The VT Plant Disease Clinic
Annual Report
2020

COLLEGE OF AGRICULTURE AND LIFE SCIENCES
SCHOOL OF PLANT AND ENVIRONMENTAL SCIENCES
VIRGINIA TECH™

The Plant Disease Clinic
2020 Annual Report

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Acknowledgements

The Plant Disease Clinic depends on an industrious staff of both full-time and part-time employees to prepare culture media, isolate pathogens from plant tissue, measure soil pH, extract nematodes from plant tissue, maintain records, answer the telephone, keep track of samples, and send out reports. In 2020, Plant Clinic staff rose to the challenge of working remotely and diagnosing many problems from digital images due to limitations imposed by COVID-19. All diagnoses in the Plant Disease Clinic in Blacksburg were performed by Mary Ann Hansen and Elizabeth Bush, with valuable assistance from Kathryn Liu and Abigail Bushhouse.

Plant Clinic staff consult with many faculty and staff in various disciplines in order to make complete, accurate diagnoses and recommendations. We would like to thank the following people for their helpful assistance during the past year:

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We would also like to thank Mr. Todd Powell of TSP Software for designing and continuing to support the Plant Clinic database ("PClinic"). The database has given us the ability to keep complete records of Plant Clinic samples and to mail reports to Extension Offices electronically, and in 2020, Todd developed functionality to allow Extension agents to upload images of plant problems directly to the database. Information on purchasing PClinic can be obtained from the Clinic at <clinic@vt.edu>.

Abigail Bushhouse painstakingly compiled the annual report. The annual report can be viewed on-line at <https://www.ppws.vt.edu/extension/plant-disease-clinic/reports.html>.

Introduction

The annual report for the Plant Disease Clinic located on the Virginia Tech campus in Blacksburg is presented in the following pages. Plant specimens that were submitted to and diagnosed at the Agricultural Research and Extension Centers throughout the Commonwealth are not included in this report. Note that the number of diagnoses performed was higher than the number of samples received because some samples are diagnosed with more than one problem.

For pathogens that could be identified to species or for which only one species is known to occur on the host plant in question, the species name is listed. For those diseases in which one of several species could have been involved, the epithet is listed as "sp." The Plant Disease Clinic does not routinely identify pathogens to species because species identification can sometimes be a very time-consuming process and often has little bearing on control recommendations. Most pathogens were assumed to be the cause of the disease if they were cultured in high numbers from the plant tissue or identified by molecular techniques, if they were reported in the literature to be pathogens of the particular host plant, and if they were reported to cause the observed symptoms.

Viral problems were, for the most part, either diagnosed by an antibody test involving the use of immunostrips or molecular techniques or they were sent to a private lab for testing at a cost to the grower. In some cases, identification of the specific virus was not desired by the client. In those cases, if symptoms indicated a virus infection, the diagnosis is listed simply as “virus”.

Soil samples for nematode assays were forwarded to the Nematode Assay Laboratory. Nematode diseases were diagnosed by extracting nematodes from soil or plant tissue. Samples must include at least 1 pint of soil for nematode assays. Nematode assays were routinely performed on samples of plant species known to be affected by nematodes, e.g. boxwood. Nematode populations in the sample were compared to damage threshold levels to make a control recommendation. Threshold levels have been developed in research trials for many, but not all, crops grown in Virginia.

The phrases "Cause of Problem Undetermined" or “No Pathogens Found” are used for plant samples from which no pathogen could be isolated and for which no obvious environmental or cultural condition could be associated with the problem, despite receipt of an adequate plant sample. Trees have more samples in this category and in the category "Insufficient Sample" than any other type of plant. Tree problems are more difficult to diagnose in a clinic setting than problems of annual plants for several reasons. First, tree problems often develop over the course of several years and current symptoms may be related to stressful conditions that occurred in previous years. Also, it is difficult for growers to supply an appropriate plant specimen for diagnosis since the causes of many tree diseases are in the trunk or roots.

Some insect and mite problems are also listed in this report. Arthropod damage is often mistaken for disease, and samples with insect or mite damage are sometimes submitted to the Plant Disease Clinic rather than the Insect Identification Lab. We make a preliminary diagnosis of insect damage on these samples and refer them to Mr. Eric Day in the Insect Identification Lab. The final diagnosis on all samples with arthropod damage

is performed by Mr. Day. Samples with known arthropod problems should be sent directly to the Insect ID Lab with the appropriate form.

During 2020, we also diagnosed or gave a preliminary diagnosis on plant problems sent to us as digital images. We discovered that we were able to diagnose many common problems from images, although most root diseases, among other things, still required a physical sample for accurate diagnosis. However, even for samples that must be submitted as a physical sample, we have found that images of the plants in the landscape or field are very helpful to the diagnosis, so we will continue to encourage submission of digital images, along with physical plant samples going forward.

Reports are mailed electronically to the local Extension office from which the sample originated. Upon request, we will simultaneously send electronic reports to one or more individual Extension personnel. Since implementing electronic mailing, we have discontinued faxing or mailing hard copies of reports. Relevant fact sheets for some diseases are available on the Web at http://pubs.ext.vt.edu/category/plant-diseases.html.

DISEASE HIGHLIGHTS 2020

In keeping with 2020 world events, the Plant Disease Clinic's activities took a very different turn in 2020. Because we were unable to have our student workers in the lab due to COVID, we were unable to process the normal number of plant samples that we receive during the growing season. We made a major shift toward encouraging submission of digital images of plant problems rather than physical samples. This required software that would allow us to manage the image submissions in an efficient manner. We initially used Trello software to manage digital submissions, but we also worked with our database developer, Todd Powell, to develop software that would allow direct uploading of digital samples by Extension agents to our PClinic database. We discovered that we could diagnose a significant number of problems from digital images alone, and images also served to give important context to physical samples, so digital diagnosis will remain a service that we offer going forward.

As a result of our lab's shift to digital diagnoses and the temporary closure of many of the county Extension offices due to COVID-19, total sample numbers received by the Plant Disease Clinic were down significantly in 2020. All samples received after April 2020 were submitted as digital images. Any commercial samples that could not be diagnosed from the images were tagged for follow-up with a physical sample. We received a total of 759 samples (both digital and physical) in 2020. This was about half the total for 2019. Meanwhile, Virginia had one of its wettest and hottest years on record in 2020, with over 61 inches of annual rainfall and an average annual temperature of 57.5°F. This meant that although the Clinic received a relatively low number of plant samples, diseases were still rampant in Virginia in 2020.

Some Highlights from 2020:

Wet conditions favored **foliar nematode** problems on several different herbaceous plants, including:

- Native Geranium *(Geranium maculatum)*
- Lenten Rose *(Helleborus* sp.)
- Lily-of-the-Valley *(Convallaria majalis)*
- Solomon's Seal *(Polygonatum* sp.)

The fungus ***Rhizoctonia*** *solani* caused **root rot** on a variety of herbaceous plants, including:

- Hemp *(Cannabis sativa* ssp. *Sativa)*
- Sunflower *(Helianthus* sp.)
- Lavender *(Lavandula* sp.)
- Basil (*Ocimum* sp.)
- Florist's Geranium *(Pelargonium X hortorum)*
- Pincushion Flower *(Scabiosa* sp.)

Rhizoctonia solani also caused **web blight** on several woody plants. The fungus causes browning of the lower canopy. The disease gets its name from the fact that the fungus webs the lower foliage together.

- Falsecypress (*Chamaecyparis* sp.)
- Holly (*Ilex* sp.)

Pierce's Disease, a disease caused by the bacterium *Xylella fastidiosa*, which is transmitted by leafhoppers and some other insects, was severe in several vineyards in 2020. A decade ago this disease was uncommon in Virginia, but climate change has allowed the insect vector to increase its northward movement and we are diagnosing this disease more frequently in the Plant Disease Clinic.

Oak leaf blister, a fungal disease that is prevalent in wet springs, was very common on oaks in 2020. A **late freeze** around May 8-9 caused damage to many woody shrubs and an earlier freeze in April caused damage to many fruit trees. **Boxwood blight** continues to be a problem in susceptible boxwood in many parts of Virginia. However, new cultivars with resistance to the disease, including the NewGen^{R} cultivars, which also have resistance to boxwood leafminer, have recently become available. Unfortunately, the box tree moth, a new and severe insect pest of boxwood, was detected in the United States for the first time in 2020 and these newer varieties do not have resistance to this pest. Attempts to eradicate the box tree moth, which was inadvertently shipped on plant material to several locations in the US, are underway.

Some of the plant problems diagnosed in 2020 are pictured below. Most of the images shown were submitted through our PClinic database upload system. Plant problems for which images are available are listed with a numbered figure. Sometimes samples sent to the Plant Disease Clinic have insect problems that are mistaken for plant disease, so one insect problem is also included in the list below. Such samples are forwarded to the Insect Identification Lab for insect identification and recommendations.

FIELD CROPS

- Fig. 1. Hemp Leaf Spot (*Drechslera gigantea*)
- Fig. 2. Southern Blight on Hemp (*Sclerotium rolfsii*)

HERBACEOUS ORNAMENTALS

- Fig. 3. Foliar Nematodes on Lily-of-the-Valley (*Aphelenchoides* sp.)
- Fig. 4a-b. Rust on Mayapple (*Puccinia podophylii*)
- Fig. 5. Physiological Bract Distortion on Poinsettia (abiotic)
- Fig. 6. White Mold on Rudbeckia (*Sclerotinia sclerotiorum*)
- Fig. 7. Rhizoctonia Root and Stem Rot on Sunflower (*Rhizoctonia solani*)

SMALL FRUIT

- Fig. 8. Blueberry Leaf and Fruit Spot (*Exobasidium maculosum*)
- Fig. 9. Pierce's Disease of Grape (*Xylella fastidiosa*)
- Fig. 10. Powdery Mildew on Strawberry (*Sphaerotheca macularis*) (Note that growth of the powdery mildew fungus is not obvious on the strawberry leaves. Symptoms resemble a fungal leaf spot disease.)

TREE FRUIT

- Fig. 11. Marssonina Blotch on Apple (*Marssonina coronaria*)
- Fig. 12. Thread Blight on Pear (*Ceratobasidium ochroleucum*)

ORNAMENTAL TREES

VEGETABLES AND HERBS

WOODY SHRUBS

Fig. 1. Hemp Leaf Spot

Fig. 2. Southern Blight, showing ropy, white mycelium at base of hemp stem.

Fig. 3. Foliar Nematodes on lily-of-the-valley. Longitudinal, interveinal lesions have dropped out of the leaf.

Fig. 4a. Mayapple Rust pustules on lower leaf surface.

Fig. 4b. Yellow lesions due to rust on upper leaf surface.

Fig. 5. Physiological Bract Distortion on poinsettia, caused by environmental factors.

Fig. 6. White Mold on Rudbeckia, showing white mycelium on basal portions of the stem.

Fig. 7. Rhizoctonia Root and Stem Rot on sunflower.

Fig. 8. Blueberry Leaf and Fruit Spot.

Fig. 9. Pierce's Disease of grape, showing symptoms of marginal leaf scorch.

Fig. 10. Powdery Mildew on strawberry, showing irregular, reddish brown leaf discoloration. Powdery mildew mycelium is not visible on the leaf surface.

Fig. 11. Marssonina Leaf Blotch on apple.

Fig. 12. Thread Blight on ornamental pear, showing ropy, brown mycelium stringing the dead leaves together. This fungus also forms sclerotia, which appear as brown bumps on the bark surface (not visible here).

Fig. 13. Phytophthora Root Rot on falsecypress.

Fig. 14. Web Blight on falsecypress causes needles in the lower canopy to turn brown. The fungal mycelium strings the leaves together in a ”web”.

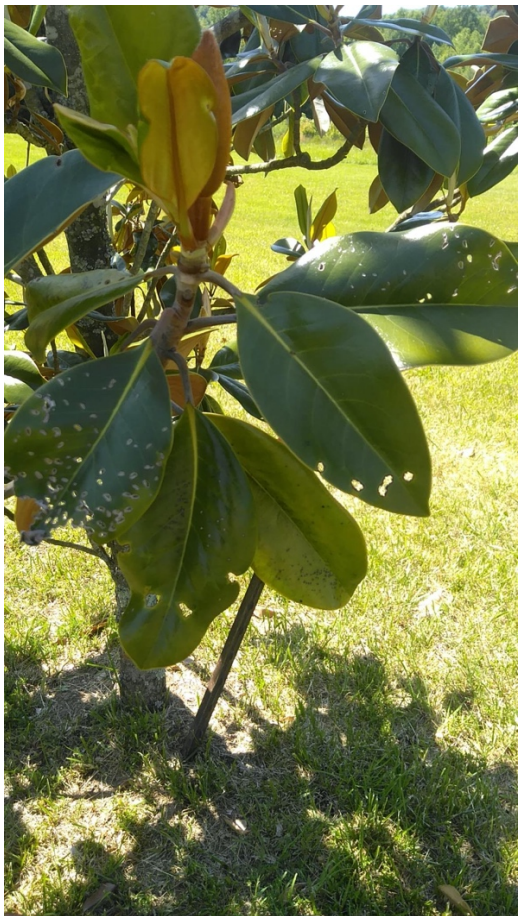


Fig. 15. Yellow Poplar Weevils leave small, rice-shaped holes in leaves of magnolia and tulip poplar. The holes may be mistaken for leaf spot diseases that cause shothole.

Fig. 16. Oak Leaf Blister can be severe in wet springs.

Fig. 17. Fruiting bodies of the Pear Trellis Rust fungus form on the lower leaf surface. Large, bright orange spots appear on the upper leaf surface.

Fig. 18. Anthracnose on yellowwood. Anthracnose fungi tend to infect along the veins.

Fig. 19. Severe galling caused by Root Knot Nematodes on bean. Galls distort the roots and disrupt water flow, causing plants to wilt.

Fig. 20. Fluffy, gray mycelium and spores of the fungus that causes Botrytis Blight on cowpea.

Fig. 21a. Discoloration and distortion caused by Stem and Bulb Nematodes on garlic.

Fig. 21b. Discoloration and distortion caused by Stem and Bulb Nematodes on garlic.

Fig. 22. Ascochyta Blight on pea.

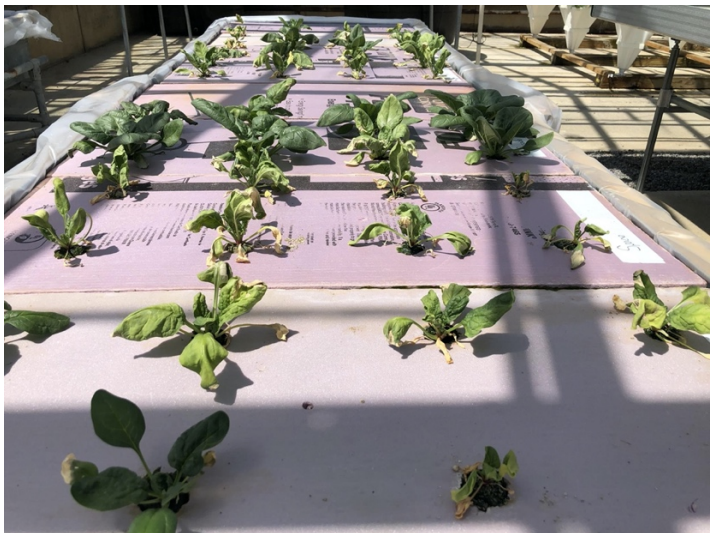


Fig. 23. Fusarium Wilt on spinach grown in a greenhouse.

Fig. 24. “Rabbit Tracks” on crape myrtle, an abiotic problem possibly related to nutrition.

Fig. 25. Web Blight on holly.

Fig. 26. Ramularia Leaf Spot on winterberry.

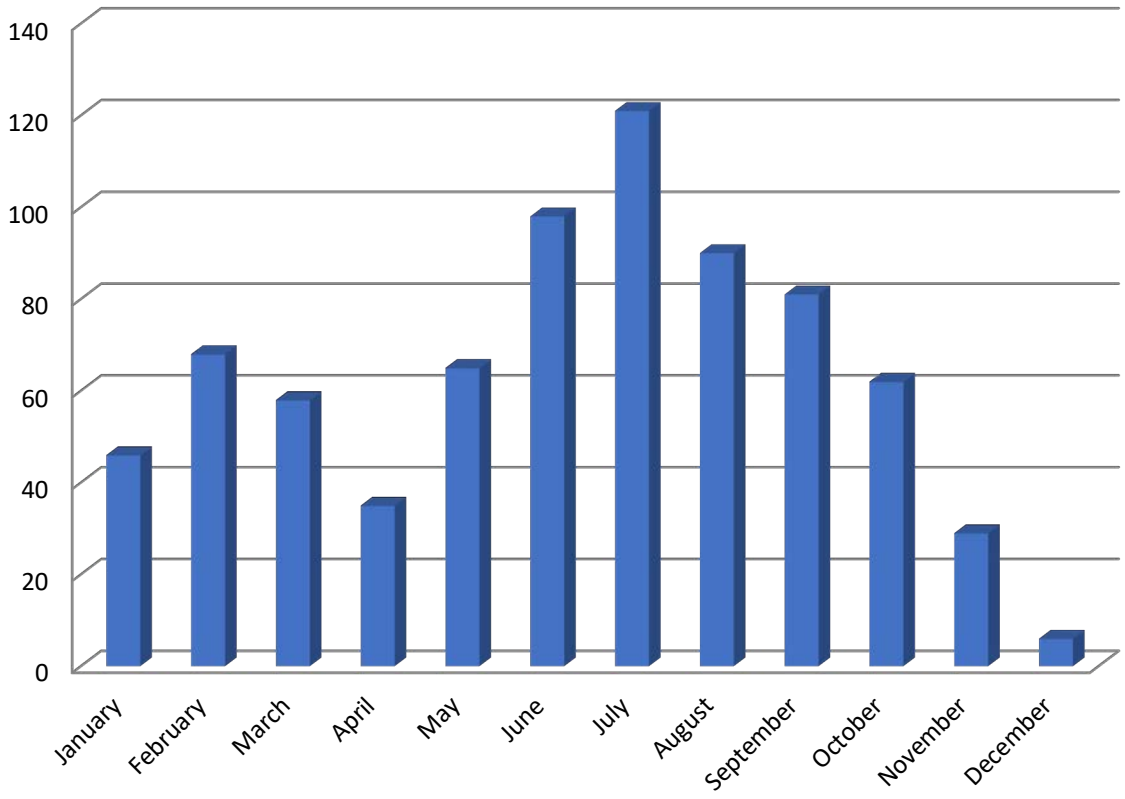
Fig. 27. Phytophthora Stem Blight on hydrangea.

Monthly Submission Summary

Number of samples received by month

Month	# Samples
January	46
February	68
March	58
April	35
May	65
June	98
July	121
August	90
September	81
October	62
November	29
December	6
Total	**759**

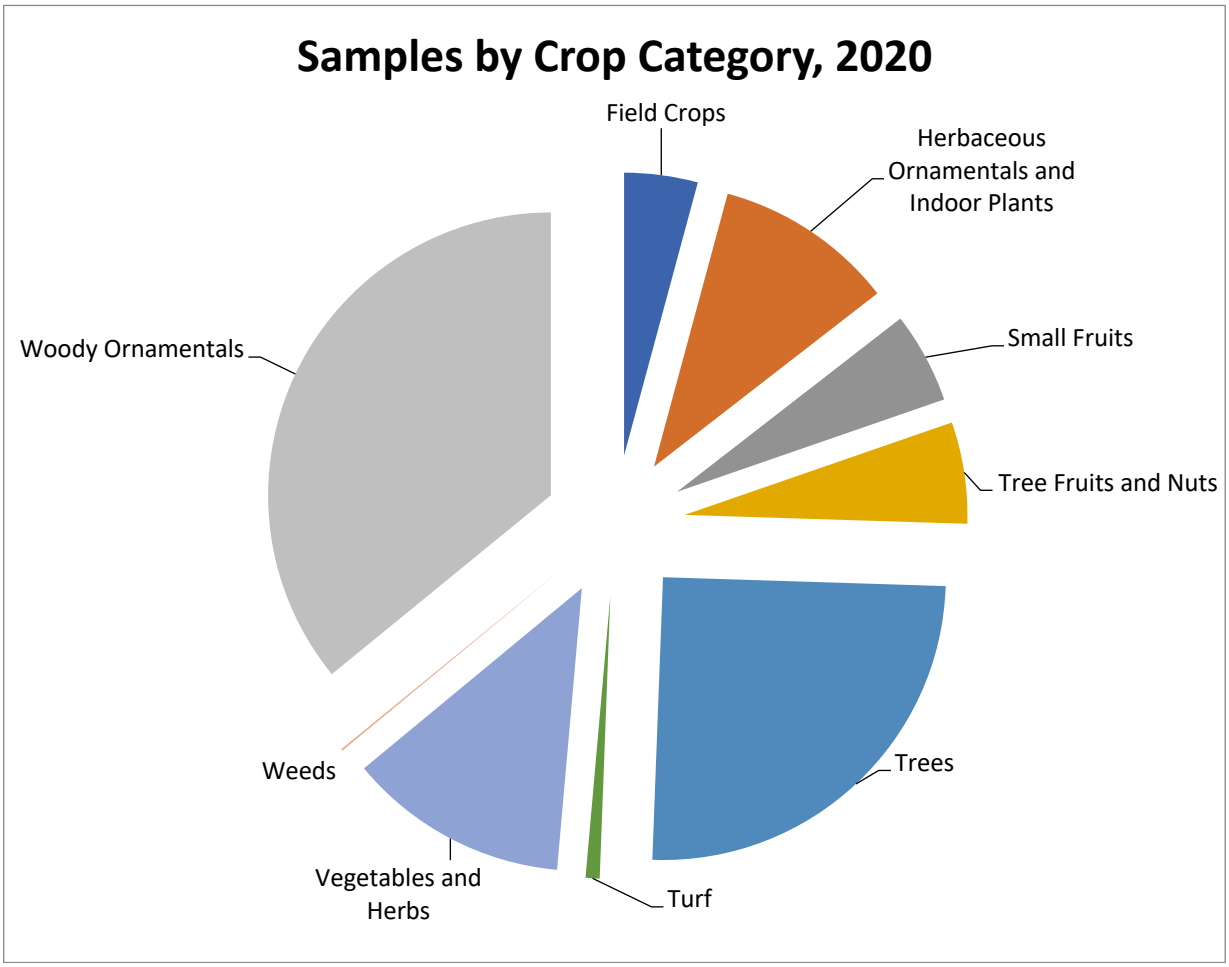
Monthly Submission Summary, 2020



Samples by Crop Category

Sample totals by major crop categories, excluding plant identifications

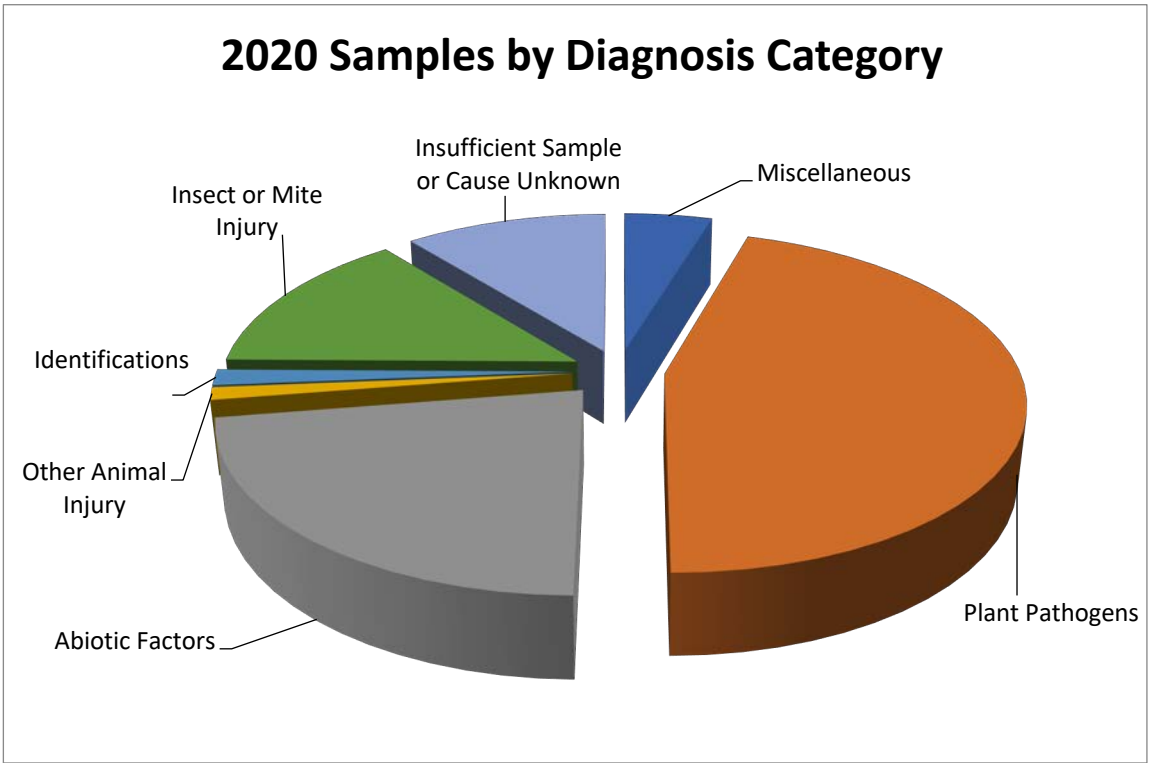
Crop Category	# of Samples	% of Total
Field Crops	31	4.2
Herbaceous Ornamentals and Indoor Plants	77	10.3
Small Fruits	39	5.2
Tree Fruits and Nuts	43	5.8
Trees	187	25.1
Turf	6	0.8
Vegetables and Herbs	94	12.6
Weeds	1	0.1
Woody Ornamentals	268	35.9
Total	**746**	

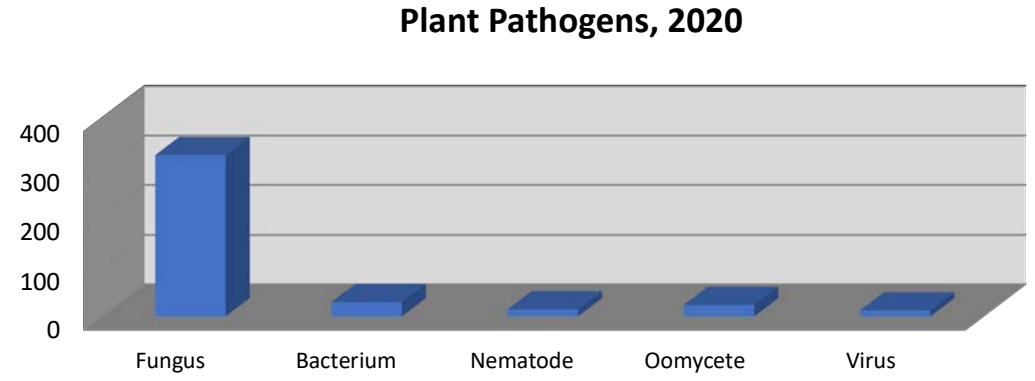


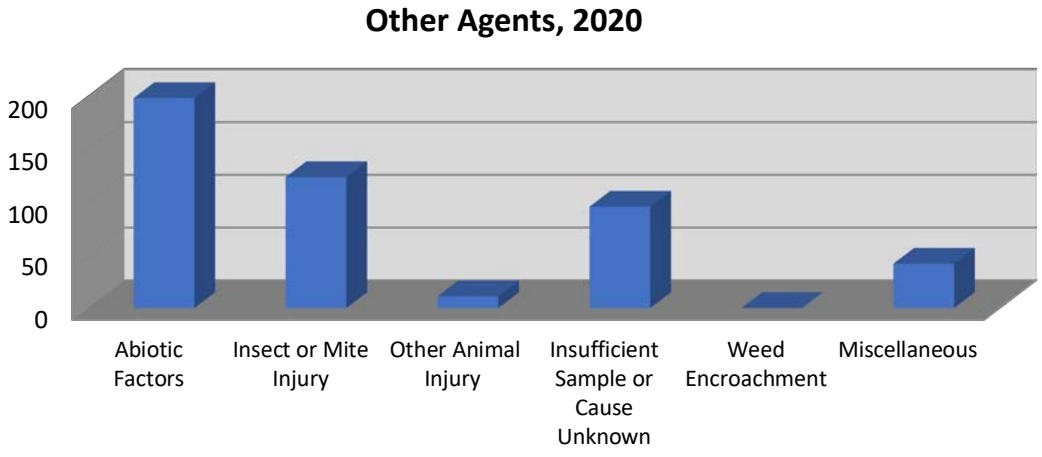
Diagnosis/ID Category Summary

	# of Diagnoses/IDs	% of Total
Plant Pathogens	**403**	**45.4**
Bacterium	29	
Fungus	325	
Nematode	14	
Oomycete	23	
Virus	12	
Abiotic Factors	**199**	**22.4**
Chemical	22	
Environmental/Cultural	171	
Mechanical	6	
Insect or Mite Injury	**124**	**14**
Insects or Mites	124	
Other Animal Injury	**11**	**1.2**
Birds	6	
Mammals	5	
Insufficient Sample or Cause Unknown	**96**	**10.8**
Cyanobacteria	1	
Insufficient sample or information	44	
Require Physical Sample	30	
Unknown	21	
Miscellaneous	**42**	**4.7**
Algae	1	
Lichen	4	
Normal Condition	4	
Other	14	
Physiological/Genetic	19	
Identifications	**13**	**1.5**
Fungi	5	
Insect	1	
Plant	4	
Slime Molds	2	
Other Substance	1	
Total	**888**	

Other Assistance, 2020	
Type	**# of Inquires**
Phone Calls	63


2020 Samples by Diagnosis Category
Insufficient Sample or Cause Unknown
Miscellaneous
Insect or Mite Injury
Identifications
Other Animal Injury
Abiotic Factors
Plant Pathogens


Plant Pathogens, 2020
400
300
200
100
0
Fungus
Bacterium
Nematode
Oomycete
Virus


Other Agents, 2020
200
150
100
50
0
Abiotic Factors
Insect or Mite Injury
Other Animal Injury
Insufficient Sample or Cause Unknown
Weed Encroachment
Miscellaneous

Geographic Distribution of Samples Received in 2020

County	# of Samples	County	# of Samples
Out of State	1	MIDDLESEX	1
ACCOMACK	3	MONTGOMERY	41
ALBEMARLE	32	NELSON	78
AMHERST	2	NEW KENT	6
APPOMATTOX	8	NEWPORT NEWS CITY	5
AUGUSTA	23	NORFOLK CITY	2
BATH	3	NORTHAMPTON	7
BEDFORD	9	NORTHUMBERLAND	9
BLAND	2	NOTTOWAY	6
BOTETOURT	1	ORANGE	4
BUCKINGHAM	5	PAGE	7
CAMPBELL	3	PATRICK	4
CAROLINE	6	PITTSYLVANIA	3
CARROLL	16	PORTSMOUTH CITY	9
CHARLES CITY	1	POWHATAN	6
CHESAPEAKE CITY	11	PRINCE GEORGE	3
CHESTERFIELD	5	PRINCE WILLIAM	6
CLARKE	3	PULASKI	3
CRAIG	2	RAPPAHANNOCK	5
CULPEPER	12	RICHMOND CITY	1
CUMBERLAND	4	ROANOKE	5
DANVILLE CITY	9	ROCKBRIDGE	13
ESSEX	3	ROCKINGHAM	14
FAIRFAX	2	RUSSELL	3
FAUQUIER	10	SCOTT	1
FLOYD	7	SHENANDOAH	7
FLUVANNA	10	SMYTH	1
FRANKLIN	1	SPOTSYLVANIA	4
FREDERICK	11	STAFFORD	10
GILES	3	SUFFOLK CITY	3
GLOUCESTER	9	TAZEWELL	4
GOOCHLAND	36	VIRGINIA BEACH	10
GRAYSON	3	WARREN	2
GREENE	2	WASHINGTON	4
GREENSVILLE	3	WESTMORELAND	5
HALIFAX	6	WISE	8
HAMPTON CITY	1	WYTHE	4
HANOVER	17	YORK	47
HENRICO	43		
HENRY	1		
ISLE OF WIGHT	21		
JAMES CITY	4		
KING GEORGE	1		
LANCASTER	4		
LEE	2		
LOUDOUN	10		
LYNCHBURG CITY	24		
MADISON	8		
MATHEWS	5	Total	759

Diagnosis Appendix

Information about diseases/pests diagnosed by the laboratory

Field Crops		
Alfalfa		
1	Insects	
1	No Pathogens Found	
1	Summer Black Stem and Leaf Spot	*Cercospora medicaginis*
3	Total for Alfalfa	
Bluegrass		
2	Environmental Stress	
2	Total for Bluegrass	
Corn		
2	Gray Leaf Spot	*Cercospora zeae-maydis*
1	Northern Corn Leaf Blight	*Setosphaeria turcica*
3	Northern Corn Leaf Spot	*Bipolaris zeicola*
6	Total for Corn	
Fescue		
1	Helminthosporium Blight	*Drechslera dictyoides*
1	Total for Fescue	
Hemp		
1	Abiotic Problem	
1	Botrytis Blight	*Botrytis sp./spp.*
1	Cercospora Leaf Spot	*Cercospora sp.*
1	Fusarium Root Rot	*Fusarium sp.*
1	Girdling Roots	
3	Hemp Leaf Spot	*Drechslera gigantea*
3	Insufficient Sample	
1	Mites	
1	No Pathogens Found	
1	Rhizoctonia Root Rot	*Rhizoctonia solani*
1	Saprophyte	
2	Southern Blight	*Sclerotium rolfsii*
17	Total for Hemp	

Millet		
1	Gray Leaf Spot	*Pyricularia grisea*
1	Total for Millet	

Oats		
1	Aphids	
1	Barley Yellow Dwarf Virus	
2	Total for Oats	

Orchardgrass		
1	Anthracnose	*Colletotrichum graminicola*
1	Brown Stripe	*Scolecotrichum graminis*
2	Total for Orchardgrass	

Soybean		
1	Anthracnose	*Colletotrichum sp.*
1	Brown Spot	*Septoria glycines*
1	Deer Injury	
1	Leafhoppers	
1	Potassium Deficiency	
1	Suspect Nitrogen Deficiency	
1	Three-cornered Alfalfa Hopper	
7	Total for Soybean	

Wheat		
1	Aphids	
1	Low pH	
1	Suspect Barley Yellow Dwarf Virus	
3	Total for Wheat	

Herbaceous Ornamentals and Indoor Plants		
Agastache		
1	Suspect Cucumber Mosaic Virus	
1	Total for Agastache	
Bellflower		
1	Sclerotinia Blight	*Sclerotinia sclerotiorum*
2	Total for Bellflower	
Cactus		
1	Abiotic Problem	
1	Total for Cactus	
Cardinal Flower		
1	No Pathogens Found	
1	Total for Cardinal Flower	
Chrysanthemum		
1	Cultural Problem	
2	Fusarium Stem Rot	*Fusarium oxysporum*
1	Pythium Root Rot	*Pythium sp.*
1	Root Rot-Cause Unknown	
6	Total for Chrysanthemum	
Coneflower		
1	Abiotic Problem	
1	Insufficient Sample	
1	Mites	
1	No Pathogens Found	
4	Total for Coneflower	
Dahlia		
1	Abiotic Problem	
1	No Pathogens Found	
2	Total for Dahlia	
Dianthus		
1	Anthracnose	*Colletotrichum sp.*
1	Total for Dianthus	

Euphorbia		
1	Insects	
1	Suspect Cultural Problem	
2	Total for Euphorbia	

Fern		
1	Foliar Nematodes	*Aphelenchoides sp.*
1	Suspect Chemical Injury	
2	Total for Fern	

Geranium		
1	Foliar Nematodes	*Aphelenchoides sp.*
4	Oedema	
2	Rhizoctonia Root Rot	*Rhizoctonia solani*
7	Total for Geranium	

Hellebore		
1	Black Leaf Spot	*Coniothyrium hellebori*
1	Foliar Nematodes	*Aphelenchoides sp.*
1	Suspect Abiotic Problem	
3	Total for Hellebore	

Hosta		
1	Environmental Stress	
1	Southern Blight	*Sclerotium rolfsii*
2	Total for Hosta	

Impatiens		
1	Downy Mildew	*Plasmopara obducens*
1	Total for Impatiens	

Iris		
1	Heterosporium Leaf Spot	*Cladosporium iridis*
1	Suspect Insects	
2	Total for Iris	

Lavender		
1	Abiotic Problem	
2	Fusarium Root and Stem Rot	*Fusarium sp.*
3	Fusarium Root Rot	*Fusarium sp.*
1	Insufficient Sample	
2	Phytophthora Root Rot	*Phytophthora nicotianae*
2	Rhizoctonia Root Rot	*Rhizoctonia sp.*
11	Total for Lavender	

Lily-of-the-valley		
1	Foliar Nematodes	*Aphelenchoides sp.*
1	Total for Lily-of-the-valley	

Liriope		
1	Abiotic Problem	
1	Anthracnose	*Colletotrichum sp.*
1	Fusarium Crown and Leaf Rot	*Fusarium sp.*
3	Total for Liriope	

Lisianthus		
1	No Pathogens Found	
1	Total for Lisianthus	

Mayapple		
1	Rust	*P. podophylli*
1	Total for Mayapple	

Miscellaneous Herbaceous Plants		
1	Insufficient Sample	
1	No Pathogens Found	
1	Suspect Cultural Problem	
3	Total for Miscellaneous Herbaceous Plants	

Mondo Grass		
1	Anthracnose	*Colletotrichum sp.*
1	Total for Mondo Grass	

Pachysandra		
1	Scales	
3	Volutella Blight	*Volutella pachysandra*
4	Total for Pachysandra	

Pansy		
3	No Pathogens Found	
3	Total for Pansy	

Peony		
1	Botrytis Blight	*Botrytis cinerea*
1	Cladosporium Stem and Leaf Blotch	*Cladosporium paeoniae*
1	Environmental Stress	
1	Suspect Environmental Stress	
4	Total for Peony	

Periwinkle		
1	Suspect Phomopsis Dieback	*Phomopsis lirella*
1	Total for Periwinkle	

Petunia		
1	Suspect Phytophthora Root Rot	*Phytophthora sp.*
1	Total for Petunia	

Poinsettia		
1	Bacterial Leaf Spot	*Xanthomonas campestris*
1	Fusarium Crown and Root Rot	*Fusarium sp.*
1	Physiological Leaf Distortion	
3	Total for Poinsettia	

Ranunculus		
1	Sclerotinia Blight	*Sclerotinia sclerotiorum*
1	Total for Ranunculus	

Rudbeckia		
1	White Mold	*Sclerotinia sclerotiorum*
1	Total for Rudbeckia	

Scabiosa		
1	Rhizoctonia Root Rot	*Rhizoctonia solani*
1	Root Rot-Cause Unknown	
2	Total for Salvia	

Schefflera		
1	Scales	
1	Total for Schefflera	

Sedum		
1	Insufficient Sample	
1	Powdery Mildew	*Oidium sp.*
2	Total for Sedum	

Snapdragon		
1	Chemical Injury	
1	Suspect Winter Injury	
2	Total for Snapdragon	

Solomon's Seal		
1	Foliar Nematodes	*Aphelenchoides sp.*
1	Total for Solomon's Seal	

Sunflower		
1	Rhizoctonia Stem Canker	*Rhizoctonia sp.*
1	Total for Sunflower	

Water Lily		
1	Abiotic Problem	
1	Insects	
2	Total for Water Lily	

Small Fruits		
Blackberry		
1	Environmental Stress	
1	Total for Blackberry	
Blueberry		
1	Abiotic Problem	
1	Blueberry Leaf and Fruit Spot	*Exobasidium maculosum*
1	Botryosphaeria Dieback	*Botryosphaeria sp.*
2	High pH	
1	Iron Deficiency	
1	Low pH	
1	Phomopsis Canker and Twig Blight	*Phomopsis vaccinii*
8	Total for Blueberry	
Fig		
1	Suspect Phomopsis Canker	*Phomopsis sp.*
1	Total for Fig	
Grape		
1	Cultural Problem	
1	Grapevine Leafroll Associated Virus-3	
1	Orange Slime Flux	
15	Pierce's Disease	*Xylella fastidiosa*
1	Suspect Mechanical Injury	
19	Total for Grape	
Raspberry		
1	Chemical Injury	
1	Insects	
1	Phytophthora Root Rot	*Phytophthora cinnamomi*
3	Total for Raspberry	
Strawberry		
1	Gray Mold	*Botrytis cinerea*
1	Powdery Mildew	*Podosphaera macularis*
1	Suspect Phytophthora Crown Rot	*Phytophthora sp.*
3	Total for Strawberry	

Tree Fruits and Nuts		
Apple		
1	Alternaria Blotch	*Alternaria mali*
2	Cedar-Apple Rust	*Gymnosporangium juniperi-virginianae*
1	Insects	
1	Insufficient Sample	
1	Marssonina Blotch	*Marssonina coronaria*
1	Necrotic Leaf Blotch	
1	No Pathogens Found	
1	Phoma Leaf Spot	*Phoma sp.*
1	Southern Blight	*Sclerotium rolfsii*
1	Suspect Alternaria Blotch	*Alternaria mali*
1	Suspect Cold Injury	
1	Woolly Apple Aphids	
13	Total for Apple	
Apricot		
1	Curculios	
1	Suspect Scab	*Cladosporium carpophilum*
2	Total for Apricot	
Asian Pear		
1	Fire Blight	*Pectobacterium amylovora*
1	Insects	
2	Total for Asian Pear	
Cherry		
1	Abiotic Problem	
1	Borers	
1	Cercospora Leaf Spot	*Cercospora circumscissa*
1	Cherry Leaf Spot	*Blumeriella jaapii*
1	Cold Injury	
1	Environmental Stress	
1	Insufficient Sample	
1	No Pathogens Found	
1	Scales	
9	Total for Cherry	

Chestnut		
1	Crystalline Residue	
1	Cultural Problem	
1	Insects	
1	No Pathogens Found	
1	Potato Leafhoppers	
5	Total for Chestnut	

Peach		
2	Brown Rot	*Monilinia fructicola*
2	Curculios	
2	Insufficient Sample	
2	Physiological Leaf Spot	
2	Suspect Cultural Problem	
1	Suspect Curculios	
11	Total for Peach	

Pear		
1	Suspect Fire Blight	*Erwinia amylovora*
1	Thread Blight	*Ceratobasidium ochroleucum*
2	Total for Pear	

Pecan		
1	Poor Pollination	
1	Total for Pecan	

Plum		
3	Black Knot	*Dibotryon morbosum*
1	Curculios	
1	Total for Plum	

Walnut		
2	Botryosphaeria Canker	*Botryosphaeria sp.*
1	Frost Injury	
1	Hail Injury	
2	Suspect Thousand Cankers Disease	*Geosmithia morbida*
6	Total for Walnut	

Trees		
Arborvitae		
3	Abiotic Problem	
2	Environmental Stress	
1	Insects	
1	Leafminers	
1	Mechanical Injury	
1	Mites	
4	No Pathogens Found	
2	Seasonal Needle Drop	
1	Suspect Abiotic Problem	
2	Suspect Cultural Problem	
18	Total for Arborvitae	
Beech		
1	Basal Canker; Butt Rot	*Kretzschmaria deusta*
1	Beech Bark Disease	*Nectria coccinea var. faginata*
2	Total for Beech	
Black Gum		
1	Felt Fungus	*Septobasidium fumigatum*
1	Total for Black Gum	
Buckeye		
1	Guignardia Blotch	*Guignardia aesculi*
1	Total for Buckeye	
Crabapple		
1	Cedar-Apple Rust	*Gymnosporangium juniperi-virginianae*
1	Lichens	
1	Sapsucker Injury	
1	Suspect Wood Decay	
4	Total for Crabapple	

Cryptomeria		
1	Environmental Stress	
3	Pestalotiopsis Tip Blight	*Pestalotiopsis sp.*
1	Scales	
1	Suspect Root Problem	
6	Total for Cryptomeria	

Cypress		
1	Insects	
1	Insufficient Sample	
1	Mites	
1	Scales	
1	Seiridium Canker	*Seiridium sp.*
1	Suspect Cultural Problem	
3	Suspect Seiridium Canker	*Seiridium sp.*
9	Total for Cypress	

Dogwood		
1	Adventitious Shoots	
1	Borers	
1	Insufficient Sample	
2	Lichens	
1	Nectria Canker	*Nectria sp.*
2	Septoria Leaf Spot	*Septoria cornicola*
1	Slime Mold	*Fuligo septica*
9	Total for Dogwood	

Elm		
1	Bacterial Scorch	*Xylella fastidiosa*
1	Total for Elm	

False Cypress		
1	Phytophthora Root Rot	*Phytophthora cinnamomi*
1	Web Blight	*Rhizoctonia solani*
2	Total for False Cypress	

Fir		
1	Phytophthora Root Rot	*Phytophthora cinnamomi*
1	Phytophthora Root Rot	*Phytophthora nicotianae*
2	Total for Fir	

Hackberry		
1	Root or Soil Problem	
1	Total for Hackberry	

Hemlock		
1	Cytospora Canker	*Cytospora sp.*
1	Insufficient Sample	
2	Total for Hemlock	

Hornbeam		
1	Abiotic Problem	
1	Insufficient Sample	
2	No Pathogens Found	
4	Total for Hornbeam	

Linden		
1	No Pathogens Found	
1	Total for Linden	

Magnolia		
1	Abiotic Problem	
1	Environmental Stress	
1	Normal Condition	
1	Powdery Mildew	*Oidium sp.*
1	Seasonal Leaf Drop	
1	Yellow Poplar Weevil	
6	Total for Magnolia	

Maple		
1	Anthracnose	*Kabatiella apocrypta*
1	Bacterial Wetwood	
1	Beetles	
1	Cold Injury	
1	Cultural Problem	
1	Cytospora Canker	*Cytospora sp.*
1	Environmental Stress	
1	Girdling Roots	
2	Insufficient Sample	
2	No Pathogens Found	
3	Powdery Mildew	*Oidium sp.*
2	Sapsucker Injury	
1	Scales	
1	Silver Leaf	*Chondrostereum purpureum*
1	Sooty Mold	
1	Sooty Mold-Sapsucker Associated	
1	Suspect Anthracnose	
2	Suspect Chemical Injury	
1	Suspect Cold Injury	
1	Suspect Cultural Problem	
2	Suspect Environmental Stress	
1	Suspect Frost Injury	
1	Suspect Leafhoppers	
1	Wood Decay	*Laetiporus sulphureus*
31	Total for Maple	

Mimosa		
1	Mimosa Wilt	*Fusarium oxysporum f. sp. perniciosum*
1	Total for Mimosa	

Miscellaneous Tree		
1	Chemical Injury	
1	Freeze Damage	
2	Total for Miscellaneous Tree	

Oak		
4	Anthracnose	*Apiognomonia sp.*
1	Bacterial Scorch	*Xylella fastidiosa*
1	Bacterial Wetwood	
1	Borers	
1	Botryosphaeria Twig Canker	*Botryosphaeria quercuum*
1	Chemical Injury	
1	Heart Rot	
1	Hypoxylon Canker	*Hypoxylon atropunctatum*
3	Insects	
1	Insufficient Sample	
2	Iron Chlorosis	
1	Jelly Fungus	*Exidia glandulosa*
3	No Pathogens Found	
8	Oak Leaf Blister	*Taphrina caerulescens*
2	Oak Leaf Button Galls	
1	Powdery Mildew	*Oidium sp.*
1	Sapwood Rot	*Schizophyllum commune*
2	Slime Flux	
1	Smooth Patch	*Aleurodiscus oakesii*
1	Suspect Bacterial Scorch	*Xylella fastidiosa*
1	Suspect Environmental Stress	
2	Suspect Frost Injury	
1	Suspect Tubakia Leaf Spot	*Tubakia dryina*
3	Woody Decay	
1	Wood Rot; White Rot	*Irpex lacteus*
46	Total for Oak	

Ornamental Cherry		
2	Borers	
1	Cercospora Leaf Spot	*Pseudocercospora circumscissa*
1	Deep Planting	
1	Insects	
1	Insufficient Sample	
1	Sapsucker Injury	
1	Suspect Cercospora Leaf Spot	*Pseudocercospora circumscissa*
1	Suspect Insects	
1	White Rot	*Trametes versicolor*
10	Total for Ornamental Cherry	

Ornamental Peach		
1	Abiotic Problem	
1	Curculios	
2	Total for Ornamental Peach	

Ornamental Pear		
1	Cedar-Quince Rust	*Gymnosporangium clavipes*
2	Pear Trellis Rust	*Gymnosporangium sabinae*
3	Total for Ornamental Pear	

Pine		
1	Bagworms	
1	Borers	
1	Dothistroma Needle Blight	*Dothistroma pini*
1	Lophodermium Needle Cast	*Lophodermium sp.*
3	No Pathogens Found	
1	Pales Weevils	
1	Ploioderma Needle Cast	*Ploioderma lethale*
1	Procerum Root Disease	*Leptographium procerum*
1	Scales	
1	Suspect Dothistroma Needle Blight	*Dothistroma pini*
2	Suspect Environmental Stress	
1	Unspecified Pathology	*Leptographium sp.*
15	Total for Pine	

Plum		
1	Black Knot	*Dibotryon morbosum*
1	Total for Plum	

Redbud		
2	Botryosphaeria Dieback	*Botryosphaeria dothidea*
1	Cultural Problem	
2	Phomopsis Canker	*Phomopsis sp.*
2	Physiological Leaf Spot	
1	Suspect Botryosphaeria Canker	*Botryosphaeria sp.*
1	Suspect Botryosphaeria Dieback	*Botryosphaeria dothidea*
1	Suspect Cold Injury	
10	Total for Redbud	

Spruce		
1	Freeze Damage	
2	No Pathogens Found	
2	Rhizosphaera Needle Cast	*Rhizosphaera kalkhoffii*
1	Stigmina Needle Cast	*Stigmina lautii*
1	Suspect Abiotic Problem	
1	Suspect Cytospora Canker	*Cytospora sp.*
1	Suspect Rhizosphaera Needle Cast	*Rhizosphaera kalkhoffii*
1	Suspect Wood Decay	
1	Weevils	
11	Total for Spruce	
Sycamore		
1	Chemical Injury	
1	Total for Sycamore	
Tulip Tree		
1	Yellow Poplar Weevils	
1	Total for Tulip Tree	
Yellowwood		
1	Anthracnose	*Gloeosporium sp.*
1	Total for Yellowwood	
Zelkova		
1	Black Spot	*Stegophora ulmea*
1	Total for Zelkova	

Turf		
Bentgrass		
1	Abiotic Problem	
1	Total for Bentgrass	
St. Augustine Grass		
1	Insufficient Sample	
1	Total for St. Augustine Grass	
Turfgrass		
1	Brown Patch	*Rhizoctonia solani*
1	Cyanobacteria	
1	Helminthosporium Blight	*Drechslera dictyoides*
1	Saprophytic Fungus	*Rhizopus sp.*
4	Total for Turfgrass	

Vegetables and Herbs		
Basil		
2	Abiotic Problem	
2	Rhizoctonia Stem and Root Rot	*Rhizoctonia sp.*
4	Total for Pea	
Bean		
1	Abiotic Problem	
1	Cercospora Leaf Spot and Blotch	*Cercospora sp.*
1	Insects	
1	Root Knot Nematodes	*Meloidogyne sp.*
1	Suspect Common Bacterial Blight	*Xanthomonas campestris*
3	Total for Bean	
Broccoli		
1	Suspect Nitrogen Deficiency	
1	Total for Broccoli	
Cabbage		
2	Abiotic Problem	
1	Nutrient Deficiency	
2	Oedema	
5	Total for Cabbage	
Cauliflower		
1	Insufficient Sample	
1	Total for Cauliflower	
Collards		
1	Suspect Nutrient Deficiency	
1	Total for Collards	
Cowpea		
1	Botrytis Blight	*Botrytis cinerea*
1	Total for Cowpea	

Cucumber		
1	Anthracnose	*Colletotrichum sp.*
1	Chemical Injury	
1	Pythium Root Rot	*Pythium sp.*
1	Sclerotinia Rot	*Sclerotinia sclerotiorum*
1	Suspect Anthracnose	*Colletotrichum sp.*
3	Total for Cucumber	

Garlic		
2	No Pathogens Found	
1	Stem and Bulb Nematode	*Ditylenchus dipsaci*
2	White Rot	*Sclerotium cepivorum*
5	Total for Garlic	

Ginseng		
1	Suspect Abiotic Problem	
1	Total for Ginseng	

Miscellaneous Herbs		
1	Insects	
1	Insufficient Sample	
2	Total for Miscellaneous Herbs	

Mint		
1	Saprophytic Fungus on Potting Mix	
1	Total for Mint	

Pea		
1	Ascochyta Blight	*Ascochyta pinodes*
1	Thrips	
2	Total for Pea	

Pepper		
1	Aphids	
1	Tomato Spotted Wilt Virus	
2	Total for Pepper	

Potato		
1	Abiotic Problem	
1	Brown Spot	*Alternaria alternata*
1	Cultural Problem	
3	Total for Potato	
Pumpkin		
1	Abiotic Problem	
1	Fusarium Crown and Foot Rot	*Fusarium solani*
1	Thrips	
3	Total for Pumpkin	
Rhubarb		
1	Suspect Abiotic Problem	
1	Total for Rhubarb	
Sage		
1	Suspect Environmental Stress	
1	Total for Sage	
Salad Greens		
1	Adventitious Roots	
1	Total for Salad Greens	
Spinach		
1	Fusarium Root Rot	*Fusarium sp.*
2	Fusarium Wilt	*Fusarium oxysporum f.sp. spinaciae*
2	Pythium Root Rot	*Pythium sp.*
5	Total for Spinach	
Squash		
1	Cucumber Beetles	
1	Downy Mildew	*Pseudoperonospora cubensis*
1	Suspect Abiotic Problem	
3	Total for Squash	

Tomato		
2	Abiotic Problem	
1	Adventitious Roots	
1	Algae	
1	Bacterial Stem Rot	*Erwinia carotovora*
1	Bacterial Wilt	*Ralstonia solanacearum*
2	Black Dot Root Rot	*Colletotrichum coccodes*
2	Blotchy Ripening	
4	Botrytis Stem Canker	*Botrytis cinerea*
3	Chemical Injury	
1	Chemical Residue Injury	
1	Cucumber Mosaic Virus	
1	Early Blight	*Alternaria solani*
4	Insufficient Sample	
1	Leaf Mold	*Passalora fulva*
1	Magnesium Deficiency	
2	No Pathogens Found	
1	Root Knot Nematodes	*Meloidogyne incognita*
2	Septoria Leaf Spot	*Septoria lycopersici*
1	Stinkbugs	
2	Suspect Abiotic Problem	
1	Suspect Botrytis Stem Canker	*Botrytis cinerea*
1	Suspect Chemical Injury	
2	Suspect Cultural Problem	
1	Suspect Fusarium Crown and Root Rot	*Fusarium oxysporum*
1	Suspect Leaf Mold	*Passalora fulva*
1	Suspect Tobacco Mosaic Virus	
2	Tomato Spotted Wilt Virus	
43	Total for Tomato	

Turnip		
1	Bacterial Soft Rot	*Pectobacterium carotovora*
1	Cercospora Leaf Spot	*Cercospora brassicicola*
2	Total for Turnip	

Miscellaneous Vegetables		
1	Chemical Injury	
1	Cultural Problem	
1	Fertilizer Burn	
3	Total for Miscellaneous Vegetables	

Watermelon		
1	Hollow Heart	
1	Total for Watermelon	

Zucchini		
1	No Pathogens Found	
1	Suspect Environmental Stress	
1	Suspect Fusarium Root Rot	*Fusarium solani*
1	Suspect Virus	
4	Total for Zucchini	

Weeds		
Milkweed		
1	Aphids	
1	Sooty Mold	
2	Total for Milkweed	

Woody Ornamentals		
Alexandrian Laurel		
1	Cercospora Leaf Spot	*Cercospora sp.*
1	Total for Alexandrian Laurel	
Aucuba		
1	Environmental Stress	
1	Suspect Poor Drainage	
2	Total for Aucuba	
Azalea		
1	Insufficient Sample	
1	Lichens	
1	Nutrient Deficiency	
3	Total for Azalea	

Boxwood		
3	Abiotic Problem	
1	Artillery Fungus	*Sphaerobolus stellatus*
24	Boxwood Blight	*Calonectria pseudonaviculata*
1	Colletotrichum Dieback	*Colletotrichum theobromicola*
2	Cultural Problem	
5	English Boxwood Decline	*Paecilomyces buxi*
10	Environmental Stress	
1	Freeze Damage	
2	Insects	
14	Insufficient Sample	
13	Leafminers	
4	Low pH	
14	Macrophoma Leaf Spot	*Macrophoma candollei*
28	Mites	
2	Nematodes	
5	No Pathogens Found	
1	Oedema	
1	Phomopsis	*Phomopsis sp.*
3	Phytophthora Root Rot	*Phytophthora nicotianae*
1	Possible Nematode Problem	
4	Root Problem	
1	Scales	
1	Sooty Mold	
3	Spiral Nematodes	*Rotylenchus buxophilus*
3	Suspect Boxwood Blight	*Calonectria pseudonaviculata*
1	Suspect Cultural Problem	
2	Suspect Environmental Stress	
6	Suspect Root Problem	
1	Suspect Volutella Blight	*Volutella buxi*
26	Volutella Blight	*Volutella buxi*
1	Wood Decay	
184	Total for Boxwood	

Butterfly Bush		
2	No Pathogens Found	
2	Total for Butterfly Bush	

Buttonbush		
1	No Pathogens Found	
1	Total for Buttonbush	
Camellia		
1	Environmental Stress	
1	Eriophyid Mites	
1	Leaf and Flower Gall	*Exobasidium camelliae*
1	Pestalotia	*Pestalotia sp.*
1	Squirrel Injury	
1	Suspect Chemical injury	
6	Total for Camellia	
Cherry Laurel		
2	Black Vine Weevils	
1	Botryosphaeria Dieback	*Botryosphaeria dothidea*
1	Environmental Stress	
1	Insects	
1	Mites	
1	No Pathogens Found	
1	Scales	
1	Shot Hole	
1	Suspect Environmental Stress	
10	Total for Cherry Laurel	
Crape Myrtle		
1	Powdery Mildew	*Erysiphe lagerstroemia*
1	Rabbit Tracks	
1	Scales	
1	Sooty Mold	
1	Squirrel Twig Pruning	
5	Total for Crape Myrtle	
Daphniphyllum		
1	Beetles	
1	Fusarium—Unspecified Pathology	*Fusarium sp.*
2	Total for Daphniphyllum	

Desert Willow		
1	Suspect Chemical Injury	
1	Total for Desert Willow	

Elderberry		
1	Abiotic Problem	
1	Total for Elderberry	

English Ivy		
1	No Pathogens Found	
1	Total for English Ivy	

Euonymus		
1	Mites	
1	Powdery Mildew	*Microsphaera sp.*
2	Total for Euonymus	

Flowering Quince		
1	Suspect Frost Injury	
1	Total for Flowering Quince	

Hibiscus		
1	Suspect Fungal Leaf Spot	
1	Total for Hibiscus	

Holly		
1	Abiotic Problem	
3	Anthracnose	*Gloeosporium sp.*
3	Black Root Rot	*Thielaviopsis basicola*
1	Environmental Stress	
1	Felt Fungus	*Septobasidium sp.*
2	Insects	
2	Insufficient Sample	
2	No Pathogens Found	
1	Phytophthora Root Rot	*Phytophthora cinnamomi*
1	Ramularia Leaf Spot	*Ramularia prini*
1	Sapsucker Injury	
2	Scales	
2	Sooty Mold	
1	Spine Spot	
3	Suspect Black Root Rot	*Thielaviopsis basicola*
1	Suspect Root Problem	
2	Web Blight	*Rhizoctonia solani*
1	Webworms	
1	Wood Decay	
31	Total for Holly	

Hydrangea		
2	Cercospora Leaf Spot	*Cercospora hydrangeae*
2	Cold Injury	
1	Environmental Stress	
2	No Pathogens Found	
1	Phytophthora Dieback	*Phytophthora sp.*
2	Pythium Root Rot	*Pythium sp.*
1	Suspect Cercospora Leaf Spot	*Cercospora sp.*
1	Suspect Chemical Injury	
1	Suspect Root Problem	
13	Total for Hydrangea	

Hypericum		
1	Suspect Environmental Stress	
1	Total for Hypericum	

Juniper		
1	Abiotic Problem	
1	Girdling Roots	
1	Mechanical Injury	
1	Mites	
3	No Pathogens Found	
1	Pestalotiopsis Twig Blight	*Pestalotiopsis sp.*
1	Suspect Cultural Problem	
1	Suspect Environmental Stress	
1	Suspect Vole Injury	
1	Weevils	
12	Total for Juniper	

Leucothoe		
1	Pestalotiopsis Leaf Spot	*Pestalotiopsis sp.*
1	Total for Leucothoe	

Lilac		
1	Environmental Stress	
2	Insufficient Sample	
1	Suspect Cultural Problem	
1	Suspect Root Problem	
1	No Pathogen Found	
6	Total for Lilac	

Mountain Laurel		
2	Botryosphaeria Dieback	*Botryosphaeria sp.*
2	Total for Mountain Laurel	

Nandina		
2	Botrytis Blight	*Botrytis cinerea*
1	Pseudocercospora Leaf Spot	*Pseudocercospora nandinae*
3	Total for Nandina	

Ninebark		
1	No Pathogens Found	
1	Phytophthora Root Rot	*Phytophthora sp.*
2	Total for Ninebark	

Osmanthus		
1	No Pathogens Found	
1	Total for Osmanthus	

Photinia		
1	Deep Planting	
1	Suspect Wood Decay	
2	Total for Photinia	

Pieris		
1	Anthracnose	*Colletotrichum sp.*
1	Botryosphaeria Dieback	*Botryosphaeria sp.*
1	Lace Bugs	
1	Mites	
1	Oedema	
1	Phytophthora Root Rot	*Phytophthora cinnamomi*
6	Total for Pieris	

Privet		
1	Chemical Injury	
1	Mycosphaerella Leaf Spot	*Pseudocercospora lisgustri*
2	Total for Privet	

Quince		
1	Cedar-Quince Rust	*Gymnosporangium clavipes*
1	Lace Bugs	
2	Total for Quince	

Rhododendron		
1	Environmental Stress	
1	Mortality of Great Rhododendron	
1	Pestalotia Leaf Spot	*Pestalotia sp.*
1	Phyllosticta Leaf Spot	*Phyllosticta sp.*
1	Sapsucker Injury	
1	Suspect Abiotic Problem	
1	Suspect Vole Injury	
7	Total for Rhododendron	

Rose		
1	Black Spot	*Diplocarpon rosae*
1	Chemical Injury	
1	Powdery Mildew	*Sphaerotheca pannose*
1	Rose Rosette Virus	
1	Suspect Rose Rosette Disease	
5	Total for Rose	

Russian Arborvitae	
1	Insufficient Sample
1	Total for Russian Arborvitae

Miscellaneous Shrubs	
1	Chemical Injury
1	Environmental Stress
1	Suspect Cultural Problem
3	Total for Miscellaneous Shrubs

Spirea	
3	No Pathogens Found
3	Total for Spirea

Sumac	
1	Physiological Leaf Spot
1	Total for Sumac

Sweetshrub	
1	Physiological Leaf Spot
1	Total for Sweetshrub

Sweetspire	
1	Environmental Stress
1	Total for Sweetspire

Tasmanian Podocarp	
1	Suspect Abiotic Problem
1	Total for Tasmanian Podocarp

Viburnum		
1	Phoma Leaf Spot	*Phoma sp.*
1	Wood Decay	
2	Total for Viburnum	
Weigela		
1	Environmental Stress	
1	Total for Weigela	
Winterberry		
1	Abiotic Problem	
1	Total for Winterberry	
Wisteria		
1	Septoria Leaf Spot	*Septora sp.*
1	Total for Wisteria	
Yew		
1	Abiotic Problem	
1	Freeze Damage	
1	Winter Injury	
3	Total for Yew	

Nonplant Material		
Soil		
2	Insufficient Sample	
1	Suspect Chemical Injury	
3	Total for Soil	

Identification Appendix

1. Higher Plants

Family: Poaceae

Poa trivialis	Rough Bluegrass

Family: Rosaceae

Pyrus sp.	Ornamental Pear

Unable to Identify (1)

2. Fungi

Family: Mycenaceae

Xeromphalina campanella	Golden Trumpet

Family: Boletaceae

Boletus sp.	Bolete

Family: Lepiotaceae

Chlorophyllum molybdites	Green-gilled Lepiota

Family: Sparassidaceae

Sparassis spathulata	Cauliflower Mushroom

Unable to Identify (1)

3. Other

Family: Physaridae

Physarum sp.	Slime Mold

Insect Gall

Non-plant material