



**Plant Disease Diagnostic Laboratory  
Summary**

**2014**

*by:*

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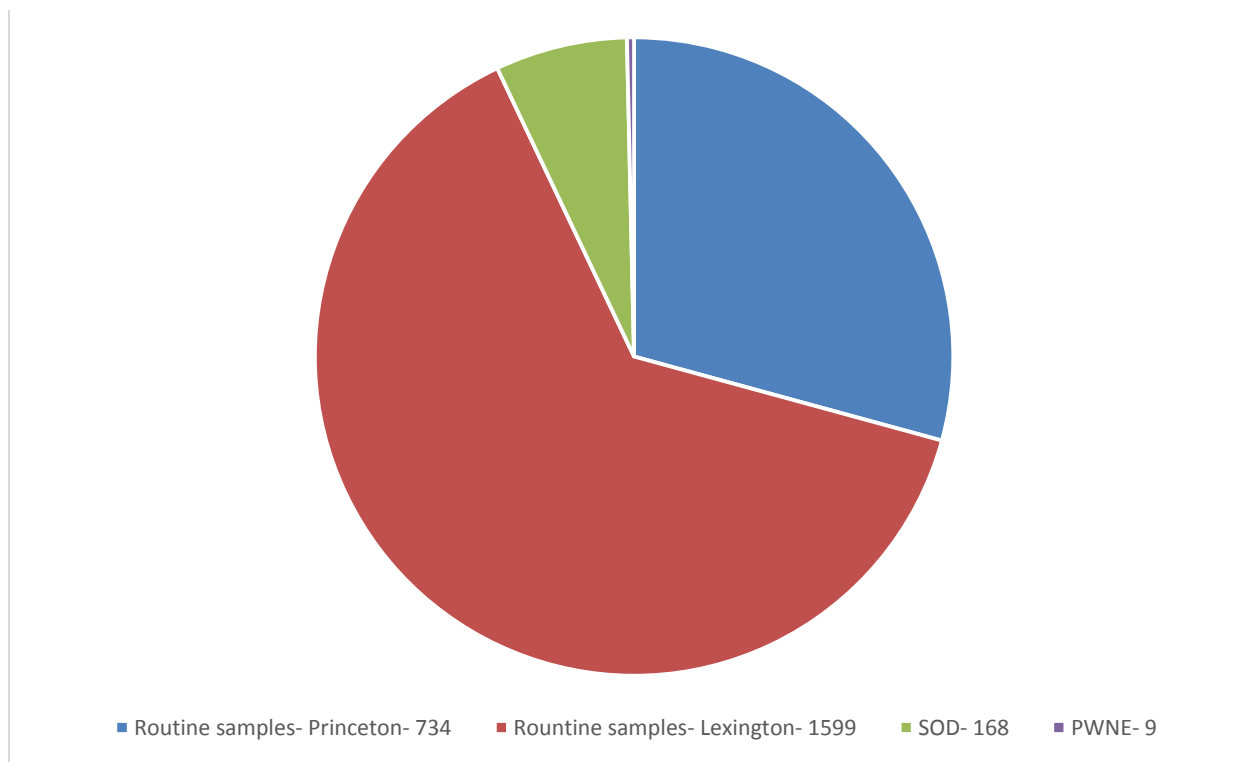
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## INTRODUCTION

The Plant Disease Diagnostic Laboratory (Lexington and Princeton) processed 2510 plant samples. Plant samples with more than one problem numbered 400 bringing the total number of actual diagnoses to 2910. The Lexington Laboratory diagnosed 1776 specimens, including 1599 routine plant samples, 168 samples from commercial nurseries surveyed for the Sudden Oak Death (SOD) pathogen, and 9 eastern red cedar (*Juniperus virginiana*) samples from commercial lumber companies for pinewood nematode extraction (PWNE). The Princeton Laboratory diagnosed 734 routine plant specimens. Sample totals are summarized in Figure 1 below.

**Figure 1: Plant Disease Diagnostic Laboratory – 2014**



<b>Total Samples</b>	<b>2510</b>
<b><u>Samples with &gt;1 diagnosis</u></b>	<b><u>400</u></b>
	<b>2910</b>

## NATURE OF WORK

Plant disease diagnosis is an ongoing educational and research activity of the U.K. Department of Plant Pathology. There are two branches of the Plant Disease Diagnostic Laboratory (PDDL), one on the U.K. campus in Lexington, and one at the U.K. Research and Education Center in Princeton.

Diagnosis of plant diseases requires keen observation and investigation into the possible causes of plant problems. Most visual diagnoses involve microscopy to determine which plant parts are affected and to identify the pathogen(s) involved. In addition, many specimens require special tests such as moist chamber incubation, pathogen isolation from plant tissue, enzyme-linked immunosorbent assay (ELISA), nematode extraction, or soil pH and soluble salts tests. The laboratory uses the polymerase-chain-reaction (PCR) technique for identification of certain pathogens.

A database of laboratory records is maintained to provide information used for conducting plant disease surveys, identifying new disease outbreaks, and formulating educational programs. In addition, information from the laboratory provides the basis for timely news of plant disease problems through the Kentucky Pest News newsletter, radio and television tapes, and plant health care workshops. Both laboratories report diagnoses of plant diseases to USDA-APHIS as part of the National Plant Diagnostic Network. In 2014, the PDDL discontinued sending hardcopy diagnostic sample reports to growers and agents in favor of electronic reports.

## WEATHER SUMMARY

Below normal temperatures and desiccating winds during the winter months resulted in winter injury on marginally hardy woody landscape plants over much of the state. Temperatures warmed rapidly in April, followed by a hard freeze in mid-April. Abundant rain during the spring delayed planting of some crops and favored fungal and oomycete diseases in many crops. Late summer moisture promoted downy mildew, other foliar diseases and fruit rots near harvest. Detailed Kentucky weather information is available from the UK AgWeather Center at <http://www.agwx.ca.uky.edu>.

## ACKNOWLEDGMENTS

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## EXPLANATORY REMARKS

In the main body of this report (Table 10), three columns of numbers appear following the diagnosis and causal agent sections. The first column contains the number of primary diagnoses, the second column contains the number of secondary diagnoses and the third column is the total of columns 1 and 2. The primary diagnosis is the main, or frequently, the only problem observed on a plant sample. If a second problem of equal or lesser importance was observed, it was entered as the secondary diagnosis. Occasionally, a problem may have only been diagnosed as a secondary problem, and not as a primary problem, thus a zero (0) will appear in the primary diagnosis column.

Referrals and consultations: Insect problems were generally identified or verified by a specialist in the Entomology Department. Chemical injuries on all commercially grown crops were diagnosed by a weed control specialist or crop specialist. Specialists in other departments at UK also may have provided input on diagnoses of abiotic problems.

**Table 1. SUMMARY OF DIAGNOSES<sup>a</sup> BY CROP CATEGORY AND CAUSAL AGENT TYPE**

<b>Crop Category</b>	<b>Abiotic Problems</b>	<b>Biotic<sup>b</sup> Problems</b>	<b>Chemical Injury</b>	<b>Inadequate Specimen</b>	<b>Insect Injury</b>	<b>Other<sup>c</sup></b>	<b>Total Diagnoses</b>
<b>Agronomic</b>							
Corn	30	26	3	1	0	4	64
Forages	4	27	2	0	2	2	37
Small grains	5	5	2	2	0	5	19
Soybeans	58	74	5	5	6	10	158
Tobacco	123	164	38	6	7	18	356
<b>Fruit</b>							
Small fruit	32	76	6	4	6	14	138
Tree fruit	9	89	1	1	35	14	149
<b>Herbs</b>	1	6	0	1	1	2	11
<b>Identifications</b>	0	35	0	5	0	0	40
<b>Ornamentals</b>							
Herbaceous/ Houseplants	23	107	6	5	7	16	164
Turfgrass	20	47	0	4	4	8	83
Woody	224	445 <sup>d</sup>	37	20	152	314 <sup>d</sup>	1192
<b>Vegetables</b>	73	284	39	21	27	45	489
<b>Miscellaneous</b>	3	4	0	1	0	2	10
<b>Total</b>	<b>605</b>	<b>1389</b>	<b>139</b>	<b>76</b>	<b>247</b>	<b>454</b>	<b>2910</b>

<sup>a</sup>All counts and totals include primary diagnoses plus secondary diagnoses.

<sup>b</sup>Refer to Table 2 for further breakdown of this category.

<sup>c</sup>"Other" includes the causal agent categories: No disease and Unknown.

<sup>d</sup>Numbers include 168 SOD survey samples (50 fungal disease diagnoses; 118 samples with no disease and 9 juniper).

<b>Crop Category</b>	<b>Bacterial</b>	<b>Fungal</b>	<b>Nematode</b>	<b>Virus</b>	<b>Other<sup>b</sup></b>
<b>Agronomic</b>					
Corn	1	25	0	0	0
Forages	0	27	0	0	0
Small grains	1	2	0	2	0
Soybeans	0	63	9	0	2
Tobacco	15	120	0	29	0
<b>Fruit</b>					
Small fruit	3	73	0	0	0
Tree fruit	38	47	0	0	4
<b>Herbs</b>					
	0	5	0	1	0
<b>Identifications</b>					
	0	25	0	0	10
<b>Ornamentals</b>					
Herbaceous/ Houseplants	10	91	1	5	0
Turfgrass	0	47	0	0	0
Woody	50	369 <sup>c</sup>	0	18	8
<b>Vegetables</b>					
	30	233	3	18	0
<b>Miscellaneous</b>					
	0	2	0	2	0
<b>Total</b>	<b>148</b>	<b>1129</b>	<b>13</b>	<b>75</b>	<b>24</b>

<sup>a</sup>All counts and totals include primary diagnoses plus secondary diagnoses.

<sup>b</sup>"Other" includes these categories: Animal (rodent and bird damage), Plant (plant identifications or parasitic plant) and Alga, Lichen and Phytoplasma.

<sup>c</sup>Number includes 50 Sudden Oak Death (SOD) survey samples with problems caused by fungi.

<b>Crop Category</b>	<b>No. of Plant Specimens</b>	<b>% of Total Plant Specimens</b>
Agronomic (-Tobacco)	199	7.93
Tobacco	299	11.91
Fruit	243	9.68
Herbs	10	0.40
Identifications	40	1.59
Ornamentals (+168 SODs + 9 PWNEs)	1291	51.39
Vegetables	419	16.69
Miscellaneous	9	0.36
<b>Total Plant Samples</b>	<b>2510</b>	<b>100.00</b>

**Table 4. SUMMARY OF DIAGNOSES BY CROP CATEGORY AND CROP**

<b>Crop Category and Crop</b>	<b>No. of Primary Diagnoses<sup>a</sup></b>	<b>No. of Secondary Diagnoses<sup>b</sup></b>	<b>Total Diagnoses<sup>c</sup></b>
<b>Agronomic</b>			
Corn	45	19	64
Forages	25	12	37
Small grains	16	3	19
Soybeans	113	45	158
Tobacco	299	57	356
<b>Fruit</b>			
Small fruit	119	19	138
Tree fruit	124	25	149
<b>Herbs</b>	10	1	11
<b>Identifications</b>	40	NA	40
<b>Ornamentals</b>			
Herbaceous and Houseplants	137	27	162
Turfgrass	73	10	83
Woody	1081 <sup>d</sup>	111	1194
<b>Vegetables</b>	419	70	489
<b>Miscellaneous</b>	9	1	10
<b>Total</b>	<b>2510</b>	<b>400</b>	<b>2910</b>

<sup>a</sup>The number of primary diagnoses corresponds to the number of different specimens examined.

<sup>b</sup>If a second problem was evident on the plant specimen it was considered the secondary diagnosis.

<sup>c</sup>Total diagnoses equals the number of primary plus the number of secondary diagnoses.

<sup>d</sup>Numbers include 168 SOD samples and 9 PWNE samples.

**Table 5. SUMMARY OF ROUTINE SAMPLES RECEIVED BY GROWER TYPE AND CROP CATEGORY**

Crop Group	Grower Type							
	Commercial		Homeowner		Research		Institution	
	Ext <sup>a</sup>	NE <sup>b</sup>	Ext <sup>a</sup>	NE <sup>b</sup>	Ext <sup>a</sup>	NE <sup>b</sup>	Ext <sup>a</sup>	NE <sup>b</sup>
<b>Agronomic</b>								
Corn	39	5	0	0	0	1	0	0
Forages	20	1	0	0	2	1	1	0
Small grains	13	1	0	0	1	1	0	0
Soybeans	108	3	0	0	0	2	0	0
Tobacco	272	13	0	0	4	10	0	0
<b>Fruit</b>								
Small Fruit	56	3	53	3	1	3	0	0
Tree Fruit	18	3	94	3	0	5	1	0
<b>Herbs</b>								
	2	1	3	1	2	1	0	0
<b>Identifications</b>								
	1	5	29	1	0	1	0	3
<b>Ornamental</b>								
Herbaceous/ Houseplants	71	6	49	2	0	2	4	3
Turfgrass	20	9	28	0	0	6	3	7
Woody	75	167	620	13	2	9	13	5
<b>Vegetable</b>								
	211	10	168	3	6	13	3	5
<b>Miscellaneous</b>								
	5	1	1	0	0	1	1	0
<b>Total</b>	<b>911</b>	<b>228</b>	<b>1045</b>	<b>26</b>	<b>18</b>	<b>56</b>	<b>26</b>	<b>23</b>
<b>Total/Grower Type</b>	<b>1139</b>		<b>1071</b>		<b>74</b>		<b>49</b>	

**Total No. of routine samples received = 2333**

<sup>a</sup>Ext = Extension samples submitted via County Extension Agents or Extension Specialists.

<sup>b</sup>NE = Non-extension samples submitted directly by the grower or other non-extension clients.



**Table 6. NUMBER OF ROUTINE SAMPLES REFERRED TO OTHER DEPARTMENTS, UK LABORATORY FACILITIES OR OUTSIDE AGENCIES FOR DIAGNOSIS\***

Department, Facility or Outside Agency	Crop Category					Total
	Agronomic	Fruit	Ornamental	Vegetable	Other	
Agdia, Inc.	7	0	2	1	0	10
Entomology Department	3	8	26	5	1	43
Horticulture Department	0	8	16	7	4	35
Plant & Soil Sciences Department	90	1	7	8	3	109
United States Department of Agriculture	0	0	1	0	0	1
<b>Total</b>						<b>198</b>
<b>Total no. of routine plant specimens</b>						<b>2333</b>
<b>Percentage of specimens referred outside Diagnostic Lab for diagnosis</b>						<b>8.5</b>

\*Numbers do not reflect the total no. of diagnoses and/or consultations conducted by other departments (See Table 9).

**Table 7. SPECIAL LABORATORY TESTS PERFORMED BY PLANT DISEASE DIAGNOSTIC LABORATORY\***

Test	No. of Tests
Polymerase Chain Reaction (PCR)	8
Culturing	31
Enzyme-linked Immunosorbent Assay (ELISA) (166 routine plant samples + 168 SOD)	334
Microscopy	1408
Nematode extraction (9 PWNE)	9
Soil tests	46
Visual examination	674
<b>Total</b>	<b>2510</b>

\*Based on 2333 routine plant samples, 9 PWNE and 168 SOD samples = 2510

Note: Some samples may have required more than one test but only the definitive test was recorded.

**Table 8. NO. OF ROUTINE PLANT SAMPLES RECEIVED BY COUNTY AND CROP CATEGORY  
(KY AND OUT-OF-STATE SOURCES)<sup>a</sup>**

COUNTY	TOTAL	AGRONOMIC <sup>b</sup>	TOBACCO	FRUIT	ORNAMENTAL	VEGETABLE	OTHER
ADAIR	15	5	2	1	6	1	0
ALLEN	18	0	1	3	0	14	0
ANDERSON	23	6	3	3	0	11	0
BALLARD	5	2	0	0	2	1	0
BARREN	26	6	8	0	9	2	1
BATH	6	2	0	0	1	3	0
BELL	4	0	0	0	2	2	0
BOONE	42	0	0	8	37	4	1
BOURBON	28	5	9	0	14	0	0
BOYD	18	0	0	0	12	4	2
BOYLE	19	3	2	2	9	2	1
BRACKEN	6	2	1	0	2	1	0
BREATHITT	15	0	1	2	2	7	3
BRECKINRIDGE	54	0	30	6	10	8	0
BULLITT	9	0	1	2	5	1	0
BUTLER	16	0	0	0	12	4	0
CALDWELL							
(+UKREC)	35	5	3	5	16	5	1
CALLOWAY	43	2	3	4	27	7	0
CAMPBELL	4	0	0	1	2	1	0
CARLISLE	6	0	0	1	5	0	0
CARROLL	1	1	0	0	0	0	0
CARTER	3	0	0	1	1	1	0
CASEY	27	1	3	1	11	10	1
CHRISTIAN	63	3	17	9	20	13	1
CLARK	14	0	2	1	10	1	0
CLAY	8	0	3	2	1	2	0
CLINTON	16	4	7	1	2	2	0
CRITTENDEN	32	0	0	3	20	5	4
CUMBERLAND	9	0	1	4	3	1	0
DAVISS	94	9	11	9	42	21	2
EDMONSON	6	0	1	2	0	3	0
ELLIOTT	6	0	1	0	3	2	0
ESTILL	16	2	0	3	6	4	1
FAYETTE							
(+LEX.							
CAMPUS)	307	13	12	14	226	26	16
FLEMING	32	5	9	2	13	3	0
FLOYD	0	0	0	0	0	0	0
FRANKLIN	20	3	0	1	12	2	2
FULTON	2	1	0	0	1	0	0
GALLATIN	1	0	0	0	1	0	0
GARRARD	10	0	1	2	4	1	2
GRANT	12	1	0	6	4	1	0
GRAVES	35	5	13	3	9	4	1
GRAYSON	4	0	0	2	0	2	0
GREEN	8	1	5	0	1	1	0
GREENUP	14	0	1	2	9	2	0
HANCOCK	6	1	1	3	0	0	1
HARDIN	10	3	3	0	1	3	0
HARLAN	7	0	0	0	5	2	0
HARRISON	20	5	4	4	4	3	0
HART	3	0	0	0	2	1	0
HENDERSON	35	6	1	4	21	2	1
HENRY	24	1	9	5	7	1	1
HICKMAN	1	1	0	0	0	0	0
HOPKINS	12	2	2	0	4	3	1
JACKSON	20	0	3	2	9	4	2
JEFFERSON	41	0	0	0	36	3	2
JESSAMINE	34	2	1	2	22	7	0

COUNTY	TOTAL	AGRONOMIC <sup>b</sup>	TOBACCO	FRUIT	ORNAMENTAL	VEGETABLE	OTHER
JOHNSON	4	0	0	0	4	0	0
KENTON	18	0	0	2	13	3	0
KNOTT	0	0	0	0	0	0	0
KNOX	9	0	0	0	0	9	0
LARUE	12	2	2	2	3	3	0
LAUREL	22	0	2	3	4	13	0
LAWRENCE	5	0	0	2	3	0	0
LEE	1	0	0	1	0	0	0
LESLIE	0	0	0	0	0	0	0
LETCHER	10	0	0	5	4	1	0
LEWIS	14	1	4	0	6	3	0
LINCOLN	27	1	4	3	9	10	0
LIVINGSTON	12	0	0	1	8	3	0
LOGAN	16	0	5	2	4	5	0
LYON	19	4	1	3	8	2	1
McCRACKEN	44	1	0	11	30	2	0
McCREARY	1	0	0	0	0	1	0
McLEAN	15	4	5	4	2	0	0
MADISON	9	0	1	0	4	3	1
MAGOFFIN	1	0	0	0	0	1	0
MARION	25	2	6	2	6	9	0
MARSHALL	36	0	0	8	19	8	1
MARTIN	0	0	0	0	0	0	0
MASON	16	2	9	0	3	2	0
MEADE	16	2	4	1	4	5	0
MENIFEE	15	0	0	5	6	4	0
MERCER	36	4	3	1	20	7	1
METCALFE	14	0	3	8	3	0	0
MONROE	6	3	1	0	0	2	0
MONTGOMERY	24	0	5	1	16	2	0
MORGAN	15	0	4	0	4	6	1
MUHLENBERG	28	2	7	2	3	14	0
NELSON	20	0	1	2	15	2	0
NICHOLAS	19	5	7	5	1	1	0
OHIO	2	0	0	0	2	0	0
OLDHAM	33	3	0	0	22	8	0
OWEN	14	0	3	1	3	7	0
OWSLEY	0	0	0	0	0	0	0
PENDELTON	8	0	2	3	2	1	0
PERRY	6	0	0	1	3	1	1
PIKE	20	0	0	8	7	5	0
POWELL	1	0	0	1	0	0	0
PULASKI	35	6	2	2	20	4	1
ROBERTSON	3	0	0	2	1	0	0
ROCKCASTLE	1	0	0	0	0	1	0
ROWAN	17	2	2	0	8	5	0
RUSSELL	16	6	1	0	6	3	0
SCOTT	44	3	2	2	25	12	0
SHELBY	26	2	1	3	17	3	0
SIMPSON	16	5	2	1	7	1	0
SPENCER	3	0	1	0	1	1	0
TAYLOR	20	4	3	0	7	6	0
TODD	26	3	8	4	4	7	0
TRIGG	21	2	3	4	10	1	1
TRIMBLE	11	8	0	1	2	0	0
UNION	11	1	0	1	8	1	0

COUNTY	TOTAL	AGRONOMIC <sup>b</sup>	TOBACCO	FRUIT	ORNAMENTAL	VEGETABLE	OTHER
WARREN	42	3	2	9	25	1	2
WASHINGTON	11	0	1	2	6	2	0
WAYNE	9	2	1	2	3	1	0
WEBSTER	10	4	4	1	0	1	0
WHITLEY	10	0	0	0	5	5	0
WOLFE	2	0	1	0	1	0	0
WOODFORD	51	3	7	2	31	6	2
OUT-OF-STATE	10	1	4	1	4	0	0
<b>TOTALS</b>	<b>2333</b>	<b>199</b>	<b>299</b>	<b>243</b>	<b>1114</b>	<b>419</b>	<b>59</b>

<sup>a</sup>Excludes SOD or PWNE samples collected by nursery inspectors.

<sup>b</sup>Agronomic crops include corn, soybeans, forages, and small grains.

**Table 9. NUMBER OF PRIMARY DIAGNOSES AND CONSULTATIONS MADE BY UK EXTENSION SPECIALISTS, DIAGNOSTICIANS AND RESEARCHERS**

Specialists, Researchers, Diagnosticians	Department	Primary Diagnosis <sup>a</sup>	Consultations <sup>b</sup>
Bailey, WA	Plant & Soil Sciences	24	26
Beale, JW (Diagnostician)	Plant Pathology	1223	69
Becker, DW	Horticulture	2	3
Berberich, SG	Horticulture	0	4
Bessin, RT	Entomology	12	16
Dunwell, WC	Horticulture	16	20
Dutton, SR	Horticulture	1	1
Fountain, WM	Horticulture	3	4
Gauthier, NW	Plant Pathology	4	16
Geneve, RL	Horticulture	0	1
Green, JD	Plant & Soil Sciences	17	21
Hershman, DE	Plant Pathology	3	8
Johnson, DW	Entomology	2	1
Kennedy, BS (Diagnostician)	Plant Pathology	594	102
Knott, CA	Plant & Soil Sciences	6	1
Lacefield, GD	Plant & Soil Sciences	2	
Lee, CD	Plant & Soil Sciences	8	3
Long, SJ (Diagnostic Assistant)	Plant Pathology	491	1
Martin, JR	Plant & Soil Sciences	15	5
Munshaw, GC	Plant & Soil Sciences	1	1
Murdock, LW	Plant & Soil Sciences	5	1
Pearce, RC	Plant & Soil Sciences	14	36
Philips, TD	Plant & Soil Sciences	0	1
Ritchey, EL	Plant & Soil Sciences	18	2
Saha, SK	Horticulture	3	20
Seebold, KW	Plant Pathology	4	21
Smith, SR	Plant & Soil Sciences	0	1
Strang, JG	Horticulture	6	6
Townsend, LH	Entomology	27	14
Vincelli, P	Plant Pathology	5	8
Wright, S	Horticulture	4	1

<sup>a</sup>Specialist or diagnostician making the primary diagnosis.

<sup>b</sup>In some cases more than one person was consulted, however only one name can be entered into the computer database. Therefore, these numbers may indicate fewer consultations than were actually performed.

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
<b>AGRONOMIC CROPS</b>					
CORN	ANTHRACNOSE	COLLETOTRICHUM	0	1	1
	BROWN SPOT	PHYSODERMA	2		2
	CHARCOAL ROT	MACROPHOMINA	0	1	1
	CHEMICAL	HERBICIDE	2		2
	CHEMICAL	UNKNOWN	1		1
	CULTURAL	IMPROPER DEPTH	4	3	7
	DISTORTION	UNKNOWN	1		1
	EAR/KERNEL ROT	PENICILLIUM	1		1
	EAR/KERNEL ROT	STENOCARPELLA	3		3
	EAR/KERNEL ROT	TRICHODERMA	2		2
	ENVIRONMENTAL	COMPACTION	7	8	15
	GRAY LEAF SPOT	CERCOSPORA	2	2	4
	HOLCUS SPOT	PSEUDOMONAS	1		1
	INAD	INAD	1		1
	LEAF STREAK	STENOCARPELLA	0	1	1
	ND	ND	4		4
	NO.LEAF BLIGHT	SETOSPHAERIA	3	2	5
	NUTRITIONAL	GENERAL	2		2
	NUTRITIONAL	K.DEFICIENCY	1		1
	NUTRITIONAL	MG.DEFICIENCY	3		3
	NUTRITIONAL	N.DEFICIENCY	1		1
	SO.LEAF BLIGHT	COCHLIOBOLUS	1		1
	SO.RUST	PUCCINIA	1	1	2
	STALK ROT	FUSARIUM	1		1
	STALK ROT	GIBBERELLA	1		1
ALFALFA	ANTHRACNOSE	COLLETOTRICHUM	0	2	2
	CHEMICAL	HERBICIDE	2		2
	INSECT	LEAF HOPPER	1	1	2
	LEAF SPOT	CERCOSPORA	0	1	1
	LEAF SPOT	LEPTOSPHAERULINA	1	1	2
	NUTRITIONAL	ACID SOIL	1		1
	NUTRITIONAL	GENERAL	1		1
	NUTRITIONAL	K.DEFICIENCY	1		1
	NUTRITIONAL	POOR NODULATION	0	1	1
	SPRING BLK.STEM	PHOMA	1	1	1
	STEM CANKER	RHIZOCTONIA	1		1
	SUMMER BLK.STEM	CERCOSPORA	2	1	3
BROMEGRASS	RUST	PUCCINIA	1		1
CLOVER	DAMPING OFF	FUSARIUM	0	1	1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	DAMPING OFF	PYTHIUM	1		1
	LEAF SPOT	PASSALORA	1		1
	ROOT ROT	PYTHIUM	1		1
FESCUE	ANTHRACNOSE	COLLETOTRICHUM	1		1
	ND	ND	1		1
ORCHARDGRASS	ANTHRACNOSE	COLLETOTRICHUM	0	3	3
	LEAF STREAK	CERCOSPORIDIUM	6		6
	ND	ND	1		1
TIMOTHY	LEAF STREAK	CERCOSPORIDIUM	1		1
SOYBEAN	ANTHRACNOSE	COLLETOTRICHUM	0	1	1
	BROWN SPOT	SEPTORIA	3	6	9
	CHARCOAL ROT	MACROPHOMINA	7	3	10
	CHEMICAL	GROWTH REGULATOR	4		4
	CHEMICAL	HERBICIDE	0	1	1
	CULTURAL	COMPACTION	0	5	5
	DOWNY MILDEW	PERONOSPORA	4	1	5
	ENVIRONMENTAL	COMPACTION	12		12
	ENVIRONMENTAL	STRESS	3		3
	FROGEYE	CERCOSPORA	2	9	11
	INAD	INAD	5		5
	INSECT	DECTES STEM BORE	1		1
	INSECT	MEALYBUG	1		1
	INSECT	SPIDER MITE	2		2
	INSECT	STINK BUG	1		1
	INSECT	THRIPS	1		1
	LEAF BLIGHT	CERCOSPORA	1		1
	LEAF SCORCH	UNKNOWN	1		1
	ND	ND	10		10
	NUTRITIONAL	GENERAL	1		1
	NUTRITIONAL	K.DEFICIENCY	27	1	28
	NUTRITIONAL	POOR NODULATION	3	5	8
	PHYSICAL INJURY	WILDLIFE	1	1	2
	POD/STEM BLIGHT	DIAPORTHE	2	1	3
	ROOT ROT	PHYTOPHTHORA	1		1
	SCN	HETERODERA	1	8	9
	STEM CANKER	DIAPORTHE	1		1
	SUDDEN DEATH	FUSARIUM	18	3	21
BARLEY	CULTURAL	IMPROPER DEPTH	0	1	1
	ENVIRONMENTAL	COLD INJURY	1		1
	ENVIRONMENTAL	WET FEET	1		1
	INAD	INAD	1		1
	NUTRITIONAL	N.DEFICIENCY	0	1	1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
CEREAL RYE	CULTURAL	OVERWATERING	1		1
MILLET	ND	ND	1		1
SORGHUM	INAD	INAD	1		1
	ND	ND	1		1
	ROOT ROT	PYTHIUM	1		1
WHEAT	BACT.STREAK	XANTHOMONAS	1		1
	CHEMICAL	HERBICIDE	1		1
	CHEMICAL	UNKNOWN	1		1
	ND	ND	3		3
	TAN SPOT	PYRENOPHORA	0	1	1
	VIRUS	WSBMV	2		2
TOBACCO	ADVENTITIOUS ROO	PHYSIOLOGICAL	1		1
	ANG.LEAF SPOT	PSEUDOMONAS	2		2
	BACT.SOFT ROT	ERWINIA	8		8
	BLACK SHANK	PHYTOPHTHORA	45		45
	BLACKLEG	ERWINIA	1		1
	BLUE MOLD	PERONOSPORA	4		4
	BROWN SPOT	ALTERNARIA	4	3	7
	CHEMICAL	FERTILIZER	1		1
	CHEMICAL	FUNGICIDE	5		5
	CHEMICAL	GROWTH REGULATOR	6		6
	CHEMICAL	HERBICIDE	15	2	17
	CHEMICAL	UNKNOWN	10		10
	COLLAR ROT	SCLEROTINIA	1		1
	CULTURAL	HEAT INJURY	1		1
	CULTURAL	TRANSPLANT SHOCK	16	2	18
	DAMPING OFF	PYTHIUM	1		1
	DAMPING OFF	RHIZOCTONIA	4		4
	ENVIRONMENTAL	COLD INJURY	4	1	5
	ENVIRONMENTAL	COMPACTION	3	2	5
	ENVIRONMENTAL	FREEZE	1		1
	ENVIRONMENTAL	FROST INJURY	1		1
	ENVIRONMENTAL	LIGHTNING	1		1
	ENVIRONMENTAL	STRESS	6		6
	ENVIRONMENTAL	SUNSCALD	1	1	2
	ENVIRONMENTAL	WET FEET	2		2
	FALSE BROOMRAPE	UNKNOWN	1		1
	FRENCHING	METABOLITES	1		1
	FROGEYE	CERCOSPORA	4	6	10
	GREEN TOBACCO	ENVIRONMENTAL	1		1
	HOLLOW STALK	ERWINIA	3		3
	IMPROPER CURING	GENERAL	1		1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	INAD	INAD	6		6
	INSECT	APHID	0	1	1
	INSECT	BUDWORM	0	1	1
	INSECT	CUTWORM	1		1
	INSECT	HORNWORM	0	1	1
	INSECT	STINK BUG	1		1
	INSECT	WIREWORM	0	2	2
	LEAF SPOT	BACTERIAL	1		1
	LEAF SPOT	ENVIRONMENTAL	7	2	9
	LEAF SPOT	PHYSIOLOGICAL	1		1
	ND	ND	18		18
	NUTRITIONAL	ACID SOIL	1	2	3
	NUTRITIONAL	B.DEFICIENCY	6		6
	NUTRITIONAL	GENERAL	10	3	13
	NUTRITIONAL	K.DEFICIENCY	10	3	13
	NUTRITIONAL	MN.TOXICITY	9		9
	NUTRITIONAL	N.DEFICIENCY	3		3
	NUTRITIONAL	P.DEFICIENCY	9	1	10
	NUTRITIONAL	SOLUBLE SALTS	1	1	2
	ROOT ROT	PYTHIUM	14	7	21
	ROOT/STEM ROT	PYTHIUM	2		2
	SORE SHIN	RHIZOCTONIA	3	8	11
	STORAGE MOLD	ASPERGILLUS	1		1
	STORAGE MOLD	CLADOSPORIUM	0	1	1
	TARGET SPOT	RHIZOCTONIA	3	2	5
	VIRUS	AMV	0	1	1
	VIRUS	TRSV	2	1	3
	VIRUS	TSWV	22	3	25
	WILT	FUSARIUM	7		7
	WX.FLECK	OZONE	6		6
<b>FRUIT CROPS: SMALL FRUITS</b>					
BLACKBERRY	CANE BLIGHT	LEPTOSPHERIA	2		2
	CANKER	FUNGAL	2		2
	CHEMICAL	HERBICIDE	1		1
	CULTURAL	TRANSPLANT SHOCK	1		1
	ENVIRONMENTAL	COLD INJURY	1		1
	ENVIRONMENTAL	WINTER INJURY	1	1	2
	INAD	INAD	1		1
	INSECT	BORER	2	1	3
	LEAF SPOT	CERCOSPORA	2	1	3
	LEAF SPOT	SEPTORIA	2		2
	ND	ND	2		2



**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	PHYSIOLOGICAL	WHITE DRUPLET	1		1
BLUEBERRY	ANTHRACNOSE	COLLETOTRICHUM	0	1	1
	CANKER/DIEBACK	BOTRYOSPHERIA	1		1
	CHEMICAL	UNKNOWN	1		1
	CULTURAL	IMPROPER PRUNING	1		1
	CULTURAL	INSUFFIC.WATER	1		1
	ENVIRONMENTAL	FREEZE	3	1	4
	ENVIRONMENTAL	HAIL INJURY	1		1
	ENVIRONMENTAL	WINTER INJURY	1		1
	INAD	INAD	1		1
	ND	ND	7		7
	NUTRITIONAL	ACID SOIL	1		1
	NUTRITIONAL	FE.DEFICIENCY	1		1
	NUTRITIONAL	GENERAL	2		2
	NUTRITIONAL	PH HIGH	0	1	1
	PHYSICAL INJURY	UNKNOWN	1		1
	ROOT ROT	PHYTOPHTHORA	15	1	16
	RUST	PUCCINIASTRUM	0	1	1
	TWIG BLIGHT	PHOMOPSIS	2		2
CURRENT	LEAF SPOT	CERCOSPORA	1		1
GRAPE	ANTHRACNOSE	ELSINOE	6		6
	BLACK ROT	GUIGNARDIA	9	1	10
	CHEMICAL	GROWTH REGULATOR	2		2
	CHEMICAL	HERBICIDE	1		1
	CROWN GALL	AGROBACTERIUM	1	1	2
	CULTURAL	OVER MATURE FRUI	1		1
	ENVIRONMENTAL	SUNSCALD	0	1	1
	INAD	INAD	1		1
	INSECT	BEETLE	1		1
	LEAF BLIGHT	ISARIOPSIS	1	1	2
	LEAF SPOT	CERCOSPORA	1		1
	LEAF SPOT	SEPTORIA	0	1	1
	ND	ND	3		3
	NUTRITIONAL	MG.DEFICIENCY	1		1
	ROOT ROT	ARMILLARIA	1		1
RASPBERRY	CANKER	UNKNOWN	1		1
	CHEMICAL	GROWTH REGULATOR	1		1
	ENVIRONMENTAL	WINTER INJURY	3	1	4
	INSECT	MITE	0	1	1
	LEAF SPOT	SEPTORIA	0	1	1
	LEAF SPOT	SPHAERULINA	2		2
	ROOT ROT	PHYTOPHTHORA	1		1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
STRAWBERRY	SPUR BLIGHT	DIDYMELLA	1		1
	ANG.LEAF SPOT	XANTHOMONAS	1		1
	ANTHRACNOSE	COLLETOTRICHUM	4		4
	CROWN ROT	PHYTOPHTHORA	1		1
	CULTURAL	IMPROPER MULCH	1		1
	CULTURAL	TRANSPLANT SHOCK	1		1
	ENVIRONMENTAL	COLD INJURY	1		1
	FRUIT ROT	RHIZOCTONIA	1	2	3
	INAD	INAD	1		1
	INSECT	GARDEN WEBWORM	1		1
	LEAF BLIGHT	PHOMOPSIS	0	1	1
	LEAF SPOT	MYCOSPHAERELLA	3		3
	LEATHER ROT	PHYTOPHTHORA	1		1
	ND	ND	2		2
	NUTRITIONAL	FE.DEFICIENCY	2		2
	NUTRITIONAL	SOLUBLE SALTS	1		1
SLIME MOLD	SP.	1		1	
<b>FRUIT CROPS: TREE FRUITS</b>					
APPLE	C/APPLE RUST	GYMNOSPORANGIUM	7	4	11
	CANKER	BOTRYOSPHAERIA	0	1	1
	CULTURAL	TRANSPLANT SHOCK	1		1
	ENVIRONMENTAL	HAIL INJURY	1		1
	ENVIRONMENTAL	WET FEET	1		1
	FIRE BLIGHT	ERWINIA	27		27
	FLYSPECK	SCHIZOTHYRIUM	1		1
	FROGEYE	BOTRYOSPHAERIA	4	1	5
	INAD	INAD	1		1
	INSECT	JAPANESE BEETLE	1	1	2
	INSECT	PLUM CURCULIO	2	6	8
	INSECT	ROSY APPLE APHID	1		1
	INSECT	SAN JOSE SCALE	1		1
	INSECT	SCALE	1		1
	INSECT	STINK BUG	1		1
	INSECT	WOOLLY APPLE APH	3		3
	LEAF SPOT	PHOMA	1		1
	LICHEN	SP.	0	1	1
	ND	ND	4		4
	SOOTY BLOTCH	GLOEODES	0	1	1
	SOOTY MOLD	SP.	1		1
	THREAD BLIGHT	CORTICIUM	1		1
APRICOT	BACT.SPOT	XANTHOMONAS	1		1
	INSECT	PLUM CURCULIO	0	1	1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
CHERRY	CANKER	BOTRYOSPHAERIA	1		1
	CULTURAL	TRANSPLANT SHOCK	1		1
	ENVIRONMENTAL	FROST INJURY	0	1	1
	INSECT	STINK BUG	1		1
	LEAF SPOT	COCCOMYCES	1		1
	ND	ND	1		1
	ROOT ROT	PHYTOPHTHORA	1		1
NECTARINE	LEAF CURL	TAPHRINA	1		1
PEACH	BACT.SPOT	XANTHOMONAS	3		3
	BROWN ROT	MONILINIA	5		5
	CANKER	CYTOSPORA	2		2
	ENVIRONMENTAL	COMPACTION	1		1
	ENVIRONMENTAL	FREEZE INJURY	2		2
	INSECT	BORER	0	1	1
	INSECT	CICADA	0	1	1
	INSECT	OR.FRUIT MOTH	1	1	2
	INSECT	TENT CATERPILLAR	0	1	1
	LEAF CURL	TAPHRINA	3		3
	LICHEN	SP.	2		2
	ND	ND	6		6
	SOUR PIT	YEAST	1		1
PEAR	FIRE BLIGHT	ERWINIA	2	1	3
	INSECT	APPLE MAGGOT	1		1
	INSECT	PLUM CURCULIO	1		1
	INSECT	UNKNOWN	1		1
	LEAF SPOT	GLOMERELLA	1		1
	ND	ND	1		1
	RUST	GYMNOSPORANGIUM	1		1
	THREAD BLIGHT	CORTICIUM	1		1
PECAN	CHEMICAL	HERBICIDE	1		1
	INSECT	PECAN WEEVIL	1		1
	INSECT	STINK BUG	2		2
	ND	ND	2		2
	PHYSICAL INJURY	RODENT	0	1	1
	PHYSIOLOGICAL	INTER.BREAKDOWN	1		1
	SCAB	CLADOSPORIUM	1		1
PLUM	BACT.SPOT	XANTHOMONAS	3		3
	BLACK KNOT	APIOSPORINA	4		4
	BROWN ROT	MONILINIA	1		1
	INSECT	PLUM CURCULIO	2	2	4
<b>HERBS</b>					
BASIL	DOWNY MILDEW	PERONOSPORA	1		1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	INAD	INAD	1		1
	ND	ND	2		2
	ROOT ROT	PYTHIUM	1		1
CILANTRO	INSECT	PLANT BUG	1		1
HOPS	LEAF SPOT	PHOMA	1		1
	VIRUS	UNKNOWN	1		1
SESAME	LEAF SPOT	CERCOSPORA	1		1
THYME	BLACK ROOT ROT	THIELAVIOPSIS	1		1
	NUTRITIONAL	SOLUBLE SALTS	0	1	1
<b>IDENTIFICATIONS</b>					
FUNGAL ID	ARMILLARIA	MELLEA	1		1
	AURICULARIA	AURICULA	1		1
	BASIDIOMYCETE	SP.	1		1
	CALVATIA	SP.	1		1
	CHLOROPHYLLUM	MOLYBDITES	1		1
	CYATHUS	SP.	1		1
	FUSARIUM	SP.	1		1
	GANODERMA	SP.	1		1
	GYRODON	MERULIOIDES	1		1
	INAD	INAD	3		3
	INONOTUS	DRYADEUS	2		2
	LACTARIUS	SP.	2		2
	LAETIPORUS	CINCINNATUS	1		1
	PHOLIOTA	SP.	1		1
	SCLERODERMA	AURANTIUM	1		1
	SLIME MOLD	SP.	1		1
	SLIME MOLD	STEMONITIS	1		1
	SMUT	USTILAGO	1		1
	SPHAEROBOLUS	SP.	2		2
	STEREUM	OSTREA	1		1
	TREMELLA	SP.	1		1
	TREMELLODENDRON	PALLIDUM	1		1
	TYROMYCES	CHIONEUS	1		1
PLANT ID	ACER	SACCHARUM	1		1
	ACER	SP.	1		1
	CYNODON	DACTYLON	1		1
	FRAXINUS	AMERICANA	1		1
	FRAXINUS	SP.	1		1
	GLEDITSIA	TRACANTHOS	1		1
	INAD	INAD	2		2
	MUHLENBERGIA	SCHREBERI	1		1
	NOSTOC	SP.	1		1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	QUERCUS	VELUTINA	1		1
	SAMBUCUS	CANADENSIS	1		1
<b>MISCELLANEOUS</b>					
HEMP	GENETIC MUTATION	CHIMERA	1		1
	LEAF SPOT	UNKNOWN	1		1
	POWDERY MILDEW	OIDIUM	1		1
	ROOT ROT	PYTHIUM	0	1	1
	VIRUS	UNKNOWN	1		1
MISCELLANEOUS	ND	ND	1		1
MOSS	INAD	INAD	1		1
	ND	ND	1		1
NICOTIANA	VIRUS	INSV	1		1
SOIL	NUTRITIONAL	ACID SOIL	1		1
<b>ORNAMENTALS: HERBACEOUS</b>					
AMARYLLIS	RED BLOTCH	STAGONOSPORA	1		1
BELL FLOWER	ROOT ROT	PYTHIUM	1		1
	ROOT ROT	RHIZOCTONIA	0	1	1
BIDENS	ROOT/CROWN ROT	RHIZOCTONIA	1		1
BLACKBERRY					
LILY	INSECT	SPIDER MITE	1		1
BRUGMANSIA	CHEMICAL	HERBICIDE	1		1
CALIBRACHOA	BLACK ROOT ROT	THIELAVIOPSIS	1		1
	NUTRITIONAL	FE.DEFICIENCY	1		1
	NUTRITIONAL	N.DEFICIENCY	1		1
	ROOT ROT	PYTHIUM	0	2	2
CANNA	ND	ND	1		1
	ROOT ROT	PHYTOPHTHORA	1		1
CAREX	BASIDIOMYCETE	SP.	1		1
CELOSIA	ROOT ROT	PYTHIUM	1		1
CHRYSANTHEMUM	BACT.BLIGHT	ERWINIA	2		2
	BACT.SPOT	PSEUDOMONAS	7		7
	CHEMICAL	HERBICIDE	1		1
	INSECT	ARMYWORM	0	1	1
	INSECT	THRIPS	1		1
	LEAF SPOT	ALTERNARIA	1		1
	ND	ND	3		3
	NUTRITIONAL	ACID SOIL	1		1
	NUTRITIONAL	GENERAL	1		1
	NUTRITIONAL	UNKNOWN	1		1
	ROOT ROT	PYTHIUM	5	8	13
	ROOT/STEM ROT	PYTHIUM	1		1
	WEB BLIGHT	RHIZOCTONIA	5		5
	WILT	FUSARIUM	9		9

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
COREOPSIS	POWDERY MILDEW	OIDIUM	1		1
	ROOT ROT	PYTHIUM	1		1
	ROOT ROT	RHIZOCTONIA	0	1	1
DAHLIA	INSECT	FUNGUS GNAT	0	1	1
	ROOT ROT	PYTHIUM	1		1
DAYLILY	ND	ND	1		1
	ROOT ROT	PYTHIUM	1		1
DUSTY MILLER	ROOT/STEM ROT	RHIZOCTONIA	1		1
EUPHORBIA	CHARCOAL ROT	MACROPHOMINA	1		1
FERN	NUTRITIONAL	SOLUBLE SALTS	0	1	1
	ROOT ROT	PYTHIUM	2		2
GALLARDIA	WHITE SMUT	ENTYLOMA	1		1
GERANIUM	CULTURAL	OEDEMA	1	1	2
	INAD	INAD	1		1
	ND	ND	1		1
	NUTRITIONAL	FE.TOXICITY	1		1
	ROOT ROT	PYTHIUM	1		1
GERBERA	CHEMICAL	FUNGICIDE	1		1
	NUTRITIONAL	SOLUBLE SALTS	0	1	1
	ROOT ROT	PYTHIUM	1		1
HELLEBORE	INAD	INAD	1		1
	VIRUS	HeNNV	1		1
HIBISCUS	CHEMICAL	UNKNOWN	1		1
	ND	ND	1		1
HOLLYHOCK	BASAL STEM ROT	UNKNOWN	2		2
	RUST	PUCCINIA	1		1
HOSTA	FOLIAR NEMA.	APHLENCHOIDES		1	1
	SO.BLIGHT	SCLEROTIUM	1		1
IMPATIENS	BLIGHT	BOTRYTIS	1		1
	LEAF BURN	UNKNOWN	0	1	1
	STEM ROT	RHIZOCTONIA	1		1
IRIS	ROOT ROT	PHYTOPHTHORA	1		1
	ROOT ROT	PYTHIUM	1		1
	ROOT ROT	RHIZOCTONIA		1	1
IVY	ANTHRACNOSE	COLLETOTRICHUM	3		3
	BACT.SPOT	XANTHOMONAS		1	1
	ENVIRONMENTAL	WINTER INJURY	2		2
JACOB'S LADDER	ROOT ROT	PYTHIUM	1		1
LILY OF THE VALLEY	ANTHRACNOSE	COLLETOTRICHUM		1	1
	CULTURAL	UNKNOWN	1		1
LIRIOPE	CROWN ROT	PHYTOPHTHORA	2		2
MARIGOLD	INSECT	SPIDER MITE	1		1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	INSECT	UNKNOWN	1		1
	ROOT ROT	PYTHIUM	1		1
	ROOT ROT	RHIZOCTONIA	0	1	1
OSTEOSPERMUM	ROOT/STEM ROT	PYTHIUM	1		1
PACHYSANDRA	LEAF/STEM BLIGHT	VOLUTELLA	3		3
PANSY	CHEMICAL	GROWTH REGULATOR	1		1
PEONY	ANTHRACNOSE	GLOEOSPORIUM	1		1
	BLACK ROOT ROT	THIELAVIOPSIS	0	1	1
	GENETIC MUTATION	CHIMERA	1		1
	GRAY MOLD	BOTRYTIS	1	1	2
	LEAF SPOT	CERCOSPORA	1		1
	ND	ND	1		1
	POWDERY MILDEW	ERYSIPHE	0	1	1
	ROOT/STEM ROT	PYTHIUM	1		1
PETUNIA	AERIAL BLIGHT	PHYTOPHTHORA	1		1
	CHEMICAL	CHLORINE	1		1
	INAD	INAD	1		1
	VIRUS	TMV	1		1
PHLOX	CHEMICAL	UNKNOWN	1		1
	ND	ND	2		2
POINSETTIA	LEAF SPOT	CERCOSPORA	1		1
	VIRUS	PNMV	3		3
RIVER CANE	ND	ND	1		1
RUBECKIA	LEAF SPOT	SEPTORIA	1		1
SNAPDRAGON	ROOT ROT	PYTHIUM	1		1
SUNFLOWER	BROWN STEM CANKE	PHOMOPSIS	1		1
	DOWNY MILDEW	PLASMOPARA	1		1
	INAD	INAD	1		1
	LEAF SPOT	ALTERNARIA	1		1
TUBER ROSE	ND	ND	1		1
VINCA	AERIAL BLIGHT	PHYTOPHTHORA	1		1
	ROOT ROT	RHIZOCTONIA	1		1
<b>ORNAMENTALS: INDOOR PLANTS</b>					
DRACAENA	ENVIRONMENTAL	LOW HUMIDITY	1		1
FICUS	ND	ND	1		1
JADE	LEAF SPOT	UNKNOWN	1		1
MING ARALIA	CULTURAL	OEDEMA	1		1
ORANGE TREE	ROOT ROT	PYTHIUM	1		1
	ROOT ROT	RHIZOCTONIA	0	1	1
PALM	INSECT	MEALYBUG	1		1
	ND	ND	2		2
PITCHER PLANT	INAD	INAD	1		1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
SCHEFFLERA	CULTURAL	OEDEMA	2		2
SHOOTING STAR	NUTRITIONAL	GENERAL	1		1
SPATHIPHYLLUM	ND	ND	1		1
TRADESCANTIA	LEAF SCORCH	UNKNOWN	1		1
<b>ORNAMENTALS: TURFGRASS</b>					
BENTGRASS	ANTHRACNOSE	COLLETOTRICHUM	6	1	7
	CHEMICAL	GROWTH REGULATOR	1		1
	CULTURAL	LAYERING	1		1
	ENVIRONMENTAL	DROUGHT	1		1
	ENVIRONMENTAL	STRESS	1		1
	ENVIRONMENTAL	WET FEET	4		4
	INAD	INAD	1		1
	ND	ND	3		3
	NUISANCE FUNGI	LYCOPERDON	1		1
	PHYSICAL INJURY	MOWER	0	1	1
	ROOT ROT	PYTHIUM	5	1	6
	SNOW MOLD	COPRINUS	1		1
	TAKE-ALL	GAEUMANNOMYCES	3		3
BERMUDAGRASS	SPRING DEAD SPOT	OPHIOSPHAERELLA	1		1
BLUEGRASS	BROWN PATCH	RHIZOCTONIA	1		1
	ENVIRONMENTAL	STRESS	1		1
	ND	ND	1		1
	NUTRITIONAL	ACID SOIL	1		1
	ROOT ROT	PYTHIUM	0	1	1
	SUMMER PATCH	MAGNAPORTHE	2		2
CRABGRASS	INAD	INAD	1		1
FESCUE	ANTHRACNOSE.BR	COLLETOTRICHUM	1		1
	BROWN PATCH	RHIZOCTONIA	12		12
	CULTURAL	THATCH LAYER	3		3
	ENVIRONMENTAL	WINTER INJURY	1		1
	FADING OUT	CURVULARIA	0	1	1
	INAD	INAD	1		1
	INSECT	SOD WEBWORM	2	2	4
	ND	ND	4		4
	NUTRITIONAL	GENERAL	1		1
RYEGRASS	ANTHRACNOSE	COLLETOTRICHUM	1		1
	BLIGHT	PYTHIUM	1		1
	BROWN PATCH	RHIZOCTONIA	1		1
	ENVIRONMENTAL	STRESSES	2		2
	ENVIRONMENTAL	WET FEET	1		1
	LEAF SPOT	CURVULARIA	0	3	3
TURFGRASS	BROWN PATCH	RHIZOCTONIA	1		1



**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	INAD	INAD	1		1
	RED THREAD	LAETISARIA	1		1
	SLIME MOLD	SP.	1		1
	SUMMER PATCH	MAGNAPORTHE	1		1
ZOYSIA	ENVIRONMENTAL	WINTER INJURY	1		1
<b>ORNAMENTALS: WOODY</b>					
ARBORVITAE	CULTURAL	TRANSPLANT SHOCK	2		2
	ENVIRONMENTAL	NEEDLE BLACKENIN	1		1
	ENVIRONMENTAL	WINTER DRYING	6	1	7
	INSECT	JUNIPER SCALE	1		1
	INSECT	LEAFMINER	1		1
	INSECT	SPIDER MITE	12		12
	ND	ND	9		9
	ROOT ROT	PHYTOPHTHORA	1		1
	TWIG BLIGHT	PESTALOTIOPSIS	2		2
ASH	ANTHRACNOSE	APIOGNOMONIA	4		4
	CANKER	BOTRYOSPHERIA	0	1	1
	CHEMICAL	GROWTH REGULATOR	1		1
	CHEMICAL	UNKNOWN	1		1
	INSECT	EMERALD ASH BORE	2		2
	LEAF SPOT	MARSONINA	1		1
	LEAF SPOT	MYCOSPHAERELLA	1		1
	ND	ND	6		6
ATLAS CEDAR	ND	ND	1		1
AUCUBA	ENVIRONMENTAL	WET FEET	1		1
AZALEA	ENVIRONMENTAL	COLD INJURY	1		1
	ENVIRONMENTAL	WET FEET	1		1
	LEAF/FLOWER GALL	EXOBASIDIUM	3		3
BALD CYPRESS	INSECT	RUST MITE	1		1
BARBERRY	CULTURAL	TRANSPLANT SHOCK	1		1
	LICHENS	SP.	1		1
	ND	ND	1		1
BEECH	BLEEDING CANKER	PHYTOPHTHORA	1		1
	CANKER	NECTRIA	1		1
BIRCH	CHEMICAL	GROWTH REGULATOR	1		1
	DIEBACK	MELANCONIUM	1		1
	INSECT	LACEBUG	1		1
BLACKGUM	ND	ND	2		2
BOXELDER	ND	ND	1		1
BOXWOOD	BLIGHT	CALONECTRIA	1		1
	CANKER	PSEUDONECTRIA	35	2	37
	CULTURAL	MULCH INJURY	1		1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	CULTURAL	TRANSPLANT SHOCK	1		1
	ENVIRONMENTAL	FREEZE INJURY	2	1	3
	ENVIRONMENTAL	WET FEET	3		3
	ENVIRONMENTAL	WINTER DRYING	2	1	3
	ENVIRONMENTAL	WINTER INJURY	1	5	6
	INSECT	BOXWOOD MITE	1		1
	INSECT	EUONYMUS SCALE	1		1
	INSECT	LEAFMINER	7	6	13
	INSECT	MITE	0	1	1
	INSECT	PSYLLID	0	1	1
	INSECT	SPIDER MITE	3		3
	INSECT	THRIPS	0	1	1
	LEAF/TWIG BLIGHT	MACROPHOMA	3	11	14
	ND	ND	2		2
	NUTRITIONAL	GENERAL	0	1	1
	PHYSICAL INJURY	UNKNOWN	1		1
	WOOD DECAY	BASIDIOMYCETE	0	1	1
BUCKEYE	LEAF SPOT	SEPTORIA	1		1
BUTTERFLY BUSH	INAD	INAD	1		1
	INSECT	SPIDER MITE	1		1
	ND	ND	1		1
CATALPA	LEAF SPOT	PHYLLOSTICTA	1		1
	ND	ND	1		1
CEDAR	ND	ND	1		1
CHAMAECYPARIS	ENVIRONMENTAL	WINTER INJURY	1		1
	NEEDLE BROWNING	NORMAL	1		1
CHERRY	BACT.CANKER	PSEUDOMONAS	2		2
	BACT.SPOT	XANTHOMONAS	2		2
	CANKER	BOTRYOSPHAERIA	3		3
	CANKER	CYTOSPORA	1		1
	CANKER	FUNGAL	1		1
	ENVIRONMENTAL	COLD INJURY	1		1
	ENVIRONMENTAL	FREEZE INJURY	3	1	4
	ENVIRONMENTAL	STRESSES	1		1
	ENVIRONMENTAL	WINTER INJURY	1	1	2
	FIRE BLIGHT	ERWINIA	1		1
	INAD	INAD	1		1
	INSECT	BEETLE	1		1
	INSECT	CICADA	1		1
	LEAF SPOT	COCCOMYCES	3	1	4
	LEAF SPOT	FUNGAL	1		1
	ND	ND	5		5

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
CHERRYLAUREL	ROOT ROT	PHYTOPHTHORA	1		1
	BACT.SPOT	XANTHOMONAS	2		2
	CANKER	CYTOSPORA	1		1
	CULTURAL	TRANSPLANT SHOCK	1		1
	ENVIRONMENTAL	WET FEET	2		2
	ENVIRONMENTAL	WINTER DRYING	1		1
	ENVIRONMENTAL	WINTER INJURY	2		2
	INAD	INAD	1		1
	INSECT	SPIDER MITE	0	1	1
	ND	ND	1		1
	ROOT ROT	ARMILLARIA	1		1
	ROOT ROT	PHYTOPHTHORA	1		1
	CHESTNUT	CULTURAL	OVERWATERING	1	
NUTRITIONAL		GENERAL	1		1
CRABAPPLE	FROGEYE	BOTRYOSPHAERIA	2		2
	ENVIRONMENTAL	STRESS	0	1	1
	FIRE BLIGHT	ERWINIA	0	1	1
	ND	ND	1		1
	SCAB	VENTURIA	4		4
CRAPE MYRTLE	BACT.SPOT	XANTHOMONAS	1		1
	ENVIRONMENTAL	WET FEET	1		1
	INAD	INAD	1		1
	POWDERY MILDEW	ERYSIPHE	1		1
CRYPTOMERIA	CULTURAL	TRANSPLANT SHOCK	1		1
	ENVIRONMENTAL	WINTER INJURY	2	1	3
	TWIG BLIGHT	PESTALOTIOPSIS	1	1	2
CYPRESS	CULTURAL	TRANSPLANT SHOCK	1		1
	TWIG BLIGHT	KABATINA	1		1
DOGWOOD	ANTHRACNOSE	DISCULA	1		1
	CHEMICAL	GROWTH REGULATOR	1		1
	CHEMICAL	HERBICIDE	1		1
	CULTURAL	TRANSPLANT SHOCK	4		4
	ENVIRONMENTAL	FREEZE INJURY	1		1
	ENVIRONMENTAL	FROST CRACK	1		1
	INSECT	CICADA	0	1	1
	INSECT	SCALE	1		1
	LEAF SCORCH	UNKNOWN	1		1
	LEAF SPOT	SEPTORIA	2		2
	LICHEN	SP.	0	1	1
	ND	ND	1		1
	NUTRITIONAL	FE.DEFICIENCY	0	1	1
	POWDERY MILDEW	ERYSIPHE	4		4

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	ROOT ROT	ARMILLARIA	1		1
	SPOT ANTHRACNOSE	ELSINOE	8	2	10
DOUGLAS FIR	ENVIRONMENTAL	WINTER DRYING	0	1	1
	ND	ND	1		1
	ROOT ROT	PHYTOPHTHORA	0	1	1
	SWISS NEEDLECAST	PHAEOCRYPTOPUS	4		4
ELM	ANTHRACNOSE	ASTEROMA	1		1
	BLACK LEAF SPOT	STEGOPHORA	3		3
	INAD	INAD	2		2
	INSECT	ERIOPHYID	1		1
	LEAF BLISTER	TAPHRINA	1		1
	LEAF SPOT	PHYLLOSTICTA	1		1
	LEAF SPOT	UNKNOWN	1		1
	ND	ND	6		6
EUONYMUS	ANTHRACNOSE	GLOEOSPORIUM	2		2
	ENVIRONMENTAL	WINTER DRYING	1		1
	INAD	INAD	1		1
	INSECT	SCALE	2		2
	INSECT	SPIDER MITE	0	1	1
	ND	ND	2		2
	NUTRITIONAL	GENERAL	0	1	1
	POWDERY MILDEW	OIDIUM	1		1
FALSE CYPRESS	CULTURAL	TRANSPLANT SHOCK	1		1
	INSECT	SPIDER MITE	0	1	1
FIR	CULTURAL	TRANSPLANT SHOCK	1		1
	ENVIRONMENTAL	STRESS	1		1
	ND	ND	1		1
FORSYTHIA	CANKER	FUNGAL	1		1
	CHEMICAL	GROWTH REGULATOR	1		1
	ROOT ROT	PHYTOPHTHORA	1		1
FRINGE TREE	WILT	VERTICILLIUM	1		1
GINKGO	ENVIRONMENTAL	COLD INJURY	1		1
	ENVIRONMENTAL	UNKNOWN	1		1
HAWTHORN	ENVIRONMENTAL	WINTER INJURY	1		1
	FIRE BLIGHT	ERWINIA	1		1
HEMLOCK	ENVIRONMENTAL	STRESS	1		1
	ENVIRONMENTAL	WET FEET	2		2
	ENVIRONMENTAL	WINTER DRYING	1		1
	INSECT	MITE	1		1
	INSECT	SCALE	0	1	1
	ND	ND	4		4
	ROOT ROT	PHYTOPHTHORA	1		1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
HIBISCUS	CHEMICAL	GROWTH REGULATOR	1		1
HICKORY	CHEMICAL	GROWTH REGULATOR	1		1
	CHEMICAL	HERBICIDE	1		1
	DOWNY SPOT	MICROSTROMA	0	1	1
	INSECT	GALL	1		1
	INSECT	PHYLLOXERA	1		1
HOLLY	ANTHRACNOSE	COLLETOTRICHUM	1		1
	ARTILLERY FUNGUS	SPHAEROBOLUS	1		1
	BLACK ROOT ROT	THIELAVIOPSIS	2	1	2
	CANKER	BOTRYOSPHAERIA	5		5
	ENVIRONMENTAL	STRESS	1		1
	ENVIRONMENTAL	FREEZE INJURY	0	1	1
	ENVIRONMENTAL	WINTER DRYING	14		14
	ENVIRONMENTAL	WINTER INJURY	7	1	8
	INAD	INAD	2		2
	INSECT	APHID	0	1	1
	INSECT	MITE	0	1	1
	INSECT	SCALE	4	1	5
	INSECT	UNKNOWN	1		1
	LEAF SPOT	FUNGAL	1		1
	MUTATION	GENETIC	1		1
	ND	ND	7		7
	PHYSICAL INJURY	HAIL	0	1	1
	ROOT ROT	PHYTOPHTHORA	1		1
	SPINE SPOT	SPINE INJURY	1		1
HONEYLOCUST	CANKER	THYRONECTRIA	1		1
	BLIGHT	INSOLIBASIDIUM	1		1
	ND	ND	1		1
HORNBEAM	CULTURAL	TRANSPLANT SHOCK	1		1
HORSECHESTNUT	ND	ND	2		2
HYDRANGEA	BACT.SPOT	XANTHOMONAS	1	1	2
	CHEMICAL	GROWTH REGULATOR	1		1
	CHEMICAL	HERBICIDE	3		3
	LEAF SPOT	CERCOSPORA	5		5
	LEAF SPOT	UNKNOWN	1		1
	ND	ND	3		3
	POWDERY MILDEW	OIDIUM	1		1
	ROOT ROT	ARMILLARIA	1		1
JUNIPER	C/A RUST	GYMNOSPORANGIUM	1		1
	CANKER	CYTOSPORA	1		1
	ENVIRONMENTAL	WINTER DRYING	1		1
	ENVIRONMENTAL	WINTER INJURY	2		2

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	INAD	INAD	1		1
	INSECT	SCALE	1	1	2
	INSECT	SPIDER MITE	6		6
	INSECT	SPITTLEBUG	1		1
	ND	ND	4		4
	PHYSICAL INJURY	UNKNOWN	1		1
	TWIG BLGHT	PHOMOPSIS	1		1
KENTUCKY COFFEETREE	ND	ND	1		1
LARCH	ND	ND	2		2
LEYLAND CYPRESS	CANKER	BOTRYOSPHAERIA	3		3
	CANKER	CYTOSPORA	1		1
	CANKER	SEIRIDIUM	7		7
	CULTURAL	TRANSPLANT SHOCK	1	2	3
	ENVIRONMENTAL	STRESS	0	2	2
	ENVIRONMENTAL	WINTER DRYING	13		13
	ENVIRONMENTAL	WINTER INJURY	5		5
	INAD	INAD	1		1
	INSECT	JUNIPER SCALE	0	1	1
	INSECT	SPIDER MITE	0	1	1
	INSECT	SPITTLEBUG	1		1
	LEAF SCORCH	UNKNOWN	1		1
	ND	ND	6		6
	NEEDLE BLIGHT	CERCOSPORIDIUM	1		1
	TWIG BLIGHT	PHOMOPSIS	1		1
LILAC	CULTURAL	TRANSPLANT SHOCK	1		1
	INAD	INAD	1		1
	ND	ND	1		1
	POWDERY MILDEW	OIDIUM	1		1
	ROOT ROT	PHYTOPHTHORA	1		1
MAGNOLIA	CHEMICAL	GROWTH REGULATOR	1		1
	ENVIRONMENTAL	WINTER DRYING	8		8
	ENVIRONMENTAL	WINTER INJURY	1		1
	INSECT	SCALE	1		1
	LICHEN	SP.	0	1	1
	ND	ND	3		3
	POWDERY MILDEW	OIDIUM	1		1
	SLIME FLUX	SP.	1		1
MAHONIA	INSECT	SPIDER MITE	1		1
MAPLE	ANTHRACNOSE	DISCULA	1		1
	ANTHRACNOSE	KABATIELLA	10		10
	BACT.SCORCH	XYLELLA	4		4

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	CANKER	BOTRYOSPHAERIA	3		3
	CANKER	PHYTOPHTHORA	3		3
	CHEMICAL	GROWTH REGULATOR	1		1
	CHEMICAL	UNKNOWN	1		1
	CULTURAL	TRANSPLANT SHOCK	7	1	8
	ENVIRONMENTAL	COLD INJURY	1		1
	ENVIRONMENTAL	STRESSES	8		8
	ENVIRONMENTAL	WET FEET	1		1
	ENVIRONMENTAL	WINTER INJURY	0	1	1
	GIRDLING ROOT	CULTURAL	1		1
	INAD	INAD	2		2
	INSECT	BORER	1		1
	INSECT	LACEBUG	0	1	1
	INSECT	MITE	1		1
	INSECT	SCALE	3	2	5
	LEAF BLOTCH	VENTURIA	1		1
	LEAF SPOT	PHLOEOSPORA	1		1
	LEAF SPOT	PHOMOPSIS	1		1
	LEAF SPOT	PHYLLOSTICTA	3	1	4
	LEAF SPOT	SEPTORIA	1		1
	LEAF SPOT	UNKNOWN	1		1
	ND	ND	18		18
	TAR SPOT	RHYTISMA	2		2
	WILT	VERTICILLIUM	8		8
MULBERRY	LEAF SPOT	PHLOEOSPORA	1		1
NANDINA	ENVIRONMENTAL	WINTER INJURY	1		1
	VIRUS	NaMV	1		1
NINEBARK	POWDERY MILDEW	SPHAEROTHECA	1		1
OAK	ANTHRACNOSE	APIOGNOMONIA	5	1	6
	BACT.SCORCH	XYLELLA	21		21
	CANKER	BOTRYOSPHAERIA	2		2
	CANKER	PHYTOPHTHORA	1		1
	CHEMICAL	GROWTH REGULATOR	6		6
	CHEMICAL	HERBICIDE	2		2
	CHEMICAL	UNKNOWN	1		1
	CULTURAL	TRANSPLANT SHOCK	2		2
	ENVIRONMENTAL	FROST INJURY	0	2	2
	ENVIRONMENTAL	WET FEET	1		1
	INSECT	CICADA	0	1	1
	INSECT	CATERPILLAR	2		2
	INSECT	CYNIPID WASP	1		1
	INSECT	GALL	1	2	3

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	INSECT	GOUTY OAK GALL	1		1
	INSECT	HORNED OAK GALL	5		5
	INSECT	JUMPING OAK GALL	6	2	8
	INSECT	LEAF GALL	1		1
	INSECT	LECANIUM SCALE	1		1
	INSECT	MIDGE	1		1
	INSECT	MITE	1		1
	INSECT	OAK SLUG SAWFLY	1	1	2
	INSECT	OAK VEIN GALL	2		2
	INSECT	ROLY POLY GALL	1		1
	INSECT	SPIDER MITE	1		1
	INSECT	WASP	2		2
	LEAF SPOT	TUBAKIA	2	1	3
	ND	ND	23		23
	NUTRITIONAL	FE.DEFICIENCY	4		4
	PHYSICAL INJURY	SQUIRREL	2		2
	PHYSICAL INJURY	WILDLIFE	1		1
	POWDERY MILDEW	SP.	0	1	1
PAULOWNIA	INAD	INAD	1		1
PEAR	CHEMICAL	GROWTH REGULATOR	3		3
	CHEMICAL	HERBICIDE	1		1
	CHEMICAL	UNKNOWN	2		2
	ENVIRONMENTAL	STRESSES	5	1	6
	FIRE BLIGHT	ERWINIA	9		9
	INAD	INAD	1		1
	ND	ND	2		2
	PHYSICAL INJURY	UNKNOWN	1		1
PHOTINIA	CANKER	BOTRYOSPHAERIA	1		1
	ENVIRONMENTAL	WINTER DRYING	1		1
	LEAF SPOT	FUNGAL	1		1
	LEAF SPOT	PESTALOTIA	1		1
PINE	BASIDIOMYCETE	SP.	1		1
	CHEMICAL	HERBICIDE	1		1
	CHEMICAL	UNKNOWN	0	1	1
	CULTURAL	INSUFF. WATER	3		3
	ENVIRONMENTAL	STRESS	1		1
	ENVIRONMENTAL	WINTER DRYING	1		1
	INAD	INAD	1		1
	INSECT	APHID	0	1	1
	INSECT	PINE BRK ADELGID	3	1	4
	INSECT	PINE SAWFLY	1		1
	INSECT	SAWFLY	2		2



**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	INSECT	SCALE	1	1	2
	INSECT	SHOOT BORER	1		1
	ND	ND	8		8
	NEEDLE BLIGHT	DOTHISTROMA	7		7
	ROOT ROT	PHYTOPHTHORA	1		1
	TIP BLIGHT	SPHAEROPSIS	3	1	4
	WP.DECLINE	ENVIRONMENTAL	7		7
PLUM	BACT.SPOT	XANTHOMONAS	1		1
POPLAR	LEAF SPOT	MARSSONINA	2		2
	ND	ND	2		2
PRIVET	CHEMICAL	HERBICIDE	1		1
QUINCE	LEAF SPOT	PHYLLOSTICTA	1		1
	ROOT ROT	PHYTOPHTHORA	1		1
REDBUD	ENVIRONMENTAL	LIGHTNING	1		1
	ENVIRONMENTAL	STRESS	1		1
	INAD	INAD	1		1
	ND	ND	5		5
	ROOT ROT	ARMILLARIA	1		1
	VIRUS	UNKNOWN	1		1
RHODODENDRON	CANKER	BOTRYOSPHERA	2		2
	CULTURAL	TRANSPLANT SHOCK	1		1
	ENVIRONMENTAL	WINTER DRYING	2		2
	LICHENS	SP.	1		1
	ND	ND	1		1
	NUTRITIONAL	FE.DEFICIENCY	0	1	1
ROSE	BLACK SPOT	DIPLOCARPON	4	2	6
	CANKER	BOTRYOSPHERA	1		1
	CANKER	CONIOTHYRIUM	1		1
	CANKER	CRYPTOSPORELLA	2		2
	CHEMICAL	HERBICIDE	2		2
	CHEMICAL	UNKNOWN	1		1
	COLLAR ROT	PHYTOPHTHORA	1		1
	CULTURAL	TRANSPLANT SHOCK	2		2
	ENVIRONMENTAL	WINTER INJURY	1	2	3
	FASCIATION	UNKNOWN	1		1
	INSECT	SAWFLY	5	1	6
	INSECT	SPIDER MITE	1	1	2
	LEAF SPOT	CERCOSPORA	1	1	2
	LEAF SPOT	TUBAKIA	1		1
	ND	ND	7		7
	NUTRITIONAL	ACID SOIL	0	1	1
	ROOT ROT	PHYTOPHTHORA	1		1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	VIRUS	ROSE MOSAIC	1	1	2
	VIRUS	ROSE ROSETTE	14		14
SEQUOIA	ENVIRONMENTAL	WINTER INJURY	1		1
SERVICEBERRY	C/A RUST	GYMNOSPORANGIUM	1		1
	ROOT ROT	PHYTOPHTHORA	1		1
SEVEN SONS	CULTURAL	TRANSPLANT SHOCK	1		1
SMOKETREE	ND	ND	1		1
SORBUS	INSECT	SPIDER MITE	1		1
SPICE BUSH	ND	ND	1		1
SPIREA	ND	ND	2		2
SPRUCE	CULTURAL	TRANSPLANT SHOCK	4		4
	ENVIRONMENTAL	DROUGHT	1		1
	ENVIRONMENTAL	STRESS	1	1	2
	ENVIRONMENTAL	WET FEET	1		1
	INAD	INAD	1		1
	INSECT	BAGWORM	0	1	1
	INSECT	NEEDLE MINER	1		1
	INSECT	SPIDER MITE	10	1	11
	ND	ND	21		21
	NEEDLE BLIGHT	DOTHISTROMA	0	1	1
	NEEDLE BLIGHT	STIGMINA	4	2	6
	NEEDLE CAST	RHIZOSPHAERA	23	1	24
	PHYSICAL INJURY	UNKNOWN	1		1
	ROOT ROT	PHYTOPHTHORA	2		2
	SOOTY MOLD	SP.	1		1
SUMAC	CHEMICAL	HERBICIDE	1		1
	WILT	VERTICILLIUM	1		1
SWEETGUM	ND	ND	1		1
SYCAMORE	ANTHRACNOSE	APIOGNOMONIA	1		1
	BACT.SCORCH	XYLELLA	2		2
	LICHEN	SP.	1		1
TAXUS	INSECT	MITE	1		1
	ND	ND	2		2
	PHYSICAL INJURY	UNKNOWN	1		2
	ROOT ROT	PHYTOPHTHORA	3		3
TULIPTREE	INAD	INAD	1		1
	ND	ND	2		2
	POWDERY MILDEW	SP.	1		1
	WILT	VERTICILLIUM	1		1
UNKNOWN	LEAF SPOT	UNKNOWN	1		1
VIBURNUM	CULTURAL	TRANSPLANT SHOCK	1		1
	ND	ND	2		2

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	ROOT ROT	PHYTOPHTHORA	1		1
WALNUT	LEAF SPOT	CYLINDROSPORIUM	1		1
	ND	ND	2		2
WEIGELA	ENVIRONMENTAL	COLD INJURY	1		1
WILLOW	BACT.BLIGHT	PSEUDOMONAS	1		1
	CANKER	BOTRYOSPHERIA	2		2
	CANKER	CYTOSPORA	5		5
	CANKER	FUNGAL	0	1	1
	CHEMICAL	GROWTH REGULATOR	1		1
	CULTURAL	TRANSPLANT SHOCK	1		1
	INSECT	BEETLE	0	1	1
	LEAF SPOT	CERCOSPORA	1		1
	ND	ND	5		5
	PHYSICAL INJURY	UNKNOWN	2		2
	RUST	MELAMPSORA	1		1
YELLOWWOOD	ND	ND	1		1
<b>VEGETABLES</b>					
ASPARAGUS	CROWN ROT	FUSARIUM	1	1	2
	LEAF SPOT	CERCOSPORA	1		1
BEAN	ANG.LEAF SPOT	PHAEOSARIOPSIS	4		4
	ANTHRACNOSE	COLLETOTRICHUM	3		3
	ASHY STEM BLIGHT	MACROPHOMINA	1		1
	BROWN SPOT	PSEUDOMONAS	1		1
	CHEMICAL	UNKNOWN	1		1
	ENVIRONMENTAL	WIND INJURY	2		2
	INSECT	SPIDER MITE	2		2
	LEAF SPOT	CERCOSPORA	1		1
	ND	ND	1		1
	NUTRITIONAL	FERTILIZER BURN	1		1
	NUTRITIONAL	HIGH PH	1		1
	NUTRITIONAL	N.DEFICIENCY	1		1
	ROOT/STEM ROT	FUSARIUM	2		2
	ROOT/STEM ROT	PYTHIUM	1		1
	ROOT/STEM ROT	RHIZOCTONIA	1		1
	RUST	UROMYCES	2		2
	STEM DECAY	THIELAVIOPSIS	0	1	1
	WILT	FUSARIUM	1		1
BROCCOLI	CHEMICAL	GROWTH REGULATOR	1		1
	LEAF SPOT	ALTERNARIA	1		1
	ND	ND	2		2
	NUTRITIONAL	SOLUBLE SALTS	1		1
	WINDWHIP	ENVIRONMENTAL	1		1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
CABBAGE	NUTRITIONAL	GENERAL	1		1
	ROOT ROT	PYTHIUM	1		1
CANTALOUPE	ANG.LEAF SPOT	PSEUDOMONAS	1		1
	ANTHRACNOSE	COLLETOTRICHUM	1		1
	BACT.WILT	ERWINIA	3		3
	CHEMICAL	UNKNOWN	1		1
	FRUIT DECAY	FUSARIUM	1		1
	GUMMY ST.BLIGHT	DIDYMELLA	1		1
	LEAF BLIGHT	ALTERNARIA	3	1	4
	LEAF SPOT	CERCOSPORA	0	2	2
COLLARD	DISTORTION	UNKNOWN	1		1
	NUTRITIONAL	MG.DEFICIENCY	1		1
CORN	CHEMICAL	HERBICIDE	1		1
	CULTURAL	PLANTING DEPTH	0	1	1
	ENVIRONMENTAL	COMPACTION	1		1
	ENVIRONMENTAL	DRIVING RAIN	1		1
	INSECT	STINK BUG	1		1
	KERNEL DECAY	YEAST	0	1	1
	ND	ND	1		1
	NO.LEAF BLIGHT	SETOSPHAERIA	1	1	2
	NUTRITIONAL	GENERAL	0	1	1
	NUTRITIONAL	K.DEFICIENCY	0	1	1
	PHYSICAL INJURY	UNKNOWN	1		1
	RUST	PUCCINIA	1		1
	SMUT	USTILAGO	1		1
	SO.RUST	PUCCINIA	1		1
	STALK ROT	ERWINIA	1		1
	STALK ROT	FUSARIUM	1		1
CUCUMBER	ANTHRACNOSE	COLLETOTRICHUM	1		1
	BLACK SPOT	ALTERNARIA	1		1
	DAMPING OFF	PYTHIUM	1		1
	DOWNY MILDEW	PSEUDOPERONOSPOR	3		3
	ENVIRONMENTAL	SUNSCALD	1		1
	INAD	INAD	2		2
	LEAF BLIGHT	ALTERNARIA	2	2	4
	ND	ND	2		2
	ROOT ROT	PYTHIUM	2	1	3
	VIRUS	TSWV	1		1
EGGPLANT	INAD	INAD	1		1
	ND	ND	1		1
	WILT	VERTICILLIUM	1		1
GARLIC	BACT.SOFT ROT	ERWINIA	0	1	1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	BULB ROT	PENICILLIUM	1		1
KOHLRABI	ENVIRONMENTAL	SUNSCALD	1		1
LETTUCE	GRAY MOLD	BOTRYTIS	1		1
	INSECT	THRIPS	1		1
	NUTRITIONAL	SOLUBLE SALTS	1		1
	ROOT ROT	PYTHIUM	1		1
MELON	BACT.WILT	ERWINIA	1		1
	INSECT	MITE	0	1	1
	LEAF BLIGHT	ALTERNARIA	1		1
	LEAF SPOT	CERCOSPORA	1		1
OKRA	INAD	INAD	1		1
	ND	ND	2		2
ONION	BACT.SOFT ROT	ERWINIA	0	1	1
	BULB ROT	FUSARIUM	1		1
PEA	INAD	INAD	1		1
	ND	ND	1		1
	NUTRITIONAL	ACID SOIL	1		1
PEPPER	ANTHRACNOSE	COLLETOTRICHUM	1	2	3
	BACT.SPOT	XANTHOMONAS	4		4
	BLIGHT	PHYTOPHTHORA	3		3
	BLOSSOM END ROT	CA.DEF/DRY	3		3
	CHEMICAL	BURN	1		1
	ENVIRONMENTAL	COLD INJURY	1		1
	INAD	INAD	2		2
	INSECT	BROAD MITE	1		1
	INSECT	SPIDER MITE	1		1
	INSECT	THRIPS	1		1
	INSECT	WHITEFLY	0	1	1
	ND	ND	5		5
	ROOT ROT	PYTHIUM	2		2
	ROOT/STEM ROT	PYTHIUM	1		1
	STEM ROT	SCLEROTINIA	1		1
	VIRUS	AMV	0	1	1
POTATO	DRY ROT	FUSARIUM	1	1	2
	FRUIT PRODUCTION	ENVIRONMENTAL	0	1	1
	INSECT	FLEA BEETLE	1		1
	ND	ND	2		2
	ROOT/STEM ROT	FUSARIUM	0	1	1
	ROOT/STEM ROT	RHIZOCTONIA	1		1
	SCAB	STREPTOMYCES	4		4
PUMPKIN	AIR POLLUTION	OZONE	1		1
	ANG.LEAF SPOT	PSEUDOMONAS	3		3

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	ANTHRACNOSE	COLLETOTRICHUM	2		2
	BACT.SPOT	XANTHOMONAS	1		1
	CHEMICAL	HERBICIDE	2		2
	COTTONY LEAK	PYTHIUM	1		1
	CROWN/ROOT ROT	FUSARIUM	1		1
	DOWNY MILDEW	PSEUDOPERONOSPOR	2		2
	FRUIT ROT	FUSARIUM	0	1	1
	FRUIT ROT	PHYTOPHTHORA	1		1
	LEAF BLIGHT	ALTERNARIA	1		1
	LEAF SPOT	CERCOSPORA	0	1	1
	ND	ND	1		1
	POWDERY MILDEW	SPHAEROTHECA	2	2	4
	SOFT ROT	ERWINIA	0	1	1
	WET ROT	CHOANEPHORA	1		1
RHUBARB	CROWN ROT	PHYTOPHTHORA	1		1
	LEAF SPOT	ALTERNARIA	1		1
	LEAF SPOT	ASCOCHYTA	1		1
	LEAF SPOT	CERCOSPORA	1		1
SPINACH	CULTURAL	WET FEET	0	1	1
	ROOT ROT	PHYTOPHTHORA	1		1
SQUASH	ANG.LEAF SPOT	PSEUDOMONAS	1		1
	BACT.WILT	ERWINIA	2		2
	CHEMICAL	HERBICIDE	1		1
	DAMPING OFF	PYTHIUM	1		1
	DISTORTION	UNKNOWN	1		1
	DOWNY MILDEW	PSEUDOPERONOSPOR	1		1
	FRUIT ROT	PHYTOPHTHORA	1		1
	INSECT	STALK BORER	0	1	1
	INSECT	VINE BORER	1		1
	LEAF SPOT	CERCOSPORA	0	1	1
	MEASLES	PHYSIOLOGICAL	1		1
	ND	ND	1		1
	POWDERY MILDEW	OIDIUM	1		1
	ROOT/STEM ROT	FUSARIUM	2		2
	SILVERING	PHYSIOLOGICAL	1		1
SWEETPOTATO	CULTURAL	IMPROPER STORAGE	1		1
	DRY ROT	PHOMOPSIS	1		1
	ND	ND	1		1
	SCURF	MONILOCHAETES	2	1	3
	STORAGE ROT	CLADOSPORIUM	1		1
TOMATO	ANTHRACNOSE	COLLETOTRICHUM	0	1	1
	BACT.SPOT	XANTHOMONAS	2		2

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	BACT.WILT	RALSTONIA	1		1
	BLOSSOM DROP	ENVIRONMENTAL	1		1
	BLOSSOM END ROT	CA.DEF/DRY	5		5
	BUCKEYE ROT	PHYTOPHTHORA	3		3
	BULL PLANT	MUTATION	1		1
	CHEMICAL	GROWTH REGULATOR	17		17
	CHEMICAL	HERBICIDE	8		8
	CHEMICAL	INSECTICIDE	1		1
	CHEMICAL	UNKNOWN	7		7
	CROWN/ROOT ROT	FUSARIUM	2		2
	CULTURAL	GROWTH CRACKS	1		1
	DISTORTION	UNKNOWN	2		1
	EARLY BLIGHT	ALTERNARIA	11	3	14
	ENVIRONMENTAL	CATFACING	2	1	3
	ENVIRONMENTAL	COLD INJURY	0	1	1
	ENVIRONMENTAL	COMPACTION	1		1
	ENVIRONMENTAL	CONCENTRIC RINGS	0	1	1
	ENVIRONMENTAL	GROWTH CRACKS	0	1	1
	ENVIRONMENTAL	ZIPPER SCAR	0	2	2
	FRUIT DECAY	ALTERNARIA	0	1	1
	GENETIC	CHIMERA	1		1
	INAD	INAD	13		13
	INJURY	UNKNOWN	1		1
	INSECT	APHID	1		1
	INSECT	FLEA BEETLE	1	3	4
	INSECT	SPIDER MITE	4		4
	INSECT	STALK BORER	1		1
	INSECT	THRIPS	1		1
	INSECT	WHITEFLY	2		2
	LATE BLIGHT	PHYTOPHTHORA	2		2
	LEAF MOLD	FULVIA	9	2	11
	LEAF ROLL	PHYSIOLOGICAL	0	1	1
	LEAF SPOT	SEPTORIA	19		19
	ND	ND	20		20
	NUTRITIONAL	GENERAL	0	1	1
	NUTRITIONAL	HIGH PH	0	1	1
	NUTRITIONAL	MG.DEFICIENCY	3	1	4
	NUTRITIONAL	N.DEFICIENCY	5		5
	NUTRITIONAL	P.DEFICIENCY	1		1
	NUTRITIONAL	SOLUBLE SALTS	3	1	4
	POWDERY MILDEW	OIDIOPSIS	0	1	1
	PHYSICAL INJURY	UNKNOWN	1		1

**Table 10. DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER**

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1DIAG</b>	<b>#2DIAG</b>	<b>TOTAL</b>
	PITH NECROSIS	PSEUDOMONAS	1		1
	ROOT KNOT NEMA	MELOIDOGYNE	2	1	3
	ROOT ROT	PYTHIUM	15	5	20
	ROOT ROT	RHIZOCTONIA	0	1	1
	ROOT/STEM ROT	PYTHIUM	8		8
	ROOT/STEM ROT	RHIZOCTONIA	1		1
	RUSSETTING	ENVIRONMENTAL	0	1	1
	SOFT ROT	ERWINIA	0	1	1
	SO.BLIGHT	SCLEROTIUM	3		3
	SOUR ROT	GEOTRICHUM	1		1
	STEM ROT	BOTRYTIS	3		3
	STEM ROT	ERWINIA	1		1
	STEM ROT	SCLEROTINIA	6	1	7
	VIRUS	TMV	3		3
	VIRUS	TSWV	12		12
	VIRUS	UNKNOWN	1		1
	WILT	FUSARIUM	12	3	15
	WILT	VERTICILLIUM	1		1
TURNIP	INSECT	FLEA BEETLE	1		1
	NUTRITIONAL	N.DEFICIENCY	1		1
	WHITE LEAF SPOT	PSEUDOCERCOSPORA	0	1	1
WATERMELON	ANTHRACNOSE	COLLETOTRICHUM	1		1
	BLACK SPOT	ALTERNARIA	1		1
	COTTONY LEAK	PYTHIUM	2		2
	CROWN ROT	FUSARIUM	2		2
	FRUIT ROT	PHYTOPHTHORA	1		1
	GUMMY ST.BLIGHT	DIDYMELLA	1		1
	INAD	INAD	1		1
	LEAF BLIGHT	ALTERNARIA	1		1
	LEAF SPOT	CERCOSPORA	1	1	2
	ND	ND	4		4
	ROOT ROT	PYTHIUM	0	1	1
	ROOT/STEM ROT	RHIZOCTONIA	1		1
	STEM ROT	RHIZOCTONIA	1		1



