# Plant Disease Clinic Annual Report 2013



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#### 2013 PLANT DISEASE CLINICS ANNUAL SUMMARY

Extension Plant Pathology maintains plant disease clinics at Athens and Tifton to aid county extension faculty in diagnosing and correcting disease related plant problems. Additionally, a laboratory for analysis for nematodes is maintained at Athens. The Plant Disease Clinic at Athens, operated by Ansuya Jogi, is located in Room 2405 Miller Plant Science Building. Samples analyzed in this clinic include commercial fruit, ornamentals, and turf; Christmas trees and forestry; all homeowner samples; legume forages, small grains, mushroom identification and wood rots. The Plant Disease Clinic at Tifton, operated by Jason Brock, is located in Room 116 of the Horticulture Building. Samples analyzed in this clinic include commercial samples of field crops, grain forages, pecans, and vegetables.

In 2013, 747 commercial plant samples were processed for diagnosis at Athens and 684 commercial plant samples were processed for diagnosis at Tifton. For the homeowners, 393 samples were analyzed.

Diagnoses and educational recommendations are returned to the county faculty. The clinics maintain a computerized database of samples and their diagnoses through the DDDI system.

#### **CLINIC SUMMARIES: 2013 PLANT SPECIMEN DIAGNOSES**

Crop	Commercial Samples	Homeowner Samples	Total
Field Crops	367	2	369
Fruits and Nuts	208	42	250
Herbaceous Ornamentals	92	11	103
Miscellaneous	6	10	16
Trees	82	82	164
Turf	300	207	507
Vegetables	284	70	354
Woody Ornamentals	134	94	228
Total*	1473	518	1991

<sup>\*</sup>The total number of diagnoses shown here is larger than the total number of samples received (shown by Monthly Sample Submission) because some samples have more than one problem or diagnosis.

The largest crop category for Commercial clinic submissions was Field Crops, followed by Turf and then Vegetables. The largest crop category for Homeowner clinic submission was Turf, followed by Woody Ornamentals and then Fruits and Nuts and Trees.

#### **MONTHLY SAMPLE SUBMISSION SUMMARY: 2013**

Month	Commercial Samples	Homeowner Samples
January	16	10
February	43	2
March	47	17
April	107	20
May	161	70
June	131	64
July	137	50
August	186	44
September	110	39
October	118	45
November	37	24
December	37	2
Total	1130	387

#### **DISTRIBUTION OF COMMERCIAL SAMPLES SUBMITTED BY COUNTY FOR 2013**

County	Samples	County	Samples	County	Samples	County	Samples
Appling	19	Effingham	30	McIntosh	1	Ware	4
Atkinson	9	Elbert	1	Meriwether	1	Washington	7
Bacon	20	Emanuel	6	Miller	20	Wayne	14
Baker	1	Evans	2	Mitchell	3	Webster	2
Banks	3	Fayette	2	Monroe	1	Wheeler	5
Barrow	1	Floyd	4	Montgomery	4	White	1
Bartow	5	Forsyth	4	Morgan	8	Whitfield	3
Ben Hill	3	Franklin	4	Muscogee	6	Wilcox	3
Berrien	22	Fulton	15	NA	208	Wilkes	3
Bibb	9	Gilmer	5	Newton	3	Worth	17
Brantley	2	Glynn	1	Oconee	5		
Brooks	3	Gordon	2	Oglethorpe	1		
Bulloch	5	Grady	3	Paulding	5		
Burke	13	Greene	3	Peach	10		
Calhoun	2	Gwinnett	19	Pickens	4		
Camden	2	Habersham	3	Pierce	29		
Candler	5	Hall	10	Polk	5		
Carroll	6	Harris	5	Pulaski	4		
Chatham	10	Hart	1	Randolph	5		
Cherokee	7	Henry	1	Richmond	15		
Clarke	33	Houston	3	Rockdale	3		
Clay	1	Irwin	10	Schley	1		
Clinch	1	Jackson	12	Screven	13		
Cobb	22	Jasper	1	Seminole	16		
Coffee	14	Jeff Davis	3	Spalding	4		
Colquitt	44	Jefferson	3	Stephens	1		
Columbia	7	Jenkins	1	Sumter	12		
Cook	28	Johnson	1	Tattnall	11		
Coweta	7	Jones	2	Taylor	9		
Crawford	3	Lamar	1	Telfair	3		
Crisp	6	Lanier	21	Terrell	11		
Dawson	4	Laurens	12	Thomas	4		
Decatur	7	Lee	4	Tift	27		
DeKalb	11	Lowndes	22	Toombs	10		
Dodge	8	Lumpkin	3	Troup	3		
Dooly	9	Macon	30	Turner	27		
Dougherty	1	Madison	6	Union	3		
Douglas	11	Marion	11	Upson	1		
Echols	13	McDuffie	12	Walton	6		

#### **DISTRIBUTION OF HOMEOWNER SAMPLES SUBMITTED BY COUNTY FOR 2013**

County	Samples	County	Samples	Cou	nty	Samples
Appling	4	Houston	3	Washi		1
Atkinson	1	Irwin	3	Way		1
Bacon	4	Jackson	1	Wh		1
Baldwin	4	Jasper	1	Whit	field	4
Berrien	1	Jefferson	3			
Bibb	36	Jenkins	1			
Burke	1	Laurens	8			
Camden	2	Lee	12			
Candler	2	Lowndes	1			
Carroll	4	Lumpkin	1			
Charlton	1	Macon	1			
Chatham	3	Madison	6			
Cherokee	1	McDuffie	1			
Clarke	31	Monroe	15			
Clinch	1	Montgomery	3			
Cobb	18	Morgan	13			
Colquitt	1	Murray	3			
Columbia	1	Muscogee	6			
Coweta	8	NA	7			
Crawford	1	Newton	10			
Dade	8	Oconee	10			
Decatur	1	Oglethorpe	1			
DeKalb	3	Paulding	3			
Dodge	2	Pierce	12			
Dougherty	8	Pulaski	5			
Douglas	1	Putnam	1			
Effingham	1	Randolph	1			
Elbert	4	Richmond	7			
Fannin	8	Rockdale	6			
Fayette	1	Seminole	1			
Franklin	1	Stephens	1			
Fulton	12	Sumter	3			
Gilmer	1	Thomas	4			
Greene	7	Towns	1			
Gwinnett	5	Treutlen	1			
Hall	1	Union	1			
Hancock	1	Walker	1			
Harris	3	Walton	5			
Henry	21	Warren	1			

#### **CROP SUMMARIES**

The following sections contain summaries of diagnosed samples by crop category.

**C:** Commercial **H:** Homeowner

### **FIELD CROPS**

(Total Diagnoses 369: C=367; H=2)

HOST	DISEASE	CAUSAL ORGANISM	С	Н
Alfalfa C = 6	Alfalfa Anthracnose	Colletotrichum trifolii	1	0
H = 0	Rhizoctonia Crown and Stem Rot	Rhizoctonia sp./spp.	1	0
	Spring Black Stem	Phoma medicaginis	1	0
	Alfalfa Fusarium Wilt	Fusarium oxysporum	1	0
	Leptosphaerulina Leaf Spot; Blight	Leptosphaerulina trifolii (briosoana)	1	0
		Rhizoctonia sp./spp.	1	0
Bahiagrass C = 3 H = 0	Gray Leaf Spot	Magnaporthe (ana. Pyricularia) grisea	1	0
	Leaf Rust; rust	Puccinia sp./spp.	1	0
		Bipolaris sp./spp.	1	0
Bermudagrass C = 12	Cultural/Environmental Problem	Abiotic disorder	1	0
H = 0	Leaf Spot	Bipolaris sp./spp.	3	0
	Large Patch	Thanatephorus (Rhizoctonia) cucumeris (solani)	1	0
	Leaf Rust; rust	Puccinia sp./spp.	2	0
		Bipolaris sp./spp.	3	0
		Rhizoctonia solani	1	0
		Rhizoctonia sp./spp.	1	0
Common Wheat	Scab	Fusarium sp./spp.	1	0
C = 39	Powdery Mildew	Erysiphe sp./spp.	6	0
H = 0	Unknown	General	1	0
	Take-all	Gaeumannomyces sp./spp.	1	0
	Bacterial Mosaic	Clavibacter	1	0

		michiganensis		
	Cultural/Environmental Problem	Abiotic disorder	6	0
	Tan Spot; Yellow Leaf Spot	Pyrenophora (ana. Drechslera) tritici- repentis	1	0
	Insects	Class insecta	1	0
		Abiotic disorder	1	0
		Barley Yellow Dwarf Virus (BYDV-RPV)	1	0
		Colletotrichum sp./spp.	1	0
		No Pathogen Found	15	0
		Viruses	1	0
	Stripe Rust; Yellow Rust	Puccinia striiformis	1	0
	No Pathogen Found	Identification Analysis	1	0
Corn C = 61 H = 1	Southern Leaf Blight	Cochliobolus (ana. Bipolaris) heterostrophus (maydis)	6	0
	Unknown	General	8	0
	Charcoal Rot	Macrophomina phaseolina	1	0
	Fusarium Ear Rot	Fusarium sp./spp.	4	0
	Rhizoctonia Root and Stem Rot	Thanatephorus (Rhizoctonia) cucumeris (solani)	1	0
	Rhizoctonia Stem Rot	Rhizoctonia sp./spp.	2	0
	Bacterial Soft Rot	Erwinia sp./spp.	1	0
	Common Corn Rust	Puccinia sorghi	3	0
	Northern Corn Leaf Spot	Cochliobolus (Bipolaris) carbonum (zeicola)	1	0
	Chemical Injury	Abiotic disorder	5	0
	Environmental Stress; Problem	Abiotic disorder	0	1
	Genetic Disorders	Abiotic disorder	1	0
	Unknown Abiotic Disorder	Abiotic disorder	3	0
	Northern Corn Leaf	Setosphaeria	8	0

	Blight; Leaf Spot	(Exserohilum)		
	Southern Corn Rust	turcica (turcicum)	3	0
	Southern Corn Rust	Puccinia polysora Unidentified	3	U
	Thrips Damage	Thrips	1	0
		Abiotic disorder	1	0
		No Pathogen Found	6	0
		Unknown cause	2	0
	Fertilizer Injury	Abiotic disorder	2	0
	No Pathogen Found	Identification Analysis	2	0
Corn (Seed) C = 9 H = 0	Southern Leaf Blight	Cochliobolus (ana. Bipolaris) heterostrophus (maydis)	2	0
	Unknown	General	1	0
	Fusarium Ear Rot	Fusarium sp./spp.	1	0
	Corynespora Leaf Spot	Corynespora cassiicola	1	0
	Unknown Abiotic Disorder	Abiotic disorder	1	0
	Northern Corn Leaf Blight; Leaf Spot	Setosphaeria (Exserohilum) turcica (turcicum)	2	0
	Southern Corn Rust	Puccinia polysora	1	0
Cotton	Ascochyta Blight	Ascochyta sp./spp.	3	0
C = 119	Ascochyta Blight	Ascochyta gossypii	10	0
H = 0	Fusarium Wilt	Fusarium oxysporum	3	0
	Unknown	General	6	0
	Rhizoctonia Stem Rot	Rhizoctonia sp./spp.	2	0
	Angular Leaf Spot	Cercospora sp./spp.	1	0
	Alternaria Leaf Spot	Alternaria sp./spp.	2	0
	Cercospora Leaf Spot	Cercospora sp./spp.	20	0
	Corynespora Leaf Spot	Corynespora sp./spp.	26	0
	Corynespora Leaf Spot	Corynespora cassiicola	24	0
	Phomopsis Leaf Spot	Phomopsis sp./spp.	3	0
	Stemphylium Leaf Spot	Stemphylium	5	0

		sp./spp.		
	Chemical Injury	Abiotic disorder	1	0
	Physiological Responses	Abiotic disorder	2	0
	Unknown Abiotic Disorder	Abiotic disorder	3	0
	Phomopsis Dieback; Tip Blight; Canker	Phomopsis sp./spp.	1	0
	Rhizoctonia Leaf Spot and/or Leaf Blight	Rhizoctonia sp./spp.	2	0
	and or Lear Bright	Cercospora sp./spp.	1	0
		Rhizoctonia solani	3	0
		Unknown cause	1	0
Grain Sorghum C = 9	Anthracnose	Colletotrichum graminicola	7	0
H = 0	Sorghum Gray Leaf Spot	Cercospora sorghi	1	0
		Fusarium sp./spp.	1	0
Oats C = 7	Cultural/Environmental Problem	Abiotic disorder	2	0
H = 0		<i>Drechslera</i> sp./spp.	1	0
		No Pathogen Found	4	0
Oriental Sesame C = 1		Rhizoctonia sp./spp.	1	0
H = 0				
Peanut C = 21	Phomopsis Blight	Phomopsis sp./spp.	1	0
H = 0	Unknown	General	6	0
	Pythium Pod Rot	Pythium sp./spp.	1	0
	Rhizoctonia Root Rot	Rhizoctonia sp./spp.	1	0
	Rhizoctonia Root and Stem Rot	Thanatephorus (Rhizoctonia) cucumeris (solani)	1	0
	Tomato Spotted Wilt	Tomato Spotted Wilt Virus (TSWV)	3	0
	Chemical Injury	Abiotic disorder	1	0
	Early Leaf Spot	Mycosphaerella (ana. Cercospora) arachidis ( arachidicola)	2	0
	Insects	Class insecta	1	0

		Aspergillus flavus	1	0
		No Pathogen	т	U
		Found	1	0
		<i>Pratylenchus</i> sp./spp.	1	0
	No Pathogen Found	Identification Analysis	1	0
Ryegrass C = 3	Cultural/Environmental Problem	Abiotic disorder	1	0
H = 0		No Pathogen Found	2	0
Sorghum C = 3	Anthracnose	Colletotrichum graminicola	1	0
H = 0		<i>Drechslera</i> sp./spp.	1	0
		Fusarium sp./spp.	1	0
Soybean	Soybean Bacterial	Xanthomonas	1	0
C = 30	Pustule	campestris		
H = 1	Downy Mildew	<i>Peronospora</i> sp./spp.	1	0
	Soybean Downy Mildew	Peronospora manshurica	2	0
	Unknown	General	6	0
	Australasian Soybean	Phakopsora	1	0
	Rust	pachyrhizi	<u>-</u>	Ü
	Corynespora Leaf Spot	Corynespora sp./spp.	1	0
	Physiological Responses	Abiotic disorder	1	0
	Unknown Abiotic Disorder	Abiotic disorder	1	0
	Soybean Anthracnose	Glomerella (Colletotrichum) glycines (destructivum)	0	1
	Pod and Stem Blight	Diaporthe (Phomopsis) sp./spp.	1	0
	Anthracnose; Colletotrichum Leaf Spot	Colletotrichum sp./spp.	2	0
		No Pathogen Found	3	0
		Unknown cause	2	0
	No Pathogen Found	Identification Analysis	8	0

Tobacco (Flue-		Thielaviopsis		
cured)	Black Root Rot	(Chalara) basicola	1	0
C = 38	Black Root Rot	(elegans)	_	O
H = 0				
П – 0	Black Shank	Phytophthora nicotianae	14	0
	Southern Stem Rot	Sclerotium rolfsii	1	0
	Rhizoctonia Crown and	Rhizoctonia	1	0
	Stem Rot	sp./spp.	<u> </u>	O
	Bacterial Soft Rot	Erwinia sp./spp.	3	0
		Tobacco Mosaic	_	
	Tobacco Mosaic	Virus (TMV)	7	0
		Tomato Spotted	_	_
	Tomato Spotted Wilt	Wilt Virus (TSWV)	2	0
		Sclerotinia		
	Sclerotinia Rot	sclerotiorum	1	0
	Pythium Root and/or	Scierotiorani		
	Crown Rot	Pythium sp./spp.	1	0
	Crown Not	No Pathogen		
		Found	4	0
		Pseudomonas ,	1	0
		sp./spp.		
		Rhizoctonia solani	2	0
Watermelon		No Pathogen	1	0
C = 1		Found	1	O
H = 0				
Wheat	Nutritional Deficiency	Abiotic disorder	1	0
C = 2	,			
H = 0	Helminthosporium	Helminthosporium	1	0
	Leaf Spot/ Leaf Blight	sp./spp.	1	U
Yellow Nutsedge	Pythium Root and/or			
C = 3	Crown Rot	Pythium sp./spp.	1	0
H = 0	Insects	Class insecta	1	0
11 - 0	11135612		1	U
		Rhizoctonia	1	0
		sp./spp.		

## **FRUITS AND NUTS**

(Total Diagnoses 250: C=206; H=44)

HOST	DISEASE	CAUSAL ORGANISM	С	Н
Blackberry	Cercospora Leaf Spot	Cercospora sp./spp.	2	0
C = 12	Algae	General	1	0
H = 0	Viruses	Viruses	1	0
	Cane and Leaf Rust	Kuehneola uredinis	1	0
	Cane Blight; Canker	Leptosphaeria (Coniothyrium) coniothyrium (fuckelli )	3	0
		Botryosphaeria sp./spp.	2	0
		Unknown cause	2	0
Blueberry	Anthracnose Fruit Rot	Colletotrichum sp./spp.	1	0
C = 115	Crown Gall	Agrobacterium sp./spp.	1	0
H = 8	Unknown	General	5	0
	Mummy Berry	Monilinia vaccinii-corymbosi	3	0
	Rhizoctonia Root; Crown Rot	Rhizoctonia sp./spp.	2	0
	Rhizoctonia Crown and Stem Rot	Rhizoctonia sp./spp.	2	0
	Phyllosticta Leaf Spot	Phyllosticta sp./spp.	1	0
	Septoria Leaf Spot	Septoria sp./spp.	2	0
	Blueberry Red Ringspot	Blueberry Red Ringspot Virus (BRRV)	1	0
	Algae	General	1	0
	Cultural/Environmental Problem	Abiotic disorder	0	5
	Nutrient Imbalance	Abiotic disorder	5	1
	Environmental Stress; Problem	Abiotic disorder	2	0
	Oedema; Edema	Abiotic disorder	5	0
	Oxygen Deficiency	Abiotic disorder	1	0
	Unknown Abiotic Disorder	Abiotic disorder	2	0
	Canker	Leptosphaeria sp./spp.	1	0
	Freeze; Frost; Cold Damage	Abiotic disorder	2	0
	Hemlock-Blueberry Rust	Thekopsora minima	2	0
	Canker, Dieback; Leaf Blight	Fusicoccum sp./spp.	1	0
	Leaf Spot	Pestalotiopsis (Pestalotia) sp./spp.	1	0
	Phomopsis Dieback; Tip Blight; Canker	Phomopsis sp./spp.	1	0
	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	11	0
	Leaf Rust	Naohidemyces (Pucciniastrum) vacciniorum (vaccinii)	5	0
	Sooty Mold	Unidentified Fungus	1	0

	Insect Damage	Unidentified Insect	0	2
		Identification Analysis	0	1
		Abiotic disorder	5	0
		Blueberry Red Ringspot Virus (BRRV)	3	0
		Botryosphaeria sp./spp.	6	0
		Cladosporium sp./spp.	1	0
		Colletotrichum sp./spp.	1	0
		Complex of Biotic; Abiotic Factors	2	0
		Environmental Stresses	9	0
		Fusicoccum sp./spp.	1	0
		Naohidemyces (Pucciniastrum) vacciniorum (vaccinii)	1	0
		No Pathogen Found	1	0
		Pestalotia sp./spp.	1	0
		Phyllosticta sp./spp.	1	0
		Phytophthora sp./spp.	4	0
		Rhizoctonia sp./spp.	3	0
		Rhizopus sp./spp.	1	0
		Unknown Agent	2	0
		Unknown cause	9	0
	No Pathogen Found	Identification Analysis	0	1
Cherry	Unknown	General	0	1
C = 0	Environmental Stress; Problem	Abiotic disorder	0	1
H = 2				
Coffee Plant C = 1		Colletotrichum sp./spp.	1	0
H = 0				
Common Apple	Fire Blight	Erwinia amylovora	1	1
C = 3 H = 8	Bitter Rot	Glomerella (Colletotrichum) cingulata (gloeosporioides)	0	2
	Rust	Gymnosporangium sp./spp.	1	2
	Alternaria Leaf Spot	Alternaria sp./spp.	0	1
	Chemical Injury	Abiotic disorder	0	1
	Unknown Abiotic Disorder	Abiotic disorder	0	1
		Abiotic disorder	1	0
		Alternaria sp./spp.	1	0
Cotton	Corynespora Leaf Spot	Corynespora sp./spp.	1	0
C = 1 H = 0				

Ripe Rot   Colletorichum sp./spp. 1   0	Grape	Downy Mildew	Peronospora sp./spp.	0	1
Environmental Stress; Problem   Abiotic disorder   0   1	C = 4	Ripe Rot		1	0
Undetermined Injury or Pest	H = 5	Sap Beetles	Family Nitidulidae	1	0
Abiotic disorder   0   1		Environmental Stress; Problem	Abiotic disorder	0	1
Abiotic disorder   0   1		Undetermined Injury or Pest	Identification Analysis	0	2
Japanese Pear Cedar-Quince Rust Gymnosporangium clavipes O 1  C = 1  H = 2  Pear C = 0  H = 4  Root Problems Abiotic disorder 0 1  C = 0  H = 2  Peanut Environmental Stress; Problem Abiotic disorder 0 1  C = 0  H = 2  Anthracnose Glomerella sp./spp. 1 0  C = 1  H = 2  Pear Cedar-Quince Rust Gymnosporangium clavipes 0 1  C = 1  H = 1  Pecan C = 3  Anthracnose Glomerella sp./spp. 3 0  Pecan Leaf Spot Phomopsis sp./spp. 3 0  Pecan Leaf Spot Phomopsis sp./spp. 3 0  Pecan Leaf Scorch Mite Eotetranychus hicoriae Bacterial Leaf Scorch (BLS) Xylella fastidiosa (BLS) 2 0  Undetermined Injury or Pest Identification Analysis 0 1  Lasiodiploidia (Botryodiplodia) theobromae 1  O 1 1  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 0  D 1 0 0				0	1
Japanese Pear Cedar-Quince Rust Gymnosporangium clavipes O 1  C = 1  H = 2  Pear C = 0  H = 4  Root Problems Abiotic disorder 0 1  C = 0  H = 2  Peanut Environmental Stress; Problem Abiotic disorder 0 1  C = 0  H = 2  Anthracnose Glomerella sp./spp. 1 0  C = 1  H = 2  Pear Cedar-Quince Rust Gymnosporangium clavipes 0 1  C = 1  H = 1  Pecan C = 3  Anthracnose Glomerella sp./spp. 3 0  Pecan Leaf Spot Phomopsis sp./spp. 3 0  Pecan Leaf Spot Phomopsis sp./spp. 3 0  Pecan Leaf Scorch Mite Eotetranychus hicoriae Bacterial Leaf Scorch (BLS) Xylella fastidiosa (BLS) 2 0  Undetermined Injury or Pest Identification Analysis 0 1  Lasiodiploidia (Botryodiplodia) theobromae 1  O 1 1  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 1 0  D 1 0  D 1 0 0			Botryosphaeria sp./spp.	1	0
C = 0 H = 1  Lemon C = 0 Insect Damage Unidentified Insect Damage Unidentified Insect Damage Unidentified Insect Damage C = 0 H = 0  Ruscadine Grape C = 2 H = 0  Peach C = 0 H = 4  Root Problems Abiotic disorder Date of Da				1	0
C = 0 H = 1  Lemon C = 0 Insect Damage Unidentified Insect Damage Unidentified Insect Damage Unidentified Insect Damage Unidentified Insect Damage C = 2 H = 0  Peach C = 0 H = 4  Root Problems Insect Damage Unidentified Insect Date of Dat	Japanese Pear	Fire Blight	Erwinia amylovora	0	1
Lemon C = 0 H = 2    Muscadine Grape C = 2 H = 0   Peach C = 0 H = 4   Root Problems   Abiotic disorder   1 0 0 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 1 0	C = 0				
C = 0	H = 1				
H = 2	Lemon	Cultural/Environmental Problem	Abiotic disorder	0	1
Muscadine Grape C = 2 H = 0 Peach Peach Peach C = 0 Unknown H = 4 Root Problems Root Problems Abiotic disorder Deanut C = 0 Anthracnose C = 1 H = 1  Pecan C = 1 H = 1  Pecan Botryosphaeria sp./spp. Deanut C = 0 Unknown General O 1 Insect Damage Unidentified Insect O 1 Southern Blight Sclerotium rolfsii O 1  C = 1 H = 1  Pecan C = 1 H = 1  Pecan Anthracnose Glomerella sp./spp. Glomerella sp./spp. Anthracnose Glomerella (Colletotrichum) cingulata (gloeosporioides) Pecan; Hickory Scab Cladosporium (cercospora) diffusum (fusca) Phomopsis Leaf Spot Brown Leaf Spot Black Pecan Aphid Physiological Responses Abiotic disorder D 1 D 1 D 1 D 1 D 1 D 2 D 2 D 3 D 3 D 3 D 3 D 4 D 4 D 5 D 6 D 6 D 7 D 7 D 7 D 7 D 7 D 7 D 7 D 7 D 7 D 7		Insect Damage	Unidentified Insect	0	1
Botryosphaeria sp./spp.   1   0	H = 2				
H = 0  Peach Peach C = 0 H = 4  Root Problems Insect Damage Pear Bouty Spiniteria spi, spin. H = 2  Pear Pear C = 0 H = 2  Pear Pear C = 1 H = 1  Pecan C = 31 H = 2  Pecan C = 31 H = 2  Pecan C = 31 Pecan; Hickory Scab Pecan; Hickory Scab Pecan Leaf Spot Phomopsis Leaf Spot Phomopsis Leaf Spot Pecan Leaf Scorch Mite Black Pecan Aphid Pecan Leaf Scorch (BLS) Phomopolical Responses Phomopolical Responses Pach Blook Pecan Analysis Phomopolical Responses Pach Blook Pecan Analysis Phomopolical Responses Plack Pecan Analysis Plack Pec	Muscadine Grape		Abiotic disorder	1	0
Peach C = 0 H = 4 Root Problems H = 4 Root Problems Root Problems Abiotic disorder Insect Damage Unidentified Insect D 1 Southern Blight C = 0 H = 2  Pear C = 0 H = 2  Pear C = 0 H = 2  Pear C = 1 H = 1  Pecan C = 1 H = 1  Pecan C = 31 H = 2  Anthracnose C = 31 H = 2  Anthracnose C = 31 Brown Leaf Spot Pecan; Hickory Scab Pecan Leaf Scorch Mite Black Pecan Aphid Physiological Responses Abiotic disorder D 1 Southern Blight Sclerotium rolfsii D 1  C = 1 Scale Insects Order homoptera D 1 Order homoptera D 1 Order homoptera D 2 Order homoptera D 3 Order homoptera D 3 Order homoptera D 4 Order homoptera D 5 Order homoptera D 6 Order homoptera D 1 Order homoptera D 1 Order homoptera D 2 Order homoptera D 3 Order homoptera D 3 Order homoptera D 4 Order homoptera D 5 Order homoptera D 6 Order homoptera D 7 Order homoptera D 8 Order homoptera D 9 Order homoptera D 1 Order homoptera	_		Botryosphaeria sp./spp.	1	0
C = 0 H = 4  Root Problems Abiotic disorder O 1 Insect Damage Unidentified Insect O 1  Peanut C = 0 H = 2  Pear C = 0 H = 2  Pear C = 0 H = 1  Pear C = 1 H = 1  Pecan C = 1 H = 1  Pecan C = 31 H = 2  Anthracnose Brown Leaf Spot Phomopsis Leaf Spot Phomopsis Leaf Spot Black Pecan Aphid Physiological Responses Bacterial Leaf Scorch (BLS) Undetermined Injury or Pest	H = 0				
H = 4  Root Problems Abiotic disorder Insect Damage Unidentified Insect Insect Damage Inse	Peach	Peach Leaf Curl	Taphrina deformans	0	1
Root Problems Ablotic disorder 0 1  Insect Damage Unidentified Insect 0 1  Environmental Stress; Problem Abiotic disorder 0 1  C = 0 Southern Blight Sclerotium rolfsii 0 1  H = 2  Pear Cedar-Quince Rust Gymnosporangium clavipes 0 1  C = 1 Scale Insects Order homoptera 1 0  H = 1  Pecan Anthracnose Glomerella sp./spp. 3 0  C = 31 Anthracnose Glomerella (Colletotrichum) cingulata (gloeosporioides) 2 0  Pecan; Hickory Scab Cladosporium caryigenum 2 1  Brown Leaf Spot Sirosporium (Cercospora) diffusum (fusca) 1 0  Phomopsis Leaf Spot Phomopsis sp./spp. 3 0  Pecan Leaf Scorch Mite Eotetranychus hicoriae 2 0  Black Pecan Aphid Melanocallis caryaefoliae 1 0  Physiological Responses Abiotic disorder 1 0  Bacterial Leaf Scorch (BLS) Xylella fastidiosa (BLS) 2 0  Undetermined Injury or Pest Identification Analysis 0 1  Lasiodiplodia (Botryodiplodia) theobromae		Unknown	General	0	1
Peanut C = 0 H = 2  Pear C = 1 H = 1  Pecan C = 31 H = 2  Anthracnose Pecan; Hickory Scab Pecan; Hickory Scab Pecan Erown Leaf Spot Phomopsis Leaf Spot Phomopsis Leaf Spot Phomopsis Leaf Spot Physiological Responses Bacterial Leaf Scorch (BLS) Undetermined Injury or Pest    Southern Blight   Sclerotium rolfsii   0   1     Scale Insects   Gymnosporangium clavipes   0   1     O	H = 4	Root Problems	Abiotic disorder	0	1
C = 0 H = 2  Pear C = 1 H = 1  Pecan C = 31 H = 2  Anthracnose  Pecan; Hickory Scab  Pecan; Hickory Scab  Pecan Leaf Spot Phomopsis Leaf Spot Phomopsis Leaf Spot Black Pecan Aphid Physiological Responses Bacterial Leaf Scorch (BLS) Undetermined Injury or Pest  Pear C = 0  Southern Blight Sclerotium rolfsii O 1  Sclerotium rolfsii O 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1		Insect Damage	Unidentified Insect	0	1
Pear C = 1 H = 1  Pecan C = 31 H = 2  Anthracnose Glomerella sp./spp. Glomerella (Colletotrichum) cingulata (gloeosporioides) Pecan; Hickory Scab Pecan; Hickory Scab Brown Leaf Spot Phomopsis Leaf Spot Pecan Leaf Scorch Mite Black Pecan Aphid Physiological Responses Bacterial Leaf Scorch (BLS) Undetermined Injury or Pest  C = 31 Brown Leaf Spot Berown Leaf Spot Bacterial Leaf Scorch (BLS) Cladosporium caryigenum Cercospora) diffusum (Gercospora) diffusum (Ge	Peanut	Environmental Stress; Problem	Abiotic disorder	0	1
Pear C = 1		Southern Blight	Sclerotium rolfsii	0	1
C = 1 H = 1  Pecan C = 31 H = 2  Anthracnose  Anthracnose  Glomerella sp./spp. Glomerella (Colletotrichum) cingulata (gloeosporioides)  Pecan; Hickory Scab  Pecan; Hickory Scab  Cladosporium caryigenum Cercospora) diffusum (fusca)  Phomopsis Leaf Spot Phomopsis sp./spp.  Pecan Leaf Scorch Mite Black Pecan Aphid Physiological Responses Abiotic disorder Bacterial Leaf Scorch (BLS) Undetermined Injury or Pest  C = 1  Scale Insects Order homoptera  1 0  Glomerella sp./spp. 3 0  Cladosporium caryigenum 2 1 0  Sirosporium (Cercospora) diffusum (fusca)  Phomopsis sp./spp. 3 0  Pecan Leaf Scorch Mite Eotetranychus hicoriae 2 0  Black Pecan Aphid Melanocallis caryaefoliae 1 0  Physiological Responses Abiotic disorder 1 0  Bacterial Leaf Scorch (BLS)  Vylella fastidiosa (BLS) 2 0  Undetermined Injury or Pest Identification Analysis 0 1  Lasiodiplodia (Botryodiplodia) theobromae	H = 2	-			
Pecan C = 31 H = 2  Anthracnose  Glomerella sp./spp. 3 0 C = 31 C	Pear	Cedar-Quince Rust	Gymnosporangium clavipes	0	1
Pecan C = 31 H = 2  Anthracnose  Glomerella sp./spp. Glomerella sp./spp. Glomerella sp./spp. Glomerella sp./spp. Glomerella sp./spp. Glomerella (Colletotrichum) cingulata (gloeosporioides) Pecan; Hickory Scab  Pecan; Hickory Scab  Cladosporium caryigenum Sirosporium (Cercospora) diffusum (fusca) Phomopsis Leaf Spot Phomopsis sp./spp. Pecan Leaf Scorch Mite Eotetranychus hicoriae Black Pecan Aphid Melanocallis caryaefoliae Physiological Responses Abiotic disorder Bacterial Leaf Scorch (BLS) Vylella fastidiosa (BLS) Undetermined Injury or Pest  Lasiodiplodia (Botryodiplodia) theobromae	_	Scale Insects	Order homoptera	1	0
C = 31 H = 2  Anthracnose  Glomerella (Colletotrichum) cingulata (gloeosporioides)  Pecan; Hickory Scab  Brown Leaf Spot  Brown Leaf Spot  Phomopsis Leaf Spot Phomopsis sp./spp.  Pecan Leaf Scorch Mite Black Pecan Aphid Physiological Responses Bacterial Leaf Scorch (BLS) Undetermined Injury or Pest  Cladosporium caryigenum Sirosporium (Cercospora) diffusum (fusca) Phomopsis sp./spp.  Becteranychus hicoriae Dhysiological Responses Abiotic disorder Dundetermined Injury or Pest Didentification Analysis Dundetermined Injury or Pest Du	H = 1				
H = 2  Anthracnose  Cingulata (gloeosporioides)  Pecan; Hickory Scab  Brown Leaf Spot  Phomopsis Leaf Spot  Pecan Leaf Scorch Mite  Black Pecan Aphid  Physiological Responses  Bacterial Leaf Scorch (BLS)  Undetermined Injury or Pest  Anthracnose  Cingulata (gloeosporioides)  2 0  Sirosporium (Cercospora)  diffusum (fusca)  Phomopsis sp./spp.  3 0  Phomopsis sp./spp.  3 0  Phomopsis caryaefoliae  1 0  Physiological Responses  Abiotic disorder  1 0  Bacterial Leaf Scorch (BLS)  Xylella fastidiosa (BLS)  Undetermined Injury or Pest  Lasiodiplodia  (Botryodiplodia) theobromae	Pecan	Anthracnose	Glomerella sp./spp.	3	0
Pecan; Hickory Scab  Brown Leaf Spot  Brown Leaf Spot  Pecan Leaf Scorch Mite  Black Pecan Aphid  Physiological Responses  Bacterial Leaf Scorch (BLS)  Undetermined Injury or Pest  Cingulata (gloeosporioides)  Cladosporium caryigenum  Aiffusum (Cercospora)  1  0  Phomopsis sp./spp. 3  0  Phomopsis sp./spp. 3  0  Reterranychus hicoriae 2  0  Relanocallis caryaefoliae 1  0  Bacterial Leaf Scorch (BLS)  Xylella fastidiosa (BLS)  Undetermined Injury or Pest  Lasiodiplodia  (Botryodiplodia) theobromae	C = 31	Anthrachaca	Glomerella (Colletotrichum)	2	0
Brown Leaf Spot  Brown Leaf Spot  Phomopsis Leaf Spot  Phomopsis sp./spp.  Black Pecan Aphid  Physiological Responses  Bacterial Leaf Scorch (BLS)  Undetermined Injury or Pest  Sirosporium (Cercospora)  Alight Sirosporium (Cercospora)  1 0  Phomopsis sp./spp.  3 0  Botetranychus hicoriae  2 0  Melanocallis caryaefoliae  1 0  Physiological Responses  Abiotic disorder  1 0  Bacterial Leaf Scorch (BLS)  Xylella fastidiosa (BLS)  Undetermined Injury or Pest  Lasiodiplodia  (Botryodiplodia) theobromae	H = 2	Antinacriose	cingulata (gloeosporioides)		U
Phomopsis Leaf Spot Phomopsis sp./spp. 3 0  Pecan Leaf Scorch Mite Eotetranychus hicoriae 2 0  Black Pecan Aphid Melanocallis caryaefoliae 1 0  Physiological Responses Abiotic disorder 1 0  Bacterial Leaf Scorch (BLS) Xylella fastidiosa (BLS) 2 0  Undetermined Injury or Pest Identification Analysis 0 1  Lasiodiplodia (Botryodiplodia) theobromae		Pecan; Hickory Scab		2	1
Phomopsis Leaf Spot Phomopsis sp./spp. 3 0  Pecan Leaf Scorch Mite Eotetranychus hicoriae 2 0  Black Pecan Aphid Melanocallis caryaefoliae 1 0  Physiological Responses Abiotic disorder 1 0  Bacterial Leaf Scorch (BLS) Xylella fastidiosa (BLS) 2 0  Undetermined Injury or Pest Identification Analysis 0 1  Lasiodiplodia (Botryodiplodia) theobromae		Brown Leaf Spot	1	1	0
Black Pecan Aphid Melanocallis caryaefoliae 1 0 Physiological Responses Abiotic disorder 1 0 Bacterial Leaf Scorch (BLS) Xylella fastidiosa (BLS) 2 0 Undetermined Injury or Pest Identification Analysis 0 1 Lasiodiplodia (Botryodiplodia) theobromae 2 0		Phomopsis Leaf Spot		3	0
Physiological Responses Abiotic disorder 1 0  Bacterial Leaf Scorch (BLS) Xylella fastidiosa (BLS) 2 0  Undetermined Injury or Pest Identification Analysis 0 1  Lasiodiplodia (Botryodiplodia) theobromae 2 0		Pecan Leaf Scorch Mite	Eotetranychus hicoriae	2	0
Bacterial Leaf Scorch (BLS)  Undetermined Injury or Pest  Lasiodiplodia (Botryodiplodia) theobromae  Xylella fastidiosa (BLS)  2 0		Black Pecan Aphid	Melanocallis caryaefoliae	1	0
Undetermined Injury or Pest Identification Analysis 0 1  Lasiodiplodia (Botryodiplodia) theobromae 2 0		Physiological Responses	Abiotic disorder	1	0
Lasiodiplodia 2 0		Bacterial Leaf Scorch (BLS)	Xylella fastidiosa (BLS)	2	0
(Botryodiplodia) theobromae		Undetermined Injury or Pest	Identification Analysis	0	1
			•	2	0
			No Pathogen Found	4	0

		Unknown Agent	1	0
		Unknown cause	5	0
	Fortilizor Injuny	Abiotic disorder	1	0
	Fertilizer Injury		1	0
Plum	No Pathogen Found	Identification Analysis		
C = 0	Brown Rot	Monilia sp./spp.	0	1
H = 6	Bacterial Canker	Pseudomonas syringae	0	1
	Unknown Abiotic Disorder	Abiotic disorder	0	1
	Insect Damage	Unidentified Insect	0	3
Pomegranate	Anthracnose Fruit Rot	Colletotrichum sp./spp.	2	0
C = 2 H = 0				
Raspberry	Mites	Order Acari	1	0
C = 1				
H = 0				
Satsuma		Unknown cause	1	0
Tangerine				
C = 1				
H = 0	Data da Biblia	Date the section	1	0
Strawberry C = 34	Botrytis Blight	Botrytis sp./spp.	1	0
H = 0	Unknown	General	2	0
	Rhizoctonia Root; Crown Rot	Rhizoctonia sp./spp.	1	0
	Angular Leaf Spot	Xanthomonas sp./spp.	2	0
	Spider Mites	Family Tetranychidae	5	0
	Twospotted Spider Mite	Tetranychus urticae	2	0
	Nutrient Imbalance	Abiotic disorder	1	0
	Boron Toxicity	Abiotic disorder	1	0
	Unknown Abiotic Disorder	Abiotic disorder	1	0
	Viruses	Viruses	2	0
		Diplocarpon (ana.		
	Leaf Scorch	Marssonina) earlianum	3	0
		(fragariae)		
	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	2	0
		Alternaria sp./spp.	1	0
		Colletotrichum sp./spp.	1	0
		No Pathogen Found	1	0
		Phytophthora sp./spp.	4	0
		Rhizoctonia sp./spp.	1	0
		Unknown cause	2	0
		Viruses	1	0
Watermelon C = 0	Gummy Stem Blight	Didymella (ana. Phoma) bryonae (cucurbitacearum)	0	1
H = 1		z.yonac (cacaronaccarani)		
			1	<u> </u>

### **HERBACEOUS ORNAMENTALS**

(Total Diagnoses 103: C=92; H=11)

HOST	DISEASE	CAUSAL ORGANISM	С	Н
Anemone	Root Knot Nematodes	Meloidogyne sp./spp.	1	0
C = 2 H = 0	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
Angel-wing	Aphids (Plant Lice)	Family Aphididae	1	0
Begonia C = 2 H = 0		No Pathogen Found	1	0
Asiatic Jasmine	Cultural/Environmental Problem	Abiotic disorder	1	0
C = 2 H = 0		No Pathogen Found	1	0
Bamboo C = 0 H = 1	Unknown	General	0	1
Begonia	Rhizoctonia Root; Crown Rot	Rhizoctonia sp./spp.	1	0
C = 6	Root Knot Nematodes	Meloidogyne sp./spp.	1	0
H = 0	Pythium Root and/or Crown Rot	Pythium sp./spp.	2	0
	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	2	0
Bird Of Paradise C = 1 H = 0	Armored Scales	Family Diaspididae	1	0
Broomsedge Bluestem C = 1 H = 0	Tangle Top	Myriogenospora atramentosa	1	0
Bugle-weed	Environmental Stress; Problem	Abiotic disorder	0	1
C = 0 H = 2		Phytophthora sp./spp.	0	1
Cigarette Plant; Elfin Herb C = 1 H = 0	Broad Mite	Polyphagotarsonemus latus	1	0
Coleus C = 1 H = 0	Slug Damage	Unidentified Slug	1	0
Creeping Jenny C = 1	Unspecified Pathology	Cladosporium sp./spp.	1	0

H = 0				
Creeping Phlox C = 4 H = 0	Black Root Rot	Thielaviopsis (Chalara) basicola (elegans)	4	0
11 – 0				
Daylily	Rhizoctonia Root; Crown Rot	Rhizoctonia sp./spp.	1	0
C = 5	Twospotted Spider Mite	Tetranychus urticae	1	0
H = 0	Anthracnose; Colletotrichum Leaf Spot	Colletotrichum sp./spp.	2	0
		No Pathogen Found	1	0
Euphorbia C = 1 H = 0	Twospotted Spider Mite	Tetranychus urticae	1	0
Florist's Chrysanthemum C = 1 H = 0	Bacterial Leaf Spot	Pseudomonas sp./spp.	1	0
Geranium ('cultivated') C = 1		No Pathogen Found	1	0
H = 0	Al Little and Defference	Alataria dia ada	1	
Greater Periwinkle	Nutritional Deficiency	Abiotic disorder	1	0
C = 2 H = 0	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
Hibiscus	Bacterial Leaf Spot	Xanthomonas sp./spp.	1	0
C = 3 H = 0	Anthracnose; Colletotrichum Leaf Spot	Colletotrichum sp./spp.	1	0
		Fusarium sp./spp.	1	0
Hosta C = 1	Not Pathogen; Saprophyte	Secondary Agents; Saprophytes; Unspecif.	0	1
H = 1	Anthracnose; Colletotrichum Leaf Spot	Colletotrichum sp./spp.	1	0
Immetions	D. Addd	Ole and the second of the second	1	
Impatiens C = 2	Downy Mildew	Plasmopara obducens	1	0
H = 0		Oomycetes	1	0
Impatiens	Rhizoctonia Root; Crown Rot	Rhizoctonia sp./spp.	1	0
C = 2	Pythium Root and/or Crown Rot	Pythium sp./spp.	1	0
H = 0				
Japanese Spurge	Leaf and Stem Blight	Volutella pachysandrae	1	0
C = 2 H = 0	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
Kudzu		Unknown cause	0	1

C = 0				
H = 1				
Lily-of-the-nile C = 1 H = 0	Anthracnose; Colletotrichum Leaf Spot	Colletotrichum sp./spp.	1	0
-				
Lilyturf (Bordergrass) C = 1	Anthracnose; Colletotrichum Leaf Spot	Colletotrichum sp./spp.	1	0
H = 0				
Madagascar	Rhizoctonia Stem and Root Rot	Rhizoctonia sp./spp.	1	0
periwinkle; Vinca	Fusarium Root; Crown Rot	Fusarium sp./spp.	1	0
C = 5 H = 0	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
		Fusarium sp./spp.	2	0
Million Bells	Botrytis Blight	Botrytis sp./spp.	1	0
C = 3	Rhizoctonia Root; Crown Rot	Rhizoctonia sp./spp.	1	0
H = 0	Pythium Root and/or Crown Rot	Pythium sp./spp.	1	0
Mondograss	Root Knot Nematodes	<i>Meloidogyne</i> sp./spp.	1	0
(Dwarf Lily Turf)	Root Problems	Abiotic disorder	0	2
C = 3 H = 2	Anthracnose; Colletotrichum Leaf Spot	Colletotrichum sp./spp.	1	0
	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
Mouse-ear Cress	Damping Off	Fusarium sp./spp.	1	0
C = 1 H = 0				
New Guinea	Root Knot Nematodes	Meloidogyne sp./spp.	1	0
Impatiens C = 2	Environmental Stress; Problem	Abiotic disorder	0	1
H = 1	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
Osteospermum	Bacterial Leaf Spot	Pseudomonas sp./spp.	2	0
C = 4 H = 0	Pythium Root and/or Crown Rot	Pythium sp./spp.	2	0
Pansy	Botrytis Blight	Botrytis sp./spp.	1	0
C = 9 H = 1	Powdery Mildew	Oidium sp./spp.	0	1
П-1	Black Root Rot	Thielaviopsis (Chalara) basicola (elegans)	2	0
	Fusarium Root; Crown Rot	Fusarium sp./spp.	2	0
	Cercospora Leaf Spot	Cercospora violae	1	0
	Pythium Root and/or Crown Rot	Pythium sp./spp.	3	0
Parlor Maple	Bacterial Leaf Spot	Xanthomonas sp./spp.	1	0
C = 1				

H = 0				
Petunias	Slug Damage	Unidentified Slug	1	0
C = 2 H = 0	No Pathogen Found	Identification Analysis	1	0
Poinsettia	Pythium Root and/or Crown Rot	Pythium sp./spp.	1	0
C = 1 H = 0				
Rosemary C = 1 H = 0		Colletotrichum sp./spp.	1	0
Rudbeckia C = 0 H = 2	Downy Mildew	Plasmopara sp./spp.	0	2
Schefflera	Armored Scales	Family Diaspididae	1	0
C = 2 H = 0		No Pathogen Found	1	0
Siberian Bugloss C = 1 H = 0		Aphelenchoides fragariae	1	0
Sunflower C = 1 H = 0	No Pathogen Found	Identification Analysis	1	0
Ti Plant; Cabbage Palm C = 1 H = 0		No Pathogen Found	1	0
Tulips	Fusarium Basal Rot	Fusarium sp./spp.	1	0
C = 2 H = 0	Bulb Mite	Rhizoglyphus sp./spp.	1	0
Verbena	Bacterial Leaf Spot	Unidentified Bacteria	1	0
C = 5	Pythium Root and/or Crown Rot	Pythium sp./spp.	1	0
H = 0	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
		Colletotrichum sp./spp.	1	0
		Fusarium sp./spp.	1	0
Wave Petunia C = 1 H = 0		No Pathogen Found	1	0
Wax Begonia C = 1 H = 0	Pythium Root and/or Crown Rot	Pythium sp./spp.	1	0
Wild Blue Phlox C = 2	Black Root Rot	Thielaviopsis (Chalara) basicola (elegans)	2	0

H = 0				
Zinnia	Pythium Blight; Cottony Blight	Pythium sp./spp.	1	0
C = 1				
H = 0				

### **MISCELLANEOUS**

(Total Diagnoses 16: C=8; H=8)

HOST	DISEASE	CAUSAL ORGANISM	С	Н
Almond		Abiotic disorder	1	0
C = 1				
H = 0				
Insect Id Request	Little Black Ant	Monomorium minimum	1	0
C = 1				
H = 0				
Multiple hosts		Abiotic disorder	1	0
C = 1				
H = 0				
Mushroom	Not Pathogen; Saprophyte	Secondary Agents;	0	1
C = 0	Not Fathogen, Saprophyte	Saprophytes; Unspecif.	U	1
H = 2	Armillaria Root Rot	Armillaria (Armillariella)	0	1
		sp./spp.		
Not Found On		No Pathogen Found	1	0
List C = 2	No Pathogen Found	Identification Analysis	1	0
H = 0				
Oriental Sesame	Alternaria Leaf Spot	Alternaria sp./spp.	1	0
C = 2	Cercospora Leaf Spot	Cercospora sp./spp.	1	0
H = 0				
Unknown; No	Unknown	General	0	1
Site Specified	Jelly Fungus	Tremella sp./spp.	0	1
C = 1	Mushroom	Unidentified Fungus	0	1
H = 6		Aspergillus sp./spp.	0	1
		No Pathogen Found	1	0
		Unknown cause	0	1
	Earth Ball	Scleroderma sp./spp.	0	1

## TREES (Total Diagnoses 164: C=81; H=83)

HOST	DISEASE	CAUSAL ORGANISM	С	Н
American Chestnut	Bacterial Leaf Scorch (BLS)	Xylella fastidiosa (BLS)	1	0
C = 1 H = 0				
American Sycamore C = 0 H = 1	Sycamore Anthracnose	Apiognomonia (Gnomonia) (ana. Discula) veneta (platani)	0	1
A de la Char				
Arborvitae C = 1 H = 1	Decline; Dieback	Abiotic disorder Abiotic disorder	0	1
Arizona Cypress	Environmental Stress; Problem	Abiotic disorder	0	1
C = 0 H = 2	Phomopsis Tip Blight; Needle Blight	Phomopsis juniperovora	0	1
Ash C = 0	Undetermined Injury or Pest	Identification Analysis	0	2
H = 2				
Baldcypress (Ornamental)	Sooty Mold	Septobasidium sp./spp.  Fusarium sp./spp.	1	0
C = 2 H = 0		. dod.ram op y opp.	_	
Callery Pear	Fire Blight	Erwinia amylovora	0	1
C = 0	Environmental Stress; Problem	Abiotic disorder	0	1
H = 3	Wood Rot Fungus	Inonotus sp./spp.	0	1
Cherry C = 0 H = 2	Wound Canker	Abiotic disorder Unknown cause	0	1
Chinese Elm C = 1 H = 0	Black Spot	Stegophora (Asteroma) ulmea (ulmeum)	1	0
Common Apple C = 0 H = 1	Insect Damage	Unidentified Insect	0	1
Cryptomeria	Environmental Stress; Problem	Abiotic disorder	0	3
C = 0 H = 4		Abiotic disorder	0	1

Deodar Cedar C = 1	Branch and Twig Borers	Family Bostrichidae	1	0
H = 0				
Dogwood	Environmental Stress; Problem	Abiotic disorder	0	1
C = 0	Root Problems	Abiotic disorder	0	1
H = 5	Dogwood Powdery Mildew	Erysiphe pulchra	0	1
	Spot Anthracnose	Elsinoe corni	0	1
	Undetermined Injury or Pest	Identification Analysis	0	1
Eastern Black Cherry C = 1	Stone Fruit Rust	Tranzschelia pruni-spinosae	1	0
H = 0  Eastern Hemlock C = 1 H = 0	Rosellinia Blight	Rosellinia herpotrichioides	1	0
Eastern Red Cedar C = 1	Phomopsis Tip Blight; Needle Blight	Phomopsis juniperovora	1	0
H = 0 Elm C = 1 H = 0	Not Pathogen; Saprophyte	Secondary Agents; Saprophytes; Unspecif.	1	0
Eucalyptus	Unknown	General	0	1
C = 3	Leaf Spot	Cristulariella sp./spp.	2	0
H = 1	Leaf Spot	Pseudocercospora sp./spp.	1	0
Fir	Mites	Order Acari	1	0
C = 1 H = 0				
Flowering Cherry C = 0 H = 1	Root Problems	Abiotic disorder	0	1
Flowering	Granulate Ambrosia Beetle	Xylosandrus crassiusculus	1	0
Dogwood C = 2 H = 0	Spot Anthracnose	Elsinoe corni	1	0
Ginkgo C = 0 H = 1	Scorch	Abiotic disorder	0	1
Hemlock	Hakasun	Conoral	0	1
C = 0	Unknown	General	0	1
H = 4	Elongate Hemlock Scale	Fiorinia externa	0	1
	Cultural/Environmental Problem	Abiotic disorder	0	1
	Environmental Stress; Problem	Abiotic disorder	0	1

Italian Cypress		Secondary Agents;		
C = 5	Not Pathogen; Saprophyte	Saprophytes; Unspecif.	1	0
H = 0	Spider Mites	Family Tetranychidae	1	0
	Root Problems	Abiotic disorder	1	0
	Spider Mite Injury	Unidentified Spider Mite	1	0
		No Pathogen Found	1	0
Japanese Cedar C = 3	Not Pathogen; Saprophyte	Secondary Agents; Saprophytes; Unspecif.	1	0
H = 0				
	Decline; Dieback	Abiotic disorder	1	0
	Root Problems	Abiotic disorder	1	0
Japanese Maple	Environmental Stress; Problem	Abiotic disorder	0	1
C = 1	Root Problems	Abiotic disorder	0	1
H = 3	Unknown Abiotic Disorder	Abiotic disorder	0	1
		No Pathogen Found	1	0
Juniper	Environmental Stress; Problem	Abiotic disorder	0	2
C = 0				
H = 3				
	Root Problems	Abiotic disorder	0	1
Leyland Cypress	Dieback; Canker	Seiridium sp./spp.	1	0
C = 10	Root Girdling	Abiotic disorder	1	0
H = 13	Cultural/Environmental Problem	Abiotic disorder	0	3
	Planting Too Deep	Abiotic disorder	1	0
	Environmental Stress; Problem	Abiotic disorder	0	7
	Root Problems	Abiotic disorder	2	0
	Needle Cast; Blight	Passalora (Cercospora) sequoiae	2	0
		Abiotic disorder	0	1
		No Pathogen Found	3	0
		Passalora (Phaeoramularia) calotropidis	0	1
		Phytophthora sp./spp.	0	1
Longleaf Pine	Rhizoctonia Root; Crown Rot	Rhizoctonia sp./spp.	5	0
C = 10				
H = 0				
	Lophodermium Leaf Spot; Needle Cast	Lophodermium sp./spp.	5	0
Magnolia	Algal Leaf Spot	Cephaleuros sp./spp.	0	1
C = 0	Cultural/Environmental Problem	Abiotic disorder	0	2
H = 9	Environmental Stress; Problem	Abiotic disorder	0	4
	Insect Damage	Unidentified Insect	0	2
Maple	Leaf Spot	Cristulariella sp./spp.	1	0

C = 2	Cultural/Environmental Problem	Abiotic disorder	0	1
H = 4	Environmental Stress; Problem	Abiotic disorder	0	1
	Unknown Abiotic Disorder	Abiotic disorder	0	1
		Family Eriophyidae	1	0
		Unknown cause	0	1
Norfolk Island		No Pathogen Found	1	0
Pine		-		
C = 1				
H = 0				
Nuttall Oak C = 1	Wood Rot Fungus	Biscogniauxia (Hypoxylon) atropunctata	1	0
H = 0	Wood Not Fullgus	(atropunctatum)	-	
11 - 0		(atropanetatam)		
Oak	Anthracnose	Aniagnamania an Jana		1
C = 3		Apiognomonia sp./spp.	0	1
H = 13	Oak Leaf Blister	Taphrina caerulescens	0	1
	Powdery Mildew	Oidium sp./spp.	0	1
	Armored Scales	Family Diaspididae	0	1
	Herbicide Injury; Exposure	Abiotic disorder	0	1
	Scorch	Abiotic disorder	0	1
	Environmental Stress; Problem	Abiotic disorder	0	4
	Wood Rot Fungus	Inonotus sp./spp.	1	0
	Insect Damage	Unidentified Insect	0	2
		Heterobasidion (Fomes) annosum (annosus)	0	1
		No Pathogen Found	2	0
Overcup Oak	Southern Fusiforme Rust	Cronartium fusiforme	1	0
C = 2 H = 0		Abiotic disorder	1	0
Pecan	Insufficient Sample	Identification Analysis	1	0
C = 1 H = 0				
Pin Oak	Mechanical Damage	Abiotic disorder	1	0
C = 3	Dieback; Canker; Twig Blight	Botryosphaeria sp./spp.	1	0
H = 0		No Pathogen Found	1	0
Pine		Secondary Agents;		
C = 2	Not Pathogen; Saprophyte	Saprophytes; Unspecif.	0	1
H = 2	Pitch Canker	Gibberella (Fusarium)	0	1
	Lophodermium Leaf Spot; Needle	sp./spp.	2	0
	Cast	Lophodermium sp./spp.		0
Queen Palm		No Pathogen Found	1	0
C = 1				

H = 0				
Red Maple	Obscure Scale	Melanaspis obscura	1	0
C = 1	Scorch	Abiotic disorder	0	1
H = 3	Root Problems	Abiotic disorder	0	1
	Wound Canker	Abiotic disorder	0	1
Red Oak	Bacterial Leaf Scorch (BLS)	Xylella fastidiosa (BLS)	1	0
C = 1				
H = 0				
Red Oaks	Bacterial Leaf Scorch (BLS)	Xylella fastidiosa (BLS)	1	0
C = 1				
H = 0				
Snowbell	Branch and Twig Borers	Family Bostrichidae	1	0
C = 1				
H = 0				
Southern	Algal Leaf Spot	Cephaleuros virescens	1	0
Magnolia	Branch and Twig Borers	Family Bostrichidae	1	0
C = 3 H = 0		No Pathogen Found	1	0
Sugar Hackberry	Petiolegall Psyllid	Pachypsylla venusta	1	0
C = 2	Sooty Mold	Unidentified Fungus	1	0
H = 0	300ty Wold	Officeritified Fullgus	1	U
Sugar Maple	Verticillium Wilt	Verticillium sp./spp.	1	0
C = 2	verticiniani vviic	No Pathogen Found	1	0
H = 0				
Sweet Bay	Additional Sample Requested	Identification Analysis	1	0
Magnolia		•		
C = 1				
H = 0	Distriction Co			
Trifoliate orange C = 1	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
H = 0	Stelli Not			
Tulip Tree	Undetermined Injury or Pest	Identification Analysis	0	1
C = 0	Gracterininea injury or rest	Tachtineactor / trialyolo		
H = 1				
Tupelo; Gum	Sooty Mold	Septobasidium sp./spp.	1	0
C = 1	5550,			
H = 0				
Water Oak	Oak Leaf Blister	Taphrina caerulescens	0	1
C = 0	Wood Rot Fungus	Fomes sp./spp.	0	1
H = 3	Bacterial Wetwood; Slime Flux	Various Pathogens	0	1
White Oaks	Bacterial Leaf Scorch (BLS)	Xylella fastidiosa (BLS)	1	0
C = 1	,	, , , , , , , , , , , , , , , , , , , ,		
H = 0				

Willow	Unknown	General	0	1
C = 0				
H = 1				
Willow Oak	Oak Leaf Blister	Taphrina caerulescens	1	0
C = 2	Chemical Injury	Abiotic disorder	1	0
H = 0				
Winged Elm	Phyllosticta Leaf Spot	Phyllosticta sp./spp.	1	0
C = 2	Dutch Elm Disease	Ophiostoma sp./spp.	1	0
H = 0				
Yoshino Cherry		No Pathogen Found	1	0
C = 1			81	83
H = 0				

**TURF** (Total Diagnoses 505: C=296; H=209)

HOST	DISEASE	CAUSAL ORGANISM	С	Н
Bentgrass	Brown Patch	Rhizoctonia sp./spp.	1	0
C = 76	Take-all	Gaeumannomyces sp./spp.	4	0
H = 0	Cultural/Environmental Problem	Abiotic disorder	7	0
	Environmental Stress; Problem	Abiotic disorder	10	0
	Anthracnose	Colletotrichum cereale	19	0
	Pythium Root and/or Crown Rot	Pythium sp./spp.	17	0
	Black Layer of Turfgrass	Abiotic disorder	1	0
	Insect Damage	Unidentified Insect	1	0
		Abiotic disorder	1	0
		Bipolaris sp./spp.	1	0
		Colletotrichum sp./spp.	4	0
		Environmental Stresses	1	0
		No Pathogen Found	6	0
		Rhizoctonia sp./spp.	2	0
	No Pathogen Found	Identification Analysis	1	0
Bermudagrass	Rhizoctonia Blight	Rhizoctonia solani	0	1
C = 0 H = 7	Rhizoctonia Crown and Root Rot	Thanatephorus (Rhizoctonia) cucumeris (solani)	0	1
	Take-all	Gaeumannomyces sp./spp.	0	1
	Cultural/Environmental Problem	Abiotic disorder	0	1
	Environmental Stress; Problem	Abiotic disorder	0	3
Bermudagrass	Anthracnose	Colletotrichum graminicola	0	1
C = 73	Rhizoctonia Blight	Rhizoctonia solani	0	4
H = 20	Spring Dead Spot	Ophiosphaerella sp./spp.	1	1
	Melting Out (Turfgrass)	Drechslera sp./spp.	2	0
	Fairy Ring	Various fungi	7	1
	Take-all	Gaeumannomyces sp./spp.	0	1
	Cultural/Environmental Problem	Abiotic disorder	5	6
	Dense Thatch Layer	Abiotic disorder	3	0
	Environmental Stress; Problem	Abiotic disorder	0	4
	Drought Stress Damage	Abiotic disorder	1	0
	Plant Parasitic Nematodes	Unspecified Genera	2	0
	Pink Snow Mold; Fusarium Patch	Monographella (Microdochium) nivalis (nivale)	3	0
	Red Leaf and Sheath Spot	Rhizoctonia zeae	1	0
	Pythium Blight; Cottony Blight	Pythium sp./spp.	2	0

	Large Patch	Thanatephorus (Rhizoctonia) cucumeris (solani)	7	0
	Root Decline of Warm Season Grasses	Gaeumannomyces graminis	1	0
	Dollar Spot	Sclerotinia homeocarpa	0	1
	Rhizoctonia Leaf Spot and/or Leaf Blight	Rhizoctonia sp./spp.	1	0
	Insects	Class insecta	1	0
	Insect Damage	Unidentified Insect	1	0
		Abiotic disorder	1	0
		Bipolaris sp./spp.	19	0
		Environmental Stresses	2	0
		No Pathogen Found	2	0
		Pythium sp./spp.	1	0
		Rhizoctonia solani	3	0
		Rhizoctonia sp./spp.	3	1
		Rhizoctonia zeae	1	0
	No Pathogen Found	Identification Analysis	3	0
Centipedegrass	Rhizoctonia Blight	Rhizoctonia solani	0	28
C = 62	Fairy Ring	Various fungi	3	2
H = 70	Unknown	General	1	0
	Rhizoctonia Root and Stem Rot	Thanatephorus (Rhizoctonia) cucumeris (solani)	1	0
	Take-all	Gaeumannomyces sp./spp.	0	3
	Algae	General	0	2
	Cultural/Environmental Problem	Abiotic disorder	15	23
	Soil Compaction	Abiotic disorder	1	0
	Environmental Stress; Problem	Abiotic disorder	3	9
	Large Patch	Thanatephorus (Rhizoctonia) cucumeris (solani)	4	0
	Root Decline of Warm Season Grasses	Gaeumannomyces graminis	6	0
	Insect Damage	Unidentified Insect	2	0
	Insufficient Sample	Identification Analysis	2	0
		Abiotic disorder	0	1
		Bipolaris sp./spp.	2	0
		Gaeumannomyces graminis	0	1
		No Pathogen Found	5	0
		Rhizoctonia solani	16	0
		Rhizoctonia sp./spp.	0	1
	No Pathogen Found	Identification Analysis	1	0

Common Wheat C = 1 H = 0		No Pathogen Found	1	0
Fescues	Dhizastania Dlight	Phizactonia calani	0	2
C = 0	Rhizoctonia Blight	Rhizoctonia solani	0	2
H = 5	Gray Leaf Spot	Magnaporthe (ana. Pyricularia) grisea	0	1
	Environmental Stress; Problem	Abiotic disorder	0	2
Grain Sorghum C = 1 H = 0	Anthracnose	Colletotrichum graminicola	1	0
Perennial		Drechslera sp./spp.	1	0
Ryegrass		Environmental Stresses	1	0
C = 2 H = 0				
Ryegrass		Bipolaris sp./spp.	1	0
C = 5		Drechslera sp./spp.	1	0
H = 0		No Pathogen Found	1	0
		Pythium sp./spp.	1	0
		Rhizoctonia sp./spp.	1	0
Seashore Paspalum	Slime Mold	Class myxomycetes; myxomycota	1	0
C = 4		Bipolaris sp./spp.	1	0
H = 0		Environmental Stresses	1	0
		Rhizoctonia solani	1	0
St.	Rhizoctonia Blight	Rhizoctonia solani	0	15
Augustinegrass	Fairy Ring	Various fungi	3	0
C = 24 H = 49	Take-all	Gaeumannomyces sp./spp.	0	12
п – 49	Gray Leaf Spot	Magnaporthe (ana. Pyricularia) grisea	2	4
	Cultural/Environmental Problem	Abiotic disorder	1	6
	Environmental Stress; Problem	Abiotic disorder	1	9
	Root Problems	Abiotic disorder	0	1
_	Unknown Abiotic Disorder	Abiotic disorder	0	1
	Large Patch	Thanatephorus (Rhizoctonia) cucumeris (solani)	1	0
	Root Decline of Warm Season Grasses	Gaeumannomyces graminis	9	0
<u> </u>	Insect Damage	Unidentified Insect	2	0
[		Rhizoctonia solani	2	0
		Rhizoctonia sp./spp.	3	0
		Unknown cause	0	1

Tall Fescue	Brown Patch	Rhizoctonia sp./spp.	3	0
C = 11	Fairy Ring	Various fungi	1	0
H = 0	Cultural/Environmental Problem	Abiotic disorder	1	0
	Pythium Root and/or Crown Rot	Pythium sp./spp.	4	0
	Insect Damage	Unidentified Insect	1	0
		Rhizoctonia sp./spp.	1	0
Unknown; No		Bipolaris sp./spp.	1	0
Site Specified		Rhizoctonia sp./spp.	1	0
C = 2				
H = 0	A vidal via a via a a	Callatatriahum manainiaala		_
Zoysia Grass C = 35	Anthracnose	Colletotrichum graminicola	0	2
H = 58	Rhizoctonia Blight	Rhizoctonia solani	0	18
11 – 30	Melting Out (Turfgrass)	Drechslera sp./spp.	1	0
	Fairy Ring	Various fungi	1	0
	Rhizoctonia Crown and Root Rot	Thanatephorus (Rhizoctonia) cucumeris (solani)	0	1
	Take-all	Gaeumannomyces sp./spp.	0	6
	Cultural/Environmental Problem	Abiotic disorder	7	16
	Environmental Stress; Problem	Abiotic disorder	1	13
	Large Patch	Thanatephorus (Rhizoctonia) cucumeris (solani)	2	0
	Root Decline of Warm Season Grasses	Gaeumannomyces graminis	2	0
	Leaf Rust; rust	Puccinia sp./spp.	2	0
	Dollar Spot	Sclerotinia homeocarpa	1	1
	Insufficient Sample	Identification Analysis	1	0
		Bipolaris sp./spp.	2	0
		No Pathogen Found	4	0
		Rhizoctonia solani	8	0
		Rhizoctonia sp./spp.	2	1
	No Pathogen Found	Identification Analysis	1	0

### **VEGETABLES**

(Total Diagnoses 354: C=277; H=77)

HOST	DISEASE	CAUSAL ORGANISM	С	Н
Allium; Onions;	Unknown Abiotic Disorder	Abiotic disorder	1	0
Leeks; Garlic				
C = 1				
H = 0	Courses and Loof Smot	Consequence on John	1	1
Asparagus C = 1	Cercospora Leaf Spot	Cercospora sp./spp.	1	1
H = 4	Francisco de la Characa Danklana	Abiatia diagodan		_
	Environmental Stress; Problem  Root Rot	Abiotic disorder	0	2
Bean		Unidentified Agent	0	1
C = 3	Sclerotinia Blight	Sclerotinia sp./spp.	1	0
H = 6	Rhizoctonia Blight	Rhizoctonia solani	0	1
11 0	Rust	Uromyces sp./spp.	0	1
	Environmental Stress; Problem	Abiotic disorder	0	2
	Root Problems	Abiotic disorder	0	2
		No Pathogen Found	1	0
		Unknown cause	1	0
Bell Pepper	Unknown	General	1	0
C = 23	Cercospora Leaf Spot	Cercospora sp./spp.	1	0
H = 0	Bacterial Leaf Spot	Xanthomonas sp./spp.	4	0
	Physiological Responses	Abiotic disorder	1	0
	Sclerotinia Rot	Sclerotinia sclerotiorum	1	0
	Pythiaceous Root Rot	Family Pythiaceae	1	0
	Pythium Root and/or Crown Rot	Pythium sp./spp.	3	0
	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
	Pythium Damping Off	Pythium sp./spp.	1	0
		Abiotic disorder	4	0
		No Pathogen Found	5	0
Broccoli	Rhizoctonia Root; Crown Rot	Rhizoctonia sp./spp.	1	0
C = 4	Physiological Responses	Abiotic disorder	1	0
H = 0		No Pathogen Found	1	0
		Xanthomonas campestris	1	0
Brussels-sprouts C = 1		Unknown Bacterial Disease	1	0
H = 0				
Cabbage	Black Rot	Xanthomonas campestris	1	0
C = 12 H = 2	Not Pathogen; Saprophyte	Secondary Agents; Saprophytes; Unspecif.	1	0
	Bacterial Leaf Spot	Xanthomonas sp./spp.	1	0

	Cultural/Environmental Problem	Abiotic disorder	0	2
	Nutritional Deficiency	Abiotic disorder	1	0
		No Pathogen Found	3	0
		Unknown cause	1	0
		Xanthomonas campestris	3	0
	No Pathogen Found	Identification Analysis	1	0
Cantalope;	Cucurbit Downy Mildew	Pseudoperonospora cubensis	1	0
Cantaloupe	Not Dathagan, Canronhyta	Secondary Agents;	1	0
C = 14	Not Pathogen; Saprophyte	Saprophytes; Unspecif.	1	0
H = 0	Alternaria Leaf Spot	Alternaria sp./spp.	1	0
	Bacterial Leaf Spot	Pseudomonas syringae	3	0
	Nutrient Imbalance	Abiotic disorder	1	0
		Abiotic disorder	1	0
		No Pathogen Found	3	0
		Unknown cause	1	0
	No Pathogen Found	Identification Analysis	2	0
Carrot	Unknown	General	1	0
C = 3				
H = 0	Not Pathogen; Saprophyte	Secondary Agents;	1	0
		Saprophytes; Unspecif.		
	Alternaria Leaf Spot	Alternaria sp./spp.	1	0
Cole Crops		No Pathogen Found	1	0
C = 1 H = 0				
Collards	Unknown	General	1	1
C = 3	Environmental Stress; Problem	Abiotic disorder	0	1
H = 2		Xanthomonas campestris	1	0
	Bacterial Leaf Spot	Xanthomonas campestris	1	0
Cucumber	Downy Mildew	Peronospora sp./spp.	1	0
C = 15	Phytophthora Stem Rot	Phytophthora sp./spp.	1	0
H = 1	Bacterial Soft Rot	Unidentified Bacterium	1	0
	Corynespora Leaf Spot	Corynespora sp./spp.	1	0
	Bacterial Leaf Spot	Pseudomonas syringae	1	0
	Nutritional Analysis	Abiotic disorder	1	0
	Physiological Responses	Abiotic disorder	1	0
	Bacterial Leaf Spot	Unidentified Bacteria	1	0
	Anthracnose; Colletotrichum Leaf Spot	Colletotrichum sp./spp.	2	0
	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
	Undetermined Injury or Pest	Identification Analysis	0	1
		Abiotic disorder	2	0

		Unknown Agent	1	0
		Unknown cause	1	0
Eggplant	Phomopsis Leaf Spot	Phomopsis sp./spp.	1	0
C = 9	Bacterial Leaf Spot	Pseudomonas syringae	1	0
H = 0	Bacterial Wilt	Ralstonia solanacearum	1	0
		Abiotic disorder	3	0
		No Pathogen Found	1	0
		Oomycetes	1	0
	No Pathogen Found	Identification Analysis	1	0
Garden Beet	No Pathogen Found	Identification Analysis	1	0
C = 1				
H = 0				
Gourd		Abiotic disorder	1	0
C = 1				
H = 0				
Indian Mustard	Septoria Leaf Spot	Septoria sp./spp.	0	1
C = 0				
H = 1				
Kale	Black Rot	Xanthomonas campestris	3	0
C = 8	Bacterial Leaf Spot	Xanthomonas sp./spp.	1	0
H = 0	Pythium Root and/or Crown Rot	Pythium sp./spp.	2	0
		No Pathogen Found	1	0
		Xanthomonas campestris	1	0
Lettuce	Botrytis Blight	Botrytis sp./spp.	1	0
C = 3	Fusarium Root; Crown Rot	Fusarium sp./spp.	1	0
H = 0	Bacterial Leaf Spot	Pseudomonas sp./spp.	1	0
Mustard Family		Mycosphaerella (ana.		
C = 3	White Leaf Spot; Gray Stem	Pseudocercosporella	0	1
H = 1		capsellae	<u> </u>	
	Pythium Blight; Cottony Blight	Pythium sp./spp.	1	0
	Pythium Root and/or Crown Rot	Pythium sp./spp.	1	0
01		Unknown Bacterial Disease	1	0
Okra C = 0	Bacterial Leaf Spot	Xanthomonas sp./spp.	0	1
H = 2	Environmental Stress; Problem	Abiotic disorder	0	1
		2	_	
Onion C = 11	Botrytis Blight	Botrytis sp./spp.	2	0
H = 0	Unknown	General	1	0
-	Stemphylium Leaf Spot	Stemphylium sp./spp.	1	0
	Thrips	Thrips sp./spp.	1	0
	Herbicide Injury; Exposure	Abiotic disorder	1	0
	Center Rot	Pantoea ananatis	1	0
	Insufficient Sample	Identification Analysis	1	0

		Botrytis allii	1	0
		No Pathogen Found	2	0
Pepper C = 6	Anthracnose Fruit Rot	Colletotrichum gloeosporioides	0	1
H = 3	Southern Stem Rot	Sclerotium rolfsii	1	0
	Bacterial Leaf Spot	Xanthomonas sp./spp.	0	1
	Tomato Spotted Wilt	Tomato Spotted Wilt Virus (TSWV)	1	0
	Environmental Stress; Problem	Abiotic disorder	0	1
	Pythium Damping Off	Pythium sp./spp.	1	0
		Abiotic disorder	1	0
		No Pathogen Found	1	0
		Rhizoctonia solani	1	0
Snap Bean;	Ashy Stem Blight	Macrophomina phaseolina	1	0
Green Bean	Bacterial Leaf Spot	Xanthomonas sp./spp.	1	0
C = 2 H = 0				
Southern peas;	Powdery Mildew	Oidium sp./spp.	2	0
Cowpeas	Fusarium Crown Rot	Fusarium oxysporum	1	0
Blackeye Peas	Cercospora Leaf Spot	Cercospora sp./spp.	2	0
C = 6 H = 0		No Pathogen Found	1	0
Spinach	Cercospora Leaf Spot	Cercospora sp./spp.	1	0
C = 2		Abiotic disorder	1	0
H = 0				
Squash	Cucurbit Yellow Vine Disease	Serratia marcescens	0	1
C = 3	Powdery Mildew	Erysiphe sp./spp.	1	0
H = 3	Pythium Fruit Rot;Cottony Leak	Pythium sp./spp.	1	0
	Chemical Injury	Abiotic disorder	0	1
	Insect Damage	Unidentified Insect	0	1
		No Pathogen Found	1	0
Sweetpotato	Cultural/Environmental Problem	Abiotic disorder	0	1
C = 1		No Pathogen Found	1	0
H = 1				
Tomato	Fusarium Wilt Complex	Fusarium sp./spp.	1	0
C = 30	Fusarium Wilt	Fusarium oxysporum	2	1
H = 50	Unknown	General	0	2
	Southern Stem Rot	Sclerotium rolfsii	2	1
	Alternaria Leaf Spot	Alternaria sp./spp.	0	1
	Septoria Leaf Spot	Septoria sp./spp.	0	4
	Bacterial Leaf Spot	Xanthomonas sp./spp.	4	3
	Mealybugs	Family Pseudococcidae	1	0
	Herbicide Injury; Exposure	Abiotic disorder	1	3

	Herbicide Drift	Abiotic disorder	0	2
	Cultural/Environmental Problem	Abiotic disorder	0	1
	Environmental Stress; Problem	Abiotic disorder	0	9
	Root Problems	Abiotic disorder	0	1
	Unknown Abiotic Disorder	Abiotic disorder	0	1
	Septoria Leaf Blight	Septoria lycopersici	0	4
	Unidentified Virus	Unidentified Virus	1	0
	Early Blight; Leaf Spot	Alternaria solani	0	6
	Rust Mites	Order acari	0	1
	Pythium Blight; Cottony Blight	Pythium sp./spp.	0	1
	Pythium Root and/or Crown Rot	Pythium sp./spp.	3	0
	Rhizopus Head Rot	Rhizopus sp./spp.	1	0
	Bacterial Pathogens	General	0	1
	Insufficient Sample	Identification Analysis	3	0
	Undetermined Injury or Pest	Identification Analysis	0	1
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Abiotic disorder	0	1
		Fusarium sp./spp.	0	1
		No Pathogen Found	8	0
		Unknown Agent	1	0
		Unknown Bacterial Disease	1	0
		Unknown cause	1	0
	No Pathogen Found	Identification Analysis	0	4
	Southern Blight	Sclerotium rolfsii	0	1
Turnip C = 2 H = 1	White Leaf Spot; Gray Stem	Mycosphaerella (ana. Pseudocercosporella capsellae	0	1
		No Pathogen Found	1	0
		Unknown Bacterial Disease	1	0
Watermelon	Gummy Stem Blight	Didymella sp./spp.	1	0
C = 91	Watermelon Fruit Blotch	Acidovorax avenae	3	0
H = 0	Downy Mildew	Peronospora sp./spp.	1	0
	Fusarium Wilt	Fusarium oxysporum	12	0
	Cercospora Leaf Spot	Cercospora sp./spp.	1	0
	Bacterial Leaf Spot	Pseudomonas syringae	14	0
	Ozone Damage	Abiotic disorder	1	0
	Physiological Responses	Abiotic disorder	3	0
	Anthracnose; Colletotrichum Leaf Spot	Colletotrichum sp./spp.	1	0
	Pythiaceous Root Rot	Family Pythiaceae	1	0
	Gummy Stem Blight	Didymella (ana. Phoma) bryonae (cucurbitacearum)	12	0
	Pythium Root and/or Crown Rot	Pythium sp./spp.	5	0

	Pythium Damping Off	Pythium sp./spp.	3	0
	Insufficient Sample	Identification Analysis	1	0
		Abiotic disorder	7	0
		Environmental Stresses	1	0
		No Pathogen Found	21	0
		Unknown Agent	1	0
		Unknown cause	1	0
	No Pathogen Found	Identification Analysis	1	0
Yellow Squash	Phytophthora Fruit Rot	Phytophthora capsici	1	0
C = 14 H = 0	Not Pathogen; Saprophyte	Secondary Agents; Saprophytes; Unspecif.	1	0
	Bacterial Leaf Spot	Pseudomonas syringae	2	0
	Pythium Root and/or Crown Rot	Pythium sp./spp.	1	0
	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
	Insufficient Sample	Identification Analysis	1	0
		Abiotic disorder	2	0
		No Pathogen Found	3	0
		Unknown Agent	1	0
		Unknown cause	1	0
Zucchini Squash	Downy Mildew	Peronospora sp./spp.	1	0
C = 3	Bacterial Leaf Spot	Pseudomonas syringae	1	0
H = 0	No Pathogen Found	Identification Analysis	1	0

### **WOODY ORNAMENTALS**

(Total Diagnoses 226: C=134; H=92)

HOST	DISEASE	CAUSAL ORGANISM	С	Н
Anise Tree	No Pathogen Found	Identification Analysis	1	0
C = 1				
H = 0				
Arborvitae	Cultural/Environmental Problem	Abiotic disorder	0	1
C = 0	Environmental Stress; Problem	Abiotic disorder	0	1
H = 2				
Azalea;	Cercospora Leaf Spot	Cercospora sp./spp.	1	0
Rhododendron	Flea Beetles	Subfamily Alticinae	1	0
C = 5	Cultural/Environmental Problem	Abiotic disorder	0	1
H = 7	Environmental Stress; Problem	Abiotic disorder	0	3
	Root Problems	Abiotic disorder	0	2
	Pythium Root and/or Crown Rot	Pythium sp./spp.	2	0
	Insect Damage	Unidentified Insect	1	1
Bamboo	Rust	Uromyces sp./spp.	0	1
C = 0	Environmental Stress; Problem	Abiotic disorder	0	1
H = 2				
Banana Shrub	Environmental Stress; Problem	Abiotic disorder	0	1
C = 0	Insect Damage	Unidentified Insect	0	1
H = 2				
Bigleaf	Botrytis Blight	Botrytis sp./spp.	1	0
Hydrangea				
C = 1				
H = 0	Doot Droblems	Abjetic disearder	0	1
Boxleaf Japanese Holly	Root Problems	Abiotic disorder	0	1
C = 0				
H = 1				
Boxwood	Leaf Blight	Volutella buxi	1	0
C = 19	Granulate Ambrosia Beetle	Xylosandrus crassiusculus	1	0
H = 16	Cultural/Environmental Problem	Abiotic disorder	1	2
	Planting Too Deep	Abiotic disorder	1	0
	Environmental Stress; Problem	Abiotic disorder	0	7
	Root Problems	Abiotic disorder	1	5
	Boxwood Macrophoma Leaf Spot	Dothiorella (Macrophoma) sempervirens (candollei)	3	0
	Macrophoma Blight; Dieback	Macrophoma sp./spp.	1	0
	Phytophthora Crown, Root and/or	Phytophthora sp./spp.	0	1
	Stem Rot	,,		

		T	1	
	Boxwood Volutella Blight; Canker	Volutella buxi	6	1
<u> </u>	Root Rot	Unidentified Agent	1	0
		No Pathogen Found	2	0
	No Pathogen Found	Identification Analysis	1	0
Boxwood Hybrids C = 2	Boxwood Macrophoma Leaf Spot	Dothiorella (Macrophoma) sempervirens (candollei)	1	0
H = 0	Boxwood Volutella Blight; Canker	Volutella buxi	1	0
Butterfly Bush; Summer Lilac	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
C = 1		Unknown cause	0	1
H = 1				
Camellia	Camellia Petal; Flower Blight	Ciborinia camelliae	0	1
C = 6		Glomerella (Colletotrichum)		_
H = 9	Glomerella Canker	cingulata (gloeosporioides)	0	1
	Not Pathogen; Saprophyte	Secondary Agents; Saprophytes; Unspecif.	0	1
	Camellia Yellow Mottle	Camellia Yellow Mottle Virus	0	1
	Tea Scale	Fiorinia theae	0	1
	Cultural/Environmental Problem	Abiotic disorder	0	1
	Nutrient Imbalance	Abiotic disorder	0	1
	Environmental Stress; Problem	Abiotic disorder	0	1
	Oedema; Edema	Abiotic disorder	2	0
	Root Problems	Abiotic disorder	0	1
	Anthracnose; Colletotrichum Leaf Spot	Colletotrichum sp./spp.	1	0
		Colletotrichum sp./spp.	1	0
		No Pathogen Found	2	0
Cherry-laurel	Cultural/Environmental Problem	Abiotic disorder	0	2
C = 0	Environmental Stress; Problem	Abiotic disorder	0	1
H = 3				
Chinese Fringe Flower	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
C = 1 H = 0				
Chinese Fringe- flower C = 1		No Pathogen Found	1	0
H = 0				
Chinese Holly	Dieback; Canker; Twig Blight	Botryosphaeria sp./spp.	1	0
C = 1 H = 0				
Citrus		No Pathogen Found	1	0

C = 1				
H = 0				
Common	Cercospora Leaf Spot	Cercospora sp./spp.	1	0
Boxwood C = 7	Boxwood Macrophoma Leaf Spot	Dothiorella (Macrophoma) sempervirens (candollei)	1	0
H = 0	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	3	0
	Boxwood Volutella Blight; Canker	Volutella buxi	2	0
Confederate	Environmental Stress; Problem	Abiotic disorder	0	1
(Star-j.) Jasmine	Root Problems	Abiotic disorder	0	1
C = 0 H = 2				
Crape Myrtle	Unknown	General	0	1
C = 1	Oedema; Edema	Abiotic disorder	1	0
H = 2	Insect Damage	Unidentified Insect	0	1
Cryptomeria	Environmental Stress; Problem	Abiotic disorder	0	1
C = 0				
H = 1				
Dogwood	Cultural/Environmental Problem	Abiotic disorder	0	1
C = 0				
H = 1				
Elaeagnus	Cultural/Environmental Problem	Abiotic disorder	0	1
C = 0	Root Problems	Abiotic disorder	0	1
H = 2				
Euonymus	Insect Damage	Unidentified Insect	0	1
C = 0				
H = 1				
Firethorn		Unknown cause	0	1
C = 0				
H = 1				
Florida Anisetree	Root Rot	Thielaviopsis sp./spp.	1	0
C = 1 H = 0				
				_
Gardenia C = 6	Cultural/Environmental Problem	Abiotic disorder	1	0
C = 6 H = 0	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	4	0
	Bacterial Leaf Spot	Xanthomonas campestris	1	0
Glossy Abelia	Root Problems	Abiotic disorder	1	0
C = 1	Not Fromenia	/ Motoric disorder	1	<u> </u>
H = 0				
Grapefruit	Additional Sample Requested	Identification Analysis	1	0
C = 1		,	<del>  -</del>	

H = 0				
Heavenly	Cercospora Leaf Spot	Cercospora sp./spp.	2	0
Bamboo	Bacterial Leaf Spot	Xanthomonas sp./spp.	1	0
C = 4 H = 0	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
Hibiscus	Root Problems	Abiotic disorder	0	1
C = 0				
H = 1				
Hinoki	Rhizoctonia Foliar/ Aerial/ Web Blight	Rhizoctonia solani	1	0
Falsecypress				
C = 1				
H = 0				
Holly	Cultural/Environmental Problem	Abiotic disorder	0	1
C = 2	Environmental Stress; Problem	Abiotic disorder	0	3
H = 6	Root Problems	Abiotic disorder	0	2
	Boxwood Macrophoma Leaf Spot	Dothiorella (Macrophoma)	1	0
	Boxwood Widerophoma Ecui Spot	sempervirens (candollei)		
		No Pathogen Found	1	0
Hydrangea	Rhizoctonia Crown and Stem Rot	Rhizoctonia sp./spp.	1	0
C = 4	Cercospora Leaf Spot	Cercospora sp./spp.	0	1
H = 2	Cyclamen Mite	Phytonemus (Steneotarsonemus) pallidus	1	0
	Granulate Ambrosia Beetle	Xylosandrus crassiusculus	1	0
	Cultural/Environmental Problem	Abiotic disorder	0	1
	Cultural From Children Troblem	No Pathogen Found	1	0
Indian Hawthorn	Cercospora Leaf Spot	Cercospora sp./spp.	1	0
C = 3	Root Girdling	Abiotic disorder	1	0
H = 1		Abiotic disorder	1	0
	Oedema; Edema  Root Problems			
Jananasa		Abiotic disorder	0	1
Japanese Barberry C = 1	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	1	0
H = 0				
Japanese Cedar	Cultural/Environmental Problem	Abiotic disorder	0	1
C = 0	Cultural/Environmental Froblem	Abiotic disorder	-	т_
H = 1				
Japanese Cleyera	Rhizoctonia Root; Crown Rot	Rhizoctonia sp./spp.	1	0
C = 4 H = 0	Root Problems	Abiotic disorder	1	0
		Pythium sp./spp.	1	0
H = 0	Pythium Root and/or Crown Rot			
H = 0	Pythium Root and/or Crown Rot	, , , , , ,		n
		No Pathogen Found	1	0
H = 0  Japanese Holly C = 2	Cultural/Environmental Problem	, , , , , ,		0 3 0

Jasmine	Mites	Order Acari	1	0
C = 2	Anthracnose; Twig Dieback	Colletotrichum sp./spp.	1	0
H = 0				
Juniper	Environmental Stress; Problem	Abiotic disorder	0	2
C = 2	Phomopsis Tip Blight; Needle Blight	Phomopsis juniperovora	0	1
H = 3	Root Rot	Unidentified Agent	1	0
		Abiotic disorder	1	0
Ligustrum; Privet	Environmental Stress; Problem	Abiotic disorder	0	1
C = 1		No Pathogen Found	1	0
H = 1				
Loropetalum	Bacterial Gall	Pseudomonas syringae	0	1
C = 1	Salt Damage	Abiotic disorder	1	0
H = 1				
Lowbush	Hemlock-Blueberry Rust	Thekopsora minima	1	0
Blueberry	Phytophthora Crown, Root and/or	Phytophthora sp./spp.	1	0
C = 2	Stem Rot	Рпусорпспога эр./ эрр.	1	U
H = 0				
Myrtle-leafed	Root Rot	Unidentified Agent	1	0
Distylium		Environmental Stresses	1	0
C = 2 H = 0				
Oakleaf	Bacterial Leaf Spot	Xanthomonas sp./spp.	1	0
Hydrangea	Bacterial Lear Spot	λαπτησιποπας 3ρ./ 3ρρ.	1	0
C = 1				
H = 0				
Osmanthus	Root Problems	Abiotic disorder	0	1
C = 0				
H = 1				
Palm	Unknown	General	0	1
C = 0				
H = 1				
Pittosporum	Phytophthora Crown, Root and/or	Phytophthora sp./spp.	1	0
C = 1	Stem Rot	,		
H = 0				
Danielle		11 11 10 15		
Pondberry C = 1	Sooty Mold	Unidentified Fungus	1	0
H = 0				
Prunus C = 2		No Pathogen Found	1	0
C = 2 H = 0	Bacterial shot hole	Pseudomonas syringae	1	0
Rhododendron C = 3	Algae	General	0	1
C= 3	Environmental Stress; Problem	Abiotic disorder	0	1

H = 2	Oedema; Edema	Abiotic disorder	1	0
	Root Problems	Abiotic disorder	1	0
	No Pathogen Found	Identification Analysis	1	0
Rose	Crown Gall	Agrobacterium tumefaciens	1	0
C = 31	Powdery Mildew	Oidium sp./spp.	1	0
H = 10	Unknown	General	0	1
	Crown and Root Rot	Phytophthora sp./spp.	0	1
	Roseslug	Endelomyia aethiops	1	0
	Herbicide Injury; Exposure	Abiotic disorder	0	1
	Root Girdling	Abiotic disorder	2	0
	Environmental Stress; Problem	Abiotic disorder	0	1
	Poor Root Development	Abiotic disorder	1	0
	Root Problems	Abiotic disorder	3	2
	Phytophthora Crown, Root and/or Stem Rot	Phytophthora sp./spp.	2	0
	Rose Rosette Disease	Rose rosette-associated virus (RRaV)	11	3
	Insufficient Sample	Identification Analysis	1	0
		No Pathogen Found	5	0
		Unknown Agent	1	0
		Unknown cause	0	1
	No Pathogen Found	Identification Analysis	2	0
Rose-of-sharon (Shrub-althea) C = 0 H = 1	Hibiscus Rust	Kuehneola malvicola	0	1
Rusty Lyonia C = 1 H = 0	Leaf and flower gall	Exobasidium ferrugineae	1	0
Sago Palm C = 0 H = 1		Unknown cause	0	1
Sasanqua Camellia C = 1	Camellia Leaf Gall	Exobasidium camelliae	1	0
H = 0 Sawara	No Pathogen Found	Identification Analysis	1	0
Falsecypress C = 1 H = 0				
Southern Bayberry; Wax Myrtle	Cultural/Environmental Problem	Abiotic disorder	1	0
C = 1				

H = 0				
Sweet (Tea) Olive C = 0		Poria sp./spp.	0	1
H = 1				
Unknown; No	Insect Damage	Unidentified Insect	0	1
Site Specified C = 0				
H = 1				
Viburnum	Granulate Ambrosia Beetle	Xylosandrus crassiusculus	1	0
C = 2	Root Problems	Abiotic disorder	0	1
H = 1		No Pathogen Found	1	0
Wax-leaf Privet	Cercospora Leaf Spot	Cercospora sp./spp.	1	0
C = 1 H = 0				
Weeping Cherry	Environmental Stress; Problem	Abiotic disorder	0	1
C = 0 H = 1				
Yew C = 1		No Pathogen Found	1	0
H=0				
•				