoor floatbed |
| ☐ greenhouse | ☐ nursery | ☐ plant bed |

Pattern of diseased plants:

- | | | |
|---|---|--|
| ☐ single plant | ☐ group(s) of plants | ☐ entire planting |
| ☐ scattered plants | ☐ large area(s) | |

Is pattern associated with:

- | | | |
|---|---|---------------------------------|
| ☐ cultivation patterns | ☐ high, dry area | ☐ shade |
| ☐ field borders | ☐ low, wet area | ☐ slopes |

Percent of planting affected: _____

Date problem first noticed: _____

Planting date or age of plant: _____

Soil type: _____

Soil drainage: _____

Previous crop(s): _____

Tillage practices: _____

Recent weather and irrigation practices: _____

Unusual disturbances: ☐ lightning ☐ hail ☐ construction
☐ pruning ☐ injuries ☐ soil compaction ☐ flooding

Chemicals applied to this crop: (include name, rate and date of application)

Fertilizer: _____

Herbicides: _____

Fungicides: _____

Insecticides: _____

Additional information:

Please retain a copy of this form for your records.

An electronic diagnosis report will be sent to the local County Extension Office and to the client (if email address is provided).

The College of Agriculture, Food and Environment is an Equal Opportunity Organization.

Grower's Name _____

Lab file # _____

TREE AND SHRUB DISEASE IDENTIFICATION FORM

Information to Supplement the Plant Disease Identification Form

Many tree and shrub problems are best diagnosed only after careful inspection of the whole plant in its growing site. However, because the plant disease diagnostician cannot visit the growing site, the grower's observations and information can be of tremendous help in formulating a diagnosis. The more information the grower provides, the better the diagnostician will be able to narrow down the cause(s) of the problem.

Please complete as much of the following as possible in addition to the Plant Disease Identification Form
(Include relevant photos, if available)

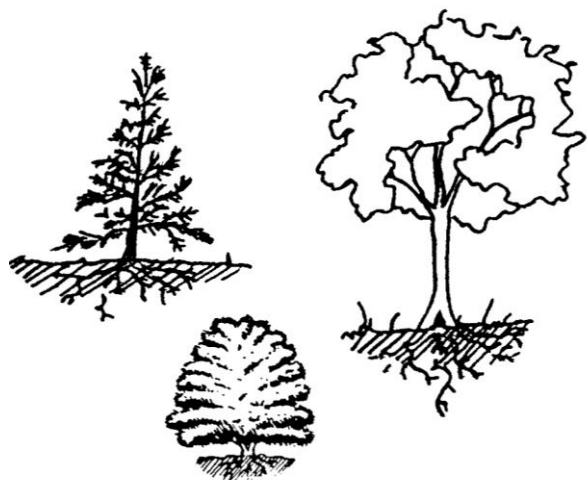
General Information

Approximate height (feet) _____ Trunk diameter (inches) _____ Trunk diameter at planting _____

Time in present site _____

Symptoms

1) What is the distribution of affected branches? Indicate location of damage on the diagram below.



☐ Scattered branches all over tree/shrub

☐ One portion of tree/shrub only

☐ Several portions of tree/shrub

☐ Entire plant

☐ Other _____

2) What is the progression of symptoms throughout the tree/shrub (e.g. from lower branches to top; from branch tips toward trunk; from one side to another, etc.)?

3) What is the progression of symptoms on leaves/needles? (e.g. leaf margins/needle tips inward; between leaf veins)?

4) Has problem occurred ☐ slowly or ☐ rather suddenly? How rapidly? _____

5) Are cankers, sunken areas, or injuries (mower, string trimmer, or other) present on main limbs or trunk? ☐ Yes ☐ No

Describe size and location _____

How old are cankers or injuries indicated above? _____ Is there any evidence of closure (callus)? ☐ Yes ☐ No

6) Does tree have a girdling root up near trunk, at soil level, or below soil level? ☐ Yes ☐ No

[Look for a large root forming a "noose" around trunk within 12 inches of soil surface. Mature trees (15 years or more) that are girdled lack a normal flare of the buttress roots and trunk will appear to go straight into the ground (like a telephone pole)].

(continued on reverse side)

- 7) Are there other plants of this type also showing the same symptoms? ☐ Yes ☐ No Are there healthy plants of the same type nearby? ☐ Yes ☐ No Are there other plants not of this type showing the same symptoms? ☐ Yes ☐ No
- 8) Are mushrooms, bracket fungi, or conks apparent on trunk or at base of tree/shrub? ☐ Yes ☐ No If so, describe:
-

Growing Site

- 1) Is tree/shrub surrounded by pavement or buildings? ☐ Yes ☐ No Is soil around tree/shrub compacted? ☐ Yes ☐ No
- 2) Is tree/shrub in ☐ full sun ☐ partial shade ☐ full shade
- 3) Have roots been disturbed in the past 5 years? ☐ Yes ☐ No Has the grade (soil level) around tree/shrub changed in the past 5 years? ☐ Yes ☐ No If yes, explain ☐ soil added ☐ soil removed Reason _____
- 4) Is tree/shrub located in a low wet area or at the base of a downspout? ☐ Yes ☐ No Does water stand or puddle on soil after rain? ☐ Yes ☐ No Is tree/shrub in a site where topsoil was removed (e.g. a new home development)? ☐ Yes ☐ No

Cultural Practices

- 1) Is there mulch around tree/shrub base? ☐ Yes ☐ No Is there a tree guard around trunk? ☐ Yes ☐ No
- 2) Has tree ever been topped ☐ Yes ☐ No When? _____
- 3) Has tree/shrub been bumped by lawn mower, string trimmer, or other equipment? ☐ Yes ☐ No
- 4) Have herbicides been used to control weeds ☐ in lawn ☐ around tree ☐ other _____
- 5) Is tree/shrub watered thoroughly during dry periods (equivalent of at least 1 inch of rain per week)? ☐ Yes ☐ No
- 6) If tree/shrub was transplanted in last 2 to 3 years, describe method _____

Was plant ☐ bare root ☐ container-grown ☐ ball & burlap Container diameter _____ or root ball size _____

If ball & burlap: type of root ball covering ☐ degradable burlap ☐ plastic ☐ other _____

Before planting, was root ball covering ☐ removed ☐ loosened ☐ slit

- 7) What were the results of last soil test taken for this site? pH _____ P _____ K _____

Ca-Mg _____ When was the last time tree/shrub or surrounding lawn was fertilized? _____

[Be sure to indicate type of fertilizer on Plant Disease Identification form]

How was fertilizer applied ☐ cores dug ☐ broadcast ☐ injection ☐ other _____

Applied ☐ at drip line ☐ near trunk ☐ other _____

Additional Information