



*University of Kentucky  
College of Agriculture*



# ***PLANT DISEASES***

***in***

# ***KENTUCKY***

**Plant Disease Diagnostic Laboratory Summary**

**1991**

**by:**

**P. R. Bachi  
B. C. Eshenaur  
J. R. Hartman  
D. E. Hershman  
W. C. Nesmith  
P. C. Vincelli**



# TABLE OF CONTENTS

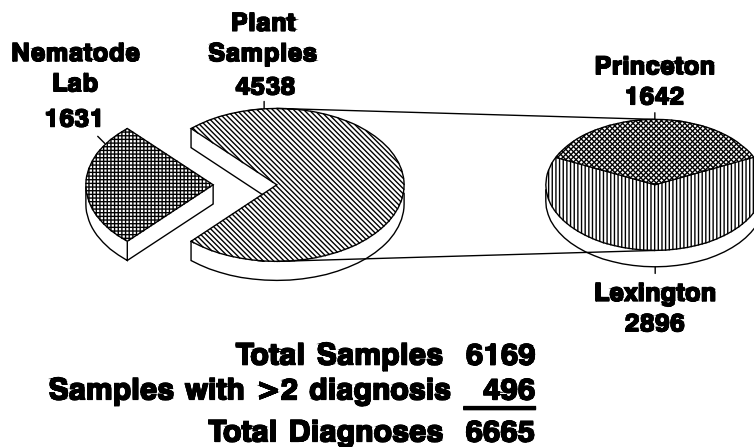
<b>INTRODUCTION</b> .....	1
<b>HIGHLIGHTS</b> .....	1
<b>EXPLANATORY REMARKS</b> .....	2
<b>ACKNOWLEDGMENT</b> .....	3
<b>SUMMARY TABLES</b>	
Table 1. Summary of diagnoses by crop category and causal agent type .....	4
Table 2. Summary of biotic problems by crop category .....	5
Table 3. Number of specimens by crop category .....	5
Table 4. Summary of diagnoses by crop category and crop .....	6
Table 5. Summary of samples received by grower type and crop group .....	7
Table 6. Number of samples referred for diagnosis .....	8
Table 7. Special laboratory tests performed.....	9
Table 8. Number of specimens received by county (KY and out-of-state sources) and crop category .....	10
Table 9. Summary of specialists and diagnosticians making primary diagnoses and consultations .....	12
<b>DIAGNOSIS OF INDIVIDUAL SAMPLES BY CROP AND DISEASE/DISORDER</b>	
Agronomic crops .....	13
Corn .....	13
Forages .....	13
Rapeseed (Canola) .....	14
Soybeans .....	14
Small grains .....	15
Tobacco .....	16
Fruit crops.....	17-19
Small fruits .....	17
Tree fruits.....	18
Herbs .....	20
Identifications .....	20
Miscellaneous .....	21
Ornamentals .....	21-38
Herbaceous Ornamentals and Indoors Plants.....	21
Turfgrass .....	27
Woody Ornamentals .....	28
Vegetables .....	38-42

## INTRODUCTION

The Plant Disease Diagnostic Lab (Lexington and Princeton) handled 4538 plant samples and 1631 nematode soil samples during 1991. Samples with more than one problem numbered 496, bringing the total number of actual diagnoses to 6665. The Lexington Lab diagnosed 2896 specimens. The Princeton Lab's specimens totaled 3273; of this number 1642 were plant samples and 1631 were soil samples submitted, almost exclusively, for soybean cyst nematode analysis. A total of 704 of the nematode samples were submitted by researchers and 927 were submitted by commercial growers.

These numbers are summarized in Figure 1 below:

### PLANT DISEASE DIAGNOSTIC LAB, TOTALS 1991



## HIGHLIGHTS

The year of 1991, overall, was a good year for plants but there were some periods which boldly tested their endurance. The winter period was mild which helped small grains and canola to green-up ahead of schedule. Spring temperatures arrived early and was not accompanied by any killing frosts which marred last year's small grain crop. In fact it was so even-tempered it allowed the first area-wide peach crop in several years. The latter part of the spring season brought long periods of overcast skies which caused the small grain crop to fill grain heads slower than normal. This, coupled with rain during flowering and a rapid warming period encouraged disease and caused the wheat crop to be the worst (in terms of test weight) in many years. Late spring and early summer continued fairly hot and moist which made conditions nearly perfect for bacterial diseases to be found in the tobacco crop. These conditions were also favorable to a host of fungal diseases on many ornamentals. Summer continued this trend in the eastern and central parts of the state but many parts of western Kentucky saw a fairly severe drought causing many corn fields used for silage instead of grain. The fall brought good conditions for planting small grains and canola, but an early, hard freeze killed nearly all the canola and set back a good deal of the wheat crop.

The "float system", used for production of tobacco transplants, continued to find favor with more and more growers. As mentioned last year, this system is also favorable to the water mold fungi, *Pythium* and *Phytophthora*, but the diseases they cause were not limited to this relatively new production system. *Pythium* was found causing soft rots of roots and stems and general damping-off symptoms on tobacco and *Phytophthora* caused severe problems in the form of the **Black Shank** disease. *Rhizoctonia* was found causing Sore Shin more widespread than usual and the incidence of **Target Spot** (*Thanatephorus*), continued to increase in both the float system and conventional seed beds. **Bacterial soft rot**, **Black leg** and **Bacterial Hollow Stalk** were very common this year due to weather conditions mentioned above.

Corn problems were relatively few except for the drought in the western part of the state. One interesting development was the occurrence of the **Virus Complex** and **Bacterial Top and Stalk Rot** on some corn crops where postemergence herbicides for johnsongrass control were used. In the case of the virus complex, it is thought that the killing of rhizome johnsongrass probably caused a mass migration of insect vectors to the corn. With the bacterial disease, the use of a surfactant or crop oil with the postemergence herbicide probably increased infection levels when high populations of the bacteria are present on the leaf surfaces.

The severity of soybean problems, as in 1990, was at a low level. Soybean cyst nematode remains the major yield-limiting disease factor in the majority of soybean producing acreage. Sudden Death Syndrome was also a factor in some areas but overall at a low incidence rate as similar to last year. With the drought in western Kentucky, **Charcoal Rot** was a problem in several fields.

Small grains, primarily wheat, were plagued by many problems as alluded to above. Poor root development caused by wet conditions during the winter months, a widespread occurrence of **Barley Yellow Dwarf Virus**, foliar diseases such as **Septoria Leaf Complex**, and severe **Head Scab** and **Glume Blotch**, caused wheat yields and quality to be sharply below normal. In addition, toxin problems associated with feeding "scabby" wheat was a hot topic of concern.

Root rots of alfalfa, caused by species of *Phytophthora* and *Aphanomyces*, continued to be monitored and were found causing significant damage in some fields. **Fusarium wilt** and **Rhizoctonia stem canker** were documented through isolation and inoculation during 1991.

Also during this year **Pythium root rot** was identified on bentgrass golf greens. In late summer a widespread loss of perennial ryegrass fairways was a major concern. This problem was found to be a stress reaction from the weather conditions and cultural practices.

On vegetables this year **root knot nematodes** were more prevalent than normal particularly on potatoes and tomatoes. The weather conditions favored **bacterial spot of pepper** which was severe this year in some commercial plantings.

Two tree diseases which we have been monitoring closely for the past three years are **Bacterial Scorch** and **Dogwood Anthracnose**.

**Dogwood Anthracnose** (caused by *Discula destructiva*) was identified for the first time in the Kentucky in 1989. Several new cases of the disease were found in 1990 (see Figure 2) and this year diagnosis of this disease became relatively common. We will continue to monitor the incidence of this disease in the state and educate the ornamental industries and public as to the presence of the disease and control recommendations.

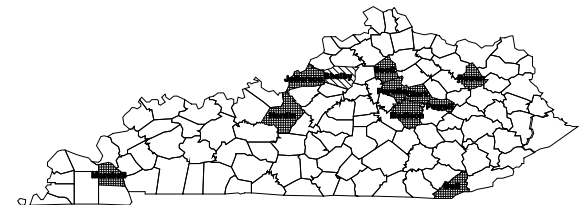


Figure 2. Incidence of Dogwood Anthracnose in Kentucky through 1991.

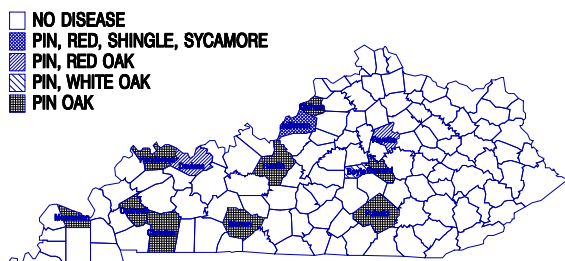


Figure 3. Incidence of Bacterial Scorch by species in Kentucky.

**Bacterial Scorch of Shade trees** (caused by *Xylella fastidiosa*) was found on sycamore for the first time in Kentucky and on shingle oak as the first case reported in the United States (see Figure 3). As with the Dogwood Anthracnose, we will continue to keep the ornamental industries and public aware of the progress of the disease and research on its control.

## EXPLANATORY REMARKS

As you examine the main body of this report, you will notice three columns of numbers following the diagnosis and causal agent sections. The first column indicates the number of primary diagnoses, the second column the number of secondary diagnoses and the third column is the total of the previous two. 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 never as a primary problem (e.g. *Lophodermium* needlecast on Pine). In these cases, a zero (0) will appear in the primary diagnosis column to indicate the absence of samples with that particular problem.

No disease: This indicates that no pathogen was observed on the specimen submitted, and that based on the sample and information provided, we were unable to pinpoint an exact abiotic or biotic cause of the problem, if there was one.

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 by the crop specialist in the Agronomy or Horticulture Departments. On a number of occasions we also consulted with crop specialists in other departments to diagnose or verify abiotic problems.

Root problems: Samples designated as having a "root problem" had above ground symptoms suggestive of root dysfunction and/or evidence of root degeneration, however, a specific biotic or abiotic cause could not be determined.

## ACKNOWLEDGEMENTS

Two technicians within the department of Plant Pathology have made significant contributions to the Plant Diagnostic Laboratories. As the technician in charge of performing all soybean cyst nematode extractions and counting, Debbie Morgan has been dutifully carrying out her responsibilities since 1985 in the Nematode Laboratory in Princeton. Rusty Wiglesworth has been working at the Lexington Laboratory since 1990, performing many valuable services such as computer database management, mailing diagnostic responses and other tasks as needed, all of which contribute to the efficiency of the lab.

We wish to thank Freddie Higgins for his assistance in the computer operation of the lab. We would also like to thank the College of Agriculture's extension specialists and researchers who served as consultants to the diagnostic lab in 1991. Their services ranged from making actual diagnoses to providing answers to plant, insect, weed or pesticide questions. These individuals are too numerous to mention here (see Table 9) but we are grateful nonetheless to each for their valuable assistance.

Table 1.

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

Crop Category	Abiotic Problems	Biotic <sup>2</sup> Problems	Chemical Injury	Inadequate Specimen	Insect Injury	Other <sup>3</sup>	Total Diagnoses
<u>Agronomic</u>							
Corn	56	44	27	3	31	35	196
Forages	19	81	0	2	16	41	159
Rapeseed (Canola)	0	2	0	0	1	0	3
Small grains	6	96	2	4	3	9	120
Soybeans	29	1738 <sup>4</sup>	19	1	12	20	1819
Tobacco	460	773	113	23	40	184	1593
<u>Fruit</u>							
Small fruit	5	44	2	2	11	18	82
Tree fruit	44	195	5	14	47	35	340
<u>Herbs</u>	2	4	1	0	6	4	17
<u>Identification</u>	0	37	0	3	0	0	40
<u>Ornamentals</u>							
Herbaceous and Houseplants	62	122	11	8	28	59	289
Turfgrass	23	86	1	3	0	31	141
Woody	355	339	42	80	286	291	1393
<u>Vegetables</u>	58	232	24	18	43	80	455
<u>Miscellaneous</u>	3	4	2	0	1	8	18
<u>Total</u>	1122	3797	249	161	525	815	6665

<sup>1</sup> All counts and totals include primary diagnoses plus secondary diagnoses.

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

<sup>3</sup> "Other" includes the causal agent categories: No disease, Unknown and None (non-applicable).

<sup>4</sup> Includes 1631 samples sent to the Nematode Laboratory in Princeton.

**Table 2. SUMMARY OF BIOTIC PROBLEMS BY CROP CATEGORY.**

<b>Crop Category</b>	<b>Bacterial</b>	<b>Fungal</b>	<b>Nematode</b>	<b>Virus</b>	<b>Other<sup>1</sup></b>
<u>Agronomic</u>					
Corn	3	26	0	15	0
Forages	1	80	0	0	0
Rapeseed (Canola)	0	2	0	0	0
Small grains	2	72	0	22	0
Soybeans	2	73	1663	0	0
Tobacco	176	502	1	83	11
<u>Fruit</u>					
Small fruit	0	44	0	0	0
Tree fruit	72	121	0	0	2
<u>Herbs</u>					
	0	3	1	0	0
<u>Identification</u>					
	0	17	0	0	20
<u>Ornamentals</u>					
Herbaceous and Houseplants	20	94	2	6	0
Turfgrass	0	85	0	0	1
Woody	35	291	7	1	5
<u>Vegetables</u>					
	60	150	7	15	0
<u>Miscellaneous</u>					
	0	4	0	0	0
<u>Total</u>	371	1564	1681	142	39

<sup>1</sup> Other includes these categories: Animal (rodent and bird damage), Plant (plant identifications), and Algae, Lichen and MLO (mycoplasma-like organism).

**Table 3.**

**NUMBER OF SPECIMENS BY CROP CATEGORY, EXPRESSED AS PERCENTAGES**

<b>Crop Category</b>	<b>Number of Specimens</b>	<b>Percentage of Total Specimens</b>
Agronomic (-Tobacco)	2194	35.6
Tobacco	1426	23.0
Fruit	375	6.1
Herbs	16	.3
Identifications	39	.6
Ornamentals	1681	27.2
Vegetables	422	6.9
Miscellaneous	16	.3
<b>Total Specimens</b>	<b>6169</b>	<b>100.0</b>

Table 4.

SUMMARY OF DIAGNOSES BY CROP CATEGORY AND CROP.

Crop Category and Crop	Number of Primary Diagnoses <sup>1</sup>	Number of Secondary Diagnoses <sup>2</sup>	Total Diagnoses <sup>3</sup>
<u>Agronomic</u>			
Corn	176	20	196
Forages	138	21	159
Rapeseed (Canola)	0	0	0
Small grains	94	29	123
Soybeans	1786	33	1819
Tobacco	1426	167	1593
<u>Fruit</u>			
Small fruit	76	6	82
Tree fruit	299	41	340
<u>Herbs</u>			
	16	1	17
<u>Identification</u>			
	39	1	40
<u>Ornamentals</u>			
Herbaceous and Houseplants	263	26	289
Turfgrass	129	12	141
Woody	1287	106	1393
<u>Vegetables</u>			
	422	33	455
<u>Miscellaneous</u>			
	18	0	18
<u>Total</u>			
	6169	496	6665

<sup>1</sup> The number of primary diagnoses corresponds to the number of different specimens examined.

<sup>2</sup> If a second problem was evident on the plant specimen it was considered the secondary diagnosis. See "Explanatory Remarks."

<sup>3</sup> Total diagnoses equals the number of primary plus the number of secondary diagnoses.



Table 5.

## SUMMARY OF SAMPLES RECEIVED BY GROWER TYPE AND CROP GROUP.

Crop Group	Grower Type							
	Commercial		Homeowner		Research		Institution	
	Ext <sup>1</sup>	Non-Ext <sup>2</sup>	Ext <sup>1</sup>	Non-Ext <sup>2</sup>	Ext <sup>1</sup>	Non-Ext <sup>2</sup>	Ext <sup>1</sup>	Non-Ext <sup>2</sup>
<u>Agronomic</u>								
Corn	166	6	0	0	2	2	0	0
Forages	134	2	2	0	0	0	0	0
Rapeseed	0	0	0	0	2	0	0	0
Small grains	89	1	0	0	0	2	0	0
Soybeans	146	5	0	0	1633	2	0	0
Tobacco	1368	33	0	0	9	16	0	0
<u>Fruit</u>								
Small Fruit	16	1	55	1	2	1	0	0
Tree Fruit	49	3	220	8	11	6	2	0
<u>Herbs</u>								
	5	0	9	2	0	0	0	0
<u>Identification</u>								
	1	1	29	3	2	2	1	0
<u>Ornamental</u>								
Herbaceous and								
Houseplants	54	15	145	21	3	11	11	3
Turfgrass	22	11	76	1	3	1	13	2
Woody	73	5	1081	54	9	16	43	6
<u>Vegetable</u>								
	165	8	233	6	1	8	1	0
<u>Miscellaneous</u>								
	5	0	5	1	5	0	2	0
<u>Total</u>								
	2293	91	1855	97	1682	67	73	11
<u>Total/Grower Type</u>								
	2384		1952		1749		84	
<u>Total number of samples received</u> = 6169								

<sup>1</sup> Ext = Extension samples submitted via County Extension Agents or Extension Specialists.

<sup>2</sup> Non-Ext = Non-extension samples submitted directly by the grower or other non-extension clients.

Table 6.

NUMBER OF 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	
Agronomy Department	26	0	1	0	1	28
Entomology Department	14	6	68	11	2	101
Horticulture Department	0	4	7	2	3	16
Regulatory Services	0	0	1	0	0	1
Cornell University	1	0	0	0	0	1
Univ. of Arkansas	3	0	0	0	0	3
					<u>Total</u>	165
					<u>Total number of plant samples</u>	4538
					<u>Percent of plant samples referred outside Diagnostic Lab for diagnosis</u>	3.6%

TABLE 7.

## SPECIAL LABORATORY TESTS PERFORMED.

Test Number of Cases	
Alfalfa root/soil assay	45
Culturing	142
Incubation	306
Nematode extraction (total = 1641)	
Pinewood nematode	9
Soybean cyst nematode	1631
Other	1
Soil tests (total = 164)	
pH	152
Soluble salts	4
pH/Soluble Salts	6
Soil bioassays	2
Virus assays (total = 56)	
Electron Microscope	7
ELISA	43
Indicator plants	6
Miscellaneous tests	
Quick nitrate test (tobacco)	22
Quick nitrate test/Soluble salts	1

Table 8. NUMBER OF PLANT SAMPLES RECEIVED BY COUNTY (KY AND OUT-OF-STATE SOURCES) AND CROP CATEGORY.

COUNTY	Total	Agronomic <sup>1</sup>	Tobacco	Fruit	Ornamental	Vegetable	Other
ADAIR	0	0	0	0	0	0	0
ALLEN	44	8	13	2	11	10	0
ANDERSON	8	1	2	2	1	1	0
BALLARD	30	7	12	5	6	0	0
BARREN	24	4	13	0	4	3	0
BATH	54	3	37	3	5	4	2
BELL	32	0	0	3	22	6	1
BOONE	77	0	7	4	58	8	0
BOURBON	45	4	27	3	7	2	2
BOYD	13	0	0	4	8	1	0
BOYLE	55	9	9	1	36	0	0
BRACKEN	0	0	0	0	0	0	0
BREATHITT	19	0	8	1	7	3	0
BRECKINRIDGE	30	4	19	1	4	2	0
BULLITT	52	6	7	9	21	3	6
BUTLER	17	4	3	0	8	2	0
CALDWELL	116	17	28	26	34	8	3
CALLOWAY	80	2	36	5	24	13	0
CAMPBELL	29	1	2	2	24	0	0
CARLISLE	12	2	2	1	7	0	0
CARROLL	14	0	8	1	5	0	0
CARTER	45	0	24	3	11	7	0
CASEY	43	6	21	2	3	11	0
CHRISTIAN	162	25	45	16	61	15	0
CLARK	26	4	14	2	3	2	1
CLAY	24	1	11	4	5	3	0
CLINTON	20	3	14	2	0	1	0
CRITTENDEN	33	3	0	10	13	6	1
CUMBERLAND	15	1	14	0	0	0	0
DAVIESS	206	43	42	22	52	42	5
EDMONSON	34	1	17	3	6	7	0
ELLIOTT	12	1	3	3	1	4	0
ESTILL	39	2	22	5	3	7	0
FAYETTE	443	12	63	24	306	24	14
FLEMING	36	8	19	1	3	4	1
FLOYD	7	0	0	0	7	0	0
FRANKLIN	63	4	16	3	37	1	2
FULTON	7	2	0	1	4	0	0
GALLATIN	5	0	4	0	0	1	0
GARRARD	16	2	10	1	3	0	0
GRANT	21	1	9	3	6	1	1
GRAVES	105	14	33	10	36	12	0
GRAYSON	11	2	8	1	0	0	0
GREEN	7	1	4	1	1	0	0
GREENUP	10	0	0	1	9	0	0
HANCOCK	17	6	5	2	2	2	0
HARDIN	110	14	25	13	51	7	0
HARLAN	11	1	0	4	4	1	1
HARRISON	14	2	10	0	2	0	0
HART	31	0	17	6	4	4	0
HENDERSON	58	24	4	4	23	3	0
HENRY	27	3	16	1	6	0	1
HICKMAN	16	7	0	3	4	2	0
HOPKINS	69	15	4	5	40	3	2
JACKSON	20	1	8	3	4	3	1
JEFFERSON	96	1	3	2	83	6	1
JESSAMINE	19	1	7	2	6	3	0
JOHNSON	6	0	4	0	2	0	0
KENTON	14	0	0	3	10	0	1
KNOTT	7	0	0	0	4	3	0
KNOX	19	1	7	3	7	0	1

COUNTY	Total	Agronomic <sup>1</sup>	Tobacco	Fruit	Ornamental	Vegetable	Other
LARUE	26	6	14	1	2	3	0
LAUREL	34	3	12	3	11	5	0
LAWRENCE	6	0	1	1	4	0	0
LEE	0	0	0	0	0	0	0
LESLIE	7	0	0	0	5	2	0
LETCHER	3	0	0	0	3	0	0
LEWIS	10	3	6	1	0	0	0
LINCOLN	22	11	10	0	1	0	0
LIVINGSTON	28	4	1	3	19	1	0
LOGAN	63	12	25	6	10	8	2
LYON	18	4	4	5	5	0	0
McCRACKEN	121	6	8	23	60	22	2
McCREARY	8	0	1	2	3	1	1
McLEAN	48	25	8	3	5	7	0
MADISON	126	3	51	10	55	6	1
MAGOFFIN	19	0	14	3	0	2	0
MARION	12	3	4	1	4	0	0
MARSHALL	43	3	5	4	20	11	0
MARTIN	8	0	0	2	5	1	0
MASON	24	0	20	1	3	0	0
MEADE	31	12	15	0	4	0	0
MENIFEE	8	0	6	0	2	0	0
MERCER	46	3	23	3	14	1	2
METCALFE	12	4	6	0	2	0	0
MONROE	10	0	9	0	1	0	0
MONTGOMERY	68	5	28	11	20	2	2
MORGAN	28	1	10	5	5	5	2
MUHLENBERG	23	5	4	0	10	3	1
NELSON	26	0	14	2	9	0	1
NICHOLAS	13	0	10	0	3	0	0
OHIO	31	5	12	0	13	1	0
OLDHAM	31	0	4	0	21	4	1
OWEN	29	7	21	1	0	0	0
OWSLEY	15	0	8	1	6	0	0
PENDELTON	21	1	14	0	4	2	0
PERRY	3	0	1	1	0	1	0
PIKE	0	0	0	0	0	0	0
POWELL	5	1	2	0	1	1	0
PULASKI	43	8	5	5	20	5	0
ROBERTSON	14	3	6	0	5	0	0
ROCKCASTLE	15	1	6	0	4	3	1
ROWAN	7	0	3	0	2	1	1
RUSSELL	57	1	12	6	11	26	1
SCOTT	26	7	4	1	13	1	0
SHELBY	95	24	45	1	21	2	2
SIMPSON	28	6	12	1	9	0	0
SPENCER	12	1	3	1	6	1	0
TAYLOR	22	3	9	1	4	5	0
TODD	89	14	44	1	19	7	4
TRIGG	37	8	9	4	15	1	0
TRIMBLE	12	2	7	0	1	2	0
UNION	30	22	1	2	4	1	0
WARREN	63	8	11	5	31	7	1
WASHINGTON	28	5	15	0	7	0	1
WAYNE	58	3	36	0	8	11	0
WEBSTER	42	23	2	3	10	4	0
WHITLEY	24	0	11	2	8	3	0
WOLFE	9	0	9	0	0	0	0
WOODFORD	58	8	13	4	31	2	0
Out-of-State	69	5	56	3	5	0	0
<b>TOTALS</b>	<b>4538</b>	<b>563</b>	<b>1426</b>	<b>375</b>	<b>1681</b>	<b>422</b>	<b>71</b>

<sup>1</sup> Agronomic crops include corn, soybeans, forages, rapeseed (Canola) and small grains but in this particular case, it excludes tobacco.

Table 9.

**THE NUMBER OF CASES IN WHICH EXTENSION SPECIALISTS, DIAGNOSTICIANS OR RESEARCHERS WERE INVOLVED IN MAKING A PRIMARY DIAGNOSIS AND THE NUMBER OF CASES IN WHICH THEY SERVED AS CONSULTANTS.**

Specialists, Researchers, Diagnosticians	Department	Number of cases	
		Primary Diagnosis <sup>1</sup>	Consultations <sup>2</sup>
<b>LEXINGTON</b>			
Anderson, RG	Horticulture	4	14
Bitzer, MJ	Agronomy	14	3
Bessin, RT	Entomology	21	2
Doney, JC	Plant Pathology	0	2
Eshenaur, BC (Diagnostician)	Plant Pathology	1930	52
Fountain, WF	Horticulture	3	2
Green, JD	Agronomy	9	13
Hartman, JR	Plant Pathology	156	36
Henning, JC	Agronomy	0	3
Nielsen, MT	Agronomy	0	1
Nesmith, WC	Plant Pathology	283	29
Palmer, GK	Agronomy	60	5
Roberts, CR	Horticulture	7	4
Scheibner, RA	Entomology	38	36
Smiley, JH	Agronomy	130	22
Strang, JG	Horticulture	9	4
Townsend, LH	Entomology	18	19
Vincelli, PC	Plant Pathology	212	11
Wells, KL	Agronomy	1	3
Witt, ML	Horticulture	1	0
<b>PRINCETON</b>			
Bachi, PR (Diagnostician)	Plant Pathology	1538	47
Brown, GR	Horticulture	2	20
Dunwell, WC	Horticulture	3	44
Herbek, JH	Agronomy	2	16
Hershman, DE	Plant Pathology	69	25
Johnson, DJ	Entomology	8	23
Lacefield, GD	Agronomy	0	2
Martin, JR	Agronomy	1	69
Murdock, LW	Agronomy	0	10
Maksymowicz, WC	Agronomy	13	111

<sup>1</sup> The specialist or diagnostician signing the Plant Diagnostic Form was considered the primary diagnoser.

<sup>2</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.

CROP	DIAGNOSIS	CAUSAL AGENT	#1° DIAGs	#2° DIAGs	TOTAL
------	-----------	--------------	-----------	-----------	-------

AGRONOMIC CROPS

**CORN (*Zea*)**

	ANTHRACNOSE	- COLLETOTRICHUM	1	0	1
	BARREN STALK	- COMPLEX	1	0	1
	BROWN SPOT	- PHYSODERMA	1	0	1
	CHEMICAL INJURY	- HERBICIDE, UNKNOWN	25	3	28
	DAMPING-OFF	- FUNGAL	1	0	1
		- PYTHIUM	2	0	2
	EAR/KERNEL ROTS	- ASPERGILLUS	1	0	1
		- FUSARIUM	4	0	4
		- PENICILLIUM	0	1	1
	ENVIRONMENTAL	- COMPACTION	4	2	6
		- OTHER STRESSES	13	0	13
	GENETIC	- MUTATION	1	0	1
	GRAY LEAF SPOT	- CERCOSPORA	7	0	7
	HOLCUS SPOT	- PSEUDOMONAS	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE, UNKNOWN		38	0	38
	INSECT INJURY		23	8	31
	LEAF SPOT	- HELMINTHOSPORIUM	1	1	2
	NORTHERN LEAF SPOT	- SETOSPHERIA	1	0	1
	NUTRITIONAL	- ACID SOIL	9	0	9
		- ZN DEFICIENCY	13	0	13
		- OTHERS	11	1	12
	RUST, SOUTHERN	- PUCCINIA	1	0	1
	SMUT	- USTILAGO	1	0	1
	STALK ROT	- ERWINIA	0	2	2
		- FUSARIUM	2	0	2
		- GIBBERELLA	0	1	1
	STEWART'S WILT	- ERWINIA	6	0	6
	VIRUS	- COMPLEX	4	0	4
		- MAIZE CHLOROTIC DWARF	8	0	8
		- MAIZE DWARF MOSAIC	1	1	2
		- UNKNOWN	1	0	1

FORAGES

**ALFALFA (*Medicago*)**

	BACTERIAL STEM BLIGHT	- PSEUDOMONAS	1	0	1
	CROWN/ROOT ROT	- FUSARIUM	0	1	1
		- RHIZOCTONIA	1	0	1
	CROWN/STEM ROT	- SCLEROTINIA	1	0	1
	ENVIRONMENTAL STRESSES		3	2	5
	INADEQUATE SPECIMEN, NO DISEASE		41	0	41
	INSECT INJURY		12	4	16
	LEAF SPOT	- FUNGAL	1	2	3
		- LEPTOSPHERULINA	11	1	12
		- PSEUDOPHEZIZA	0	1	1
		- STEMPHYLIUM	1	0	1
	NUTRITIONAL	- ACID SOIL	3	0	3
		- B DEFICIENCY	2	0	2
		- POOR NODULATION	2	1	3

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1° DIAGs</b>	<b>#2° DIAGs</b>	<b>TOTAL</b>
<b>ALFALFA (cont)</b>					
	ROOT ROT	- APHANOMYCES	35	1	36
		- PHYTOPHTHORA	5	5	10
		- PYTHIUM	1	0	1
		- RHIZOCTONIA	1	0	1
	SPRING BLACK STEM	- PHOMA	2	1	3
	STEM CANKER	- RHIZOCTONIA	5	0	5
	WILT	- FUSARIUM	1	1	2
<b>CLOVER (Trifolium)</b>					
	INADEQUATE SPECIMEN		1	0	1
<b>FESCUE (Festuca)</b>					
	LEAF SPOT	- RHIZOCTONIA	1	0	1
	NO DISEASE		1	0	1
<b>ORCHARDGRASS (Dactylis)</b>					
	NUTRITIONAL	- NITROGEN DEFICIENCY	3	0	3
<b>SUDANGRASS (Sorghum)</b>					
	ENVIRONMENTAL	- STRESS	1	0	1
<b>TIMOTHY (Phleum)</b>					
	ENVIRONMENTAL	- COMPACTION	1	0	1
<b>VETCH (Vicia)</b>					
	ENVIRONMENTAL	- STRESS	1	0	1
<b><u>RAPESEED</u></b>					
<b>"CANOLA" (Brassica)</b>					
	DAMPING-OFF	- RHIZOCTONIA	1	0	1
	INSECT INJURY		0	1	1
	POD DECAY	- ALTERNARIA	1	0	1
<b><u>SOYBEAN</u></b>					
<b>SOYBEAN (Glycine)</b>					
	ANTHRACNOSE	- COLLETOTRICHUM	3	1	4
	BROWN SPOT	- SEPTORIA	2	3	5
	BROWN STEM ROT	- PHIALOPHORA	0	1	1
	CHARCOAL ROT	- MACROPHOMINA	14	0	14
	CHEMICAL INJURY	- HERBICIDE, GROWTH REG.	15	2	17
		- OTHER	2	0	2
	CULTURAL	- POOR NODULATION	0	1	1
	DOWNY MILDEW	- PERONOSPORA	7	1	8
	ENVIRONMENTAL STRESSES		7	2	9
	INADEQUATE SPECIMEN, NO DISEASE		21		21
	INDUCED CHLOROSIS	- RHIZOBIUM	1	1	2
	INSECT INJURY		5	7	12
	LEAF BLIGHT	- CERCOSPORA	3	0	3



<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1° DIAGs</b>	<b>#2° DIAGs</b>	<b>TOTAL</b>
<b>SOYBEAN (cont)</b>					
LEAF SCORCH		- UNKNOWN	1	0	1
NUTRITIONAL		- K DEFICIENCY	3	1	4
		- MN DEFICIENCY	5	2	7
		- OTHER	6	1	7
POD STEM ROT		- DIAPORTHE	1	1	2
ROOT/STEM ROT		- PHYTOPHTHORA	5	0	5
		- RHIZOCTONIA	11	3	14
SOYBEAN CYST NEMATODE - on plant samples			25	7	32
HETERODERA		* in soil samples	1410	0	1410
		* absent in soil samples	221	0	221
		(*soil submitted to Nematode Laboratory)			
SOUTHERN BLIGHT		- ATHELIA	6	0	6
STEM CANCKER		- DIAPORTHE	1	0	1
SUDDEN DEATH SYNDROME		- FUSARIUM	11	0	11

SMALL GRAINS

**OAT (Avena)**

INADEQUATE SPECIMEN, NO DISEASE			2	0	2
VIRUS		- BARLEY YELLOW DWARF	1	0	1

**RYE (Secale)**

NO DISEASE

**SORGHUM (Sorghum)**

ENVIRONMENTAL		- STRESS	1	0	1
INADEQUATE SPECIMEN, NO DISEASE			1	0	1
INSECT INJURY			1	0	1
VIRUS		- MAIZE DWARF MOSAIC	2	0	2

**WHEAT (Triticum)**

BLACK CHAFF		- XANTHOMONAS	1	1	2
CHEMICAL		- HERBICIDE	2	0	2
ENVIRONMENTAL		- COLD INJURY	2	1	3
		- OTHER	2	0	2
GLUME BLOTCH		- SEPTORIA	13	13	26
INADEQUATE SPECIMEN, NO DISEASE			9	0	9
INSECT INJURY			2	0	2
LEAF BLIGHT		- PSEUDOMONAS	0	1	1
LEAF BLOTCH		- SEPTORIA	7	3	10
POWDERY MILDEW		- ERYSPHE	1	0	1
RUST/LEAF		- PUCCINIA	0	1	1
SCAB		- GIBBERELLA	21	6	27
SEED CONTAMINENT		- FUSARIUM	1	0	1
SMUT		- USTILAGO	0	1	1
TAKE-ALL		- GAEUMANNOMYCES	2	0	2
VIRUS		- BARLEY YELLOW DWARF	15	0	15
		- WHEAT SPINDLE STREAK	1	1	2

CROP	DIAGNOSIS	CAUSAL AGENT	#1° DIAGs	#2° DIAGs	TOTAL
<u>TOBACCO</u>					
TOBACCO (Nicotiana)					
	ALGAE	- BLUE-GREEN	3	4	7
		- RED-BROWN	1	1	2
	ANGULAR LEAF SPOT	- PSEUDOMONAS	47	8	55
	ANTHRACNOSE	- COLLETOTRICHUM	2	1	3
	BACTERIAL BLACK STALK	- ERWINIA	1	0	1
	BACTERIAL LEAF SPOT	- XANTHOMONAS	2	0	2
	BACTERIAL SOFT ROT	- ERWINIA	23	10	33
	BLACK LEG	- ERWINIA	70	7	77
	BLACK ROOT ROT	- CHARLARA	23	6	29
	BLACK SHANK	- PHYTOPHTHORA	279	3	282
	BLUE MOLD	- PERONOSPORA	37	5	42
	BROWN SPOT	- ALTERNARIA	11	6	17
	CHEMICAL INJURY	- GROWTH REGULATOR	45	0	45
		- FUNGICIDE	3	0	3
		- HERBICIDE	19	6	25
		- INSECTICIDE	1	0	1
		- SUCKER AGENT	4	1	5
		- UNKNOWN	33	1	34
	CROWN/STEM ROT	- SCLEROTINIA	5	0	5
	CULTURAL	- TRANSPLANT SHOCK	25	3	28
		- OTHER	7	0	7
	DAMPING OFF	- PYTHIUM	1	0	1
		- RHIZOCTONIA	3	1	4
	ENVIRONMENTAL	- COLD INJURY	35	3	38
		- COMPACTION	9	5	14
		- LIGHTNING	13	0	13
		- WET FEET	19	5	24
		- WEATHER SCALD	28	2	30
		- OTHER STRESSES	4	3	7
	FALSE BROOMRAPE	- UNKNOWN	3	0	3
	FRENCHING	- METABOLITES	7	0	7
	FROGEYE	- CERCOSPORA	7	6	13
	HOLLOW STALK	- ERWINIA	8	0	8
	INADEQUATE SPECIMEN, NO DISEASE, UNKNOWN		207	0	207
	INSECT INJURY		31	9	40
	NUTRITIONAL	- ACID SOIL	27	15	42
		- FERTILIZER BURN	32	3	35
		- K DEFICIENCY	21	1	22
		- MN TOXICITY	83	7	91
		- N DEFICIENCY	17	1	18
		- P DEFICIENCY	17	5	22
		- OTHER	6	1	7
	PHYSICAL INJURIES		26	1	27
	PHYSIOLOGICAL	- UNKNOWN	0	1	1
	RAGGED SPOT	- ASCOCHYTA	1	0	1
	ROOT KNOT NEMATODE	- MELOIDOGYNE	0	1	1
	ROOT ROT	- RHIZOCTONIA	10	0	10
		- PYTHIUM	8	3	11
	SORE SHIN	- RHIZOCTONIA	34	0	34

<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1º DIAGs</i>	<i>#2º DIAGs</i>	<i>TOTAL</i>	
<b>TOBACCO (cont)</b>						
SOFT ROT		- ERWINIA	1	0	1	
		- PYTHIUM	1	0	1	
STORAGE MOLD		- ASPERGILLUS	2	0	2	
TARGET SPOT		- RHIZOCTONIA	16	16	32	
VARIEGATION		- GENETIC	5	0	5	
VIRUS		- ALFALFA MOSAIC	11	1	12	
		- CUCUMBER MOSIAC	0	2	2	
		- COMPLEX	9	1	10	
		- POTATO VIRUS Y	3	1	4	
		- TOBACCO ETCH	8	3	11	
		- TOBACCO MOSAIC	2	0	2	
		- TOBACCO RINGSPOT	7	1	8	
		- TOBACCO STREAK	2	0	2	
		- TOBACCO VEIN MOTTLING	2	0	2	
		- TOMATO SPOTTED WILT	22	2	24	
		- UNKNOWN	3	3	6	
	WEATHER FLECK		- OZONE	3	0	3
	WILDFIRE		- PSEUDOMONAS	0	1	1
WILT		- FUSARIUM	12	1	13	

FRUIT CROPS

SMALL FRUITS

**BLUEBERRY (Vaccinium)**

DIEBACK		- BOTRYOSPHERA	1	0	1
FRUIT ROT		- ALTERNARIA	0	1	1
GRAY MOLD		- BOTRYTIS	1	0	1
ENVIRONMENTAL		- LEAF SCORCH	2	0	2
NO DISEASE, UNKNOWN			3	0	3
ROOT ROT		- PHYTOPHTHORA	1	0	1
TWIG BLIGHT		- FUSICOCUM	1	0	1

**BRAMBLES - Blackberry and Raspberry (Rubus)**

ANTHRACNOSE		- ELSINOE	2	0	2
CANKER		- BOTRYOSPHERA	1	0	1
		- UNKNOWN	1	0	1
		- CERCOSPORELLA	1	0	1
DOUBLE BLOSSOM		- SUNSCALD	1	0	1
ENVIRONMENTAL		- BOTRYTIS	1	0	1
GRAY MOLD			3	1	4
INSECT INJURY		- SEPTORIA	1	0	1
LEAF SPOT			3	2	5
NO DISEASE		- PHYTOPHTHORA	1	2	3
ROOT ROT					

**GOOSEBERRY (Ribes)**

NO DISEASE			1	0	1
------------	--	--	---	---	---

**GRAPE (Vitis)**

ANTHRACNOSE		- ELSINOE	1	0	1
BLACK ROT		- GUIGNARDIA	9	0	9

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1° DIAGs</b>	<b>#2° DIAGs</b>	<b>TOTAL</b>
<b>GRAPE (cont)</b>					
	CHEMICAL INJURY	- GROWTH REGULATOR	1	0	1
		- HERBICIDE	1	0	1
	DOWNY MILDEW	- PLASMOPORA	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		9	0	9
	INSECT INJURY		4	1	5
	POWDERY MILDEW	- UNCINULA	2	0	2
<b>STRAWBERRY (Fragaria)</b>					
	ANTHRACNOSE	- ELSINOE	0	1	1
	BLACK ROOT ROT	- PYTHIUM	2	0	2
		- RHIZOCTONIA	4	1	5
	ENVIRONMENTAL STRESS		2	0	2
	GRAY MOLD	- BOTRYTIS	2	0	2
	INSECT INJURY		1	0	1
	LEAF BLIGHT	- PHOMOPSIS	1	0	1
	LEAF SCORCH	- DIPLOCARPON	1	1	2
	LEAF SPOT	- MYCOSPHAERELLA	3	0	3
	MULTIPLIER DISEASE	- UNKNOWN	1	0	1
	NO DISEASE		1	0	1
<u><b>TREE FRUITS</b></u>					
<b>APPLE (Malus)</b>					
	BITTER ROT	- GLOMERELLA	4	1	5
	BLACK ROT	- BOTRYOSPHAERIA	1	0	1
	BLOTCH	- PHYLLOSTICTA	1	0	1
	BURR KNOT	- PHYSIOLOGICAL	2	0	2
	CEDAR APPLE RUST	- GYMNOSPORANGIUM	15	1	16
	CANKER	- BOTRYOSPHAERIA	1	1	2
	CHEMICAL INJURY	- HERBICIDE	1	0	1
		- INSECTICIDE	1	0	1
		- UNKNOWN	1	0	1
	COLLAR ROT	- PHYTOPHTHORA	2	0	2
	CORK SPOT	- CA DEFICIENCY	3	0	3
	CROWN GALL	- AGROBACTERIUM	2	0	2
	CULTURAL	- TRANSPLANT SHOCK	1	1	2
	ENVIRONMENTAL STRESSES		8	1	9
	FIRE BLIGHT	- ERWINIA	47	2	49
	FLYSPECK	- SCHIZOTHYRIUM	3	5	8
	FROGEYE	- BOTRYOSPHAERIA	10	5	15
	GRAFT PROBLEMS	- INCOMPATIBILITY	2	0	2
	INADEQUATE SPECIMEN, NO DISEASE		15	0	15
	INSECT INJURY		17	6	23
	INTERNAL BARK NECROSIS	- MANGANESE TOXICITY	1	0	1
	MOLD	- ALGAL	1	0	1
		- FUNGAL	1	0	1
	NECROTIC LEAF BLOTCH	- GLOMERELLA	1	0	1
	PHYSICAL INJURY	- PRUNING	1	0	1
	POWDERY MILDEW	- PODOSPHAERA	0	1	1
	RUSSETTING	- PHYSIOLOGICAL	0	1	1
	SCAB	- VENTURIA	8	0	8

<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1º DIAGs</i>	<i>#2º DIAGs</i>	<i>TOTAL</i>
<b>APPLE (cont)</b>					
	SOOTY BLOTCH	- GLOEODES	2	3	5
	SOOTY MOLD	- FUNGAL	1	0	1
	THREAD BLIGHT	- CERATOBASIDIUM	1	0	1
	WHITE ROT	- BOTRYOSPHAERIA	1	0	1
<b>CHERRY (Prunus)</b>					
	BACTERIAL SPOT	- XANTHOMONAS	1	0	1
	CANKER	- BOTRYOSPHAERIA	1	0	1
	CHEMICAL INJURY	- HERBICIDE	1	0	1
	CULTURAL	- TRANSPLANT SHOCK	2	0	2
	INADEQUATE SPECIMEN, NO DISEASE		0	11	
	INSECT INJURY		2	1	3
	LEAF SPOT	- COCCOMYCES	1	0	1
	POLLEN PROBLEM	- UNKNOWN	1	0	1
	POWDERY MILDEW	- PODOSPHAERA	1	0	1
<b>MANGO (Mangifera)</b>					
	ANTHRACNOSE	- GLOMERELLA	1	0	1
<b>ORANGE (Citrus)</b>					
	MOLD	- PENICILLIUM	1	0	1
<b>PEACH and APRICOT (Prunus)</b>					
	BACTERIAL SPOT	- XANTHOMONAS	3	0	3
	BROWN ROT	- MONILINIA	10	1	11
	DIEBACK	- UNKNOWN	1	0	1
	ENVIRONMENTAL STRESSES		2	1	3
	GUMMOSIS	- INJURY	1	0	1
		- UNKNOWN	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		7	0	7
	INSECT INJURY		2	4	6
	LEAF CURL	- TAPHRINA	2	0	2
	NUTRITIONAL	- NITROGEN DEFICIENCY	4	0	4
		- UNKNOWN	1	0	1
	PHYSICAL INJURY	- BIRD	0	1	1
	SCAB	- CLADOSPORIUM	1	0	1
		- FUSICLADIUM	8	3	11
<b>PEAR (Pyrus)</b>					
	ANTHRACNOSE	- GLOEOSPORIUM	1	0	1
	CHEMICAL INJURY	- PETROLEUM	1	0	1
	CULTURAL	- TRANSPLANT SHOCK	1	0	1
	ENVIRONMENTAL STRESSES		3	0	3
	FIRE BLIGHT	- ERWINIA	18	0	18
	INSECT INJURY		8	0	8
	LEAF SPOT	- CERCOSPORA	1	0	1
		- FABRAEA	1	0	1
		- PHYLLOSTICTA	1	0	1
	NO DISEASE		6	0	6
	WHITE ROT	- BOTRYOSPHAERIA	1	0	1

<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1° DIAGs</i>	<i>#2° DIAGs</i>	<i>TOTAL</i>
<b>PECAN (Carya)</b>					
	INSECT INJURY		1	0	1
	LEAF SPOT	- GNOMONIA	1	0	1
<b>PLUM (Prunus)</b>					
	BLACK KNOT	- APOSPORINA	8	0	8
	BROWN ROT	- MONILINIA	3	0	3
	ENVIRONMENTAL STRESSES		2	0	2
	INADEQUATE SPECIMEN, NO DISEASE		9	0	9
	INSECT INJURY		5	1	6
	PHYSICAL INJURY	- BIRD	1	0	1
	PLUM POCKETS	- TAPHRINA	4	0	4
	SOOTY MOLD	- FUNGAL	0	1	1
<hr/>					
<u>HERBS</u>					
<b>BASIL (Ocimum)</b>					
	CHEMICAL INJURY	- UNKNOWN	1	0	1
	INSECT INJURY		2	0	2
<b>BAY (Persea)</b>					
	LEAF SPOT	- UNKNOWN	1	0	1
<b>GINSENG (Panax)</b>					
	BLIGHT	- ALTERNARIA	1	0	1
	INSECT INJURY		1	1	2
	NO DISEASE		2	0	2
	ROOT ROT	- RHIZOCTONIA	1	0	1
<b>MINT (Mentha)</b>					
	INSECT INJURY		1	0	1
	NO DISEASE		1	0	1
	NUTRITIONAL	- GENERAL	1	0	1
<b>OREGANO (Origanum)</b>					
	NO DISEASE		1	0	1
<b>PARSNIP (Pastinaca)</b>					
	ROOT KNOT NEMATODE	- MELOIDOGYNE	1	0	1
<b>ROSEMARY (Rosmarinus)</b>					
	INSECT INJURY		1	0	1
<b>SAGE (Salvia)</b>					
	ROOT ROT	- RHIZOCTONIA	1	0	1

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1º DIAGs</b>	<b>#2º DIAGs</b>	<b>TOTAL</b>
-------------	------------------	---------------------	------------------	------------------	--------------

IDENTIFICATIONS

**FUNGAL IDENTIFICATION**

ALTERNARIA	- species	1	0	1
BULGARIA	- species	1	0	1
CHLOROPHYLLUM	- MOLYBDITES	1	0	1
FUSARIUM	- species	1	0	1
GYRODON	- MERULIOIDES	1	0	1
HETEROBASIDION	- species	1	0	1
INADEQUATE SPECIMEN		3	0	3
MARASMIUS	- species	3	0	3
MUTINUS	- CANINUS	1	0	1
POLYPORACEAE	- species	1	0	1
PORIA	- COCOS	1	0	1
SCHIZOPHYLLUM	- COMMUNE	1	0	1
SLIME MOLD	- species	2	0	2
WOOD DECAY	- UNKNOWN	1	0	1
YEAST	- species	0	1	1

**PLANT IDENTIFICATION**

CELTIS	- OCCIDENTALIS	1	0	1
CUCURBITA	- species	2	0	2
DIOSCOREA	- BATATAS	1	0	1
ELEAGNUS	- UMBELLATA	1	0	1
INADEQUATE SPECIMEN		1	0	1
MALUS	- GOLDEN DELICIOUS	1	0	1
	- RED DELICIOUS	1	0	1
	- SYLVESTRIS	1	0	1
MORUS	- ALBA	1	0	1
MOSS	- species	1	0	1
RUBUS	- THORNLESS	1	0	1
PERIDERIDIA	- GAIRDNERI	1	0	1
PRUNUS	- PERSICA	2	0	2
UNKNOWN		2	0	2

MISCELLANEOUS

**BARK**

NO DISEASE		1	0	1
------------	--	---	---	---

**CURLY DOCK (Rumex)**

AIR POLLUTION	- FLOURIDE	1	0	1
---------------	------------	---	---	---

**HORSEWEED (Conyza)**

CHEMICAL INJURY	- UNKNOWN	1	0	1
-----------------	-----------	---	---	---

**MULCH**

SLIME MOLD	- species	1	0	1
------------	-----------	---	---	---

**ROCKS**

MOLD	- RHIZOPUS	1	0	1
------	------------	---	---	---

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1° DIAGs</b>	<b>#2° DIAGs</b>	<b>TOTAL</b>
<b>SOIL</b>					
	CHEMICAL	- HERBICIDE	1	0	1
	ENVIRONMENTAL	- WET FEET	1	0	1
	NO DISEASE		6	0	6
	NUTRITIONAL	- HIGH SOLUBLE SALTS	1	0	1
	ROOT ROT	- APHANOMYCES	2	0	2
<b>THISTLE (Cirsium)</b>					
	NO DISEASE		2	0	2
<b>VINE</b>					
	INSECT INJURY		1	0	1
<u>ORNAMENTALS</u>					
<u>HERBACEOUS ORNAMENTALS AND INDOOR PLANTS</u>					
<b>AFRICAN VIOLET (Saintpaulia)</b>					
	INSECT INJURY		2	0	2
	POWDERY MILDEW	- OIDIUM	1	0	1
<b>AGLAONEMA (Aglaonea)</b>					
	NO DISEASE		1	0	1
<b>AJUGA (Ajuga)</b>					
	CROWN ROT	- ATHELIA	3	0	3
		- SCLEROTINIA	1	0	1
	LEAF ROT	- RHIZOCTONIA	1	0	1
<b>ANTHURIUM (Anthurium)</b>					
	NO DISEASE		1	0	1
<b>ARTEMISIA (Artemisia)</b>					
	ROOT ROT	- FUSARIUM	1	0	1
<b>ASTER (Aster)</b>					
	CHEMICAL INJURY	- BURN	1	0	1
	ROOT ROT	- RHIZOCTONIA	1	0	1
<b>BABYS BREATH (Gypsophila)</b>					
	WILT	- FUSARIUM	1	0	1
<b>BEGONIA (Begonia)</b>					
	BACTERIAL SOFT ROT	- ERWINIA	0	1	1
	CULTURAL	- OVERWATERING	1	1	2
	INADEQUATE SPECIMEN, NO DISEASE		3	0	3
	INSECT INJURY		1	0	1
	NUTRITIONAL	- FERTILIZER BURN	1	0	1
	POWDERY MILDEW	- OIDIUM	1	0	1
	ROOT/STEM ROT	- FUNGAL	1	0	1
		- RHIZOCTONIA	1	1	2



<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1° DIAGs</i>	<i>#2° DIAGs</i>	<i>TOTAL</i>
<b>BELLS-OF-IRELAND (Molucella)</b>	CHEMICAL INJURY	- BURN	1	0	1
<b>BENJAMIN FIG (Ficus)</b>	ENVIRONMENTAL	- STRESS	1	0	1
<b>CACTUS (various)</b>	INSECT INJURY		1	0	1
	STEM ROT	- FUSARIUM	1	0	1
<b>CAMELLIA (Camellia)</b>	CULTURAL	- TRANSPLANT SHOCK	1	0	1
<b>CHRYSANTHEMUM (Chrysanthemum)</b>	BACTERIAL BLIGHT	- ERWINIA	0	1	1
	BACTERIAL LEAF SPOT	- PSEUDOMONAS	1	0	1
	CULTURAL	- UNEVEN WATERING	0	1	1
	FOLIAR BLIGHT	- RHIZOCTONIA	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		3	0	3
	NUTRITIONAL	- CALCIUM DEFICIENCY	1	0	1
		- PHOSPHORUS DEFICIENCY	1	0	1
	ROOT/STEM ROT	- FUSARIUM	1	0	1
<b>CLEMATIS (Clematis)</b>	LEAF/STEM SPOT	- ASCOCHYTA	1	0	1
	NO DISEASE		1	0	1
<b>COLEUS (Coleus)</b>	NUTRITIONAL	- ACID SOIL	1	0	1
<b>COLUMBINE (Aquilegia)</b>	NO DISEASE		1	0	1
<b>COREOPSIS (Coreopsis)</b>	POWDERY MILDEW	- ERYSHIPHE	1	0	1
	ROOT ROT	- RHIZOCTONIA	0	1	1
<b>CREEPING ST. JOHN (Hyparicum)</b>	NO DISEASE		1	0	1
<b>CTENANTHE (Ctenanthe)</b>	CULTURAL	- OVERWATERING	1	0	1
<b>DAFFODIL (Narcissus)</b>	NO DISEASE		2	0	2
<b>DAISY (Chrysanthemum)</b>	CHEMICAL INJURY	- GROWTH REGULATOR	1	0	1
	INSECT INJURY		1	0	1

<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1º DIAGs</i>	<i>#2º DIAGs</i>	<i>TOTAL</i>
<b>DAYLILY (Hemerocallis)</b>					
	NO DISEASE		3	0	3
	RUSSET SPOT	- UNKNOWN	1	0	1
<b>DELPHINIUM (Delphinium)</b>					
	NO DISEASE		1	0	1
	ROOT ROT	- PYTHIUM	1	0	1
<b>DIANTHUS (Dianthus)</b>					
	LEAF SPOT	- PSEUDOMONAS	1	0	1
	ROOT ROT	- PHYTOPHTHORA	1	0	1
	STEM ROT	- RHIZOCTONIA	2	0	2
<b>DRACAENA (Dracaena)</b>					
	CULTURAL	- OEDEMA	1	0	1
	LEAF SPOT	- FUSARIUM	1	0	1
<b>EUSTOMA (Eustoma)</b>					
	SOUTHERN BLIGHT	- ATHELIA	1	0	1
<b>FERN (Various)</b>					
	CULTURAL	- OVERWATERING	1	0	1
	INSECT INJURY		1	0	1
	ROOT ROT	- PYTHIUM	0	1	1
<b>FIG (FICUS)</b>					
	NO DISEASE		6	0	6
<b>FUCHSIA (Fuchsia)</b>					
	BLACK ROOT ROT	- CHARLARA	1	0	1
	LEAF SPOT	- CERCOSPORA	1	0	1
<b>GARDENIA (Gardenia)</b>					
	CULTURAL	- OVERWATERING	1	0	1
	INSECT INJURY		2	0	2
<b>GERANIUM (Pelargonium)</b>					
	BACTERIAL BLIGHT	- XANTHOMONAS	7	0	7
	CHEMICAL INJURY	- BURN	1	0	1
	CULTURAL	- IMPROPER LIGHTING	1	0	1
		- OEDEMA	4	1	5
		- OVERWATERING	3	0	3
	ENVIRONMENTAL	- COLD INJURY	2	0	2
		- STRESS	1	0	1
	INSECT INJURY		1	1	2
	NO DISEASE		7	0	7
	NUTRITIONAL	- CALCIUM DEFICIENCY	1	0	1
	ROOT ROT	- PYTHIUM	0	1	1
<b>HELIOPSIS (Heliopsis)</b>					
	STEM ROT	- RHIZOCTONIA	3	0	3

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1° DIAGs</b>	<b>#2° DIAGs</b>	<b>TOTAL</b>
<b>HIBISCUS (Hibiscus)</b>					
	INSECT INJURY		1	1	2
	ROOT ROT	- FUSARIUM	1	0	1
<b>HOLLYHOCK (Althaea)</b>					
	RUST	- PUCCINIA	1	0	1
<b>HOSTA (Hosta)</b>					
	ROOT KNOT NEMATODE	- MELOIDOGYNE	1	0	1
<b>IMPATIENS (Impatiens)</b>					
	GRAY MOLD	- BOTRYTIS	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		0	6	6
	INSECT INJURY		2	0	2
	LEAF ROT	- RHIZOCTONIA	1	0	1
	NUTRITIONAL	- FERTILIZER BURN	1	0	1
		- UNKNOWN	1	0	1
	ROOT ROT	- RHIZOCTONIA	5	0	5
	ROOT/STEM ROT	- FUSARIUM	0	1	1
	VIRUS	- TOMATO SPOTTED WILT	4	0	4
	WILT	- VERTICILLIUM	1	0	1
<b>IRIS (Iris)</b>					
	AIR POLLUTION	- FLOURIDE	1	0	1
	BACTERIAL SOFT ROT	- ERWINIA	2	1	3
	INSECT INJURY		1	0	1
	LEAF SPOT	- HETEROSPORIUM	2	0	2
		- MICROSPHAERELLA	1	0	1
	RUST	- PUCCINIA	1	0	1
<b>IVY (Various)</b>					
	BACTERIAL SPOT	- XANTHOMONAS	1	0	1
	ENVIRONMENTAL	- SUNSCALD	0	1	1
	LEAF SPOT	- COLLETOTRICHUM	1	0	1
<b>JADE PLANT (Crassula)</b>					
	STEM DECAY	- UNKNOWN	1	0	1
<b>LILY (Lilium)</b>					
	AIR POLLUTION	- FLOURIDE	1	0	1
	ENVIRONMENTAL	- STRESS	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		1	0	1
<b>LUPINE (Lupine)</b>					
	NO DISEASE		1	0	1
<b>LYTHIUM (Lythium)</b>					
	AIR POLLUTION	- FLOURIDE	1	0	1
	ENVIRONMENTAL	- STRESS	1	0	1
	NO DISEASE		1	0	1

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1° DIAGs</b>	<b>#2° DIAGs</b>	<b>TOTAL</b>
<b>MELAMPODIUM (Melampodium)</b>					
	CHEMICAL INJURY	- GROWTH REGULATOR	1	0	1
	INSECT INJURY		1	1	2
<b>MARANTA (Maranta)</b>					
	CULTURAL	- OVERWATERING	1	0	1
<b>MARIGOLD (Tagetes)</b>					
	BACTERIAL LEAF SPOT	- XANTHOMONAS	3	0	3
	BACTERIAL SPOT	- PSEUDOMONAS	1	0	1
	ENVIRONMENTAL	- STRESS	0	1	1
	INSECT INJURY		2	0	2
	LEAF SPOT	- ALTERNARIA	1	0	1
		- SEPTORIA	1	0	1
	NO DISEASE		1	0	1
<b>MOSES IN THE CRADLE (Tradescantia)</b>					
	ENVIRONMENTAL	- STRESS	1	0	1
<b>NASTURTIUM (Nasturtium)</b>					
	INSECT INJURY		0	2	2
	NUTRITIONAL	- GENERAL	2	0	2
<b>ORCHID (Various)</b>					
	BROWN SPOT	- PSEUDOMONAS	1	0	1
	PETAL BLIGHT	- BOTRYTIS	1	0	1
	VIRUS	- POTEX	1	0	1
<b>PANSY (Viola)</b>					
	NO DISEASE		1	0	1
	ROOT ROT	- PYTHIUM	1	0	1
<b>PEDILANTHUS (Pedilanthus)</b>					
	POWDERY MILDEW	- OIDIUM	1	0	1
<b>PENSTEMON (Penstemon)</b>					
	POWDERY MILDEW	- ERYSHIPHE	1	0	1
<b>PEONY (Paeonia)</b>					
	CHEMICAL INJURY	- HERBICIDE	1	0	1
	ENVIRONMENTAL	- BUD BLAST	1	0	1
	GRAY MOLD	- BOTRYTIS	1	0	1
	NO DISEASE		1	0	1
	RED SPOT	- CLADOSPORIUM	2	0	2
	ROOT KNOW NEMATODE	- MELOIDOGYNE	1	0	1
<b>PETUNIA (Petunia)</b>					
	CULTURAL	- OVERWATERING	1	0	1
	DAMPING OFF	- RHIZOCTONIA	0	1	1
	NO DISEASE		2	0	2
	NUTRITIONAL	- NITROGEN DEFICIENCY	1	0	1
		- POTASSIUM DEFICIENCY	0	1	1
	ROOT/STEM ROT	- PYTHIUM	1	0	1

<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1° DIAGs</i>	<i>#2° DIAGs</i>	<i>TOTAL</i>
<b>PHILODENDRON (Philodendron)</b>					
	NO DISEASE		1	0	1
	NUTRITIONAL	- HIGH SOLUBLE SALTS	1	0	1
<b>PHLOX (Phlox)</b>					
	CHEMICAL INJURY	- HERBICIDE	0	1	1
	INADEQUATE SPECIMEN		1	0	1
	LEAF SPOT	- PHYLLOSTICTA	1	0	1
	PHYSIOLOGICAL	- UNKNOWN	1	0	1
	ROOT ROT	- PYTHIUM	1	0	1
	STEM ROT	- RHIZOCTONIA	1	0	1
<b>POINSETTIA (Euphorbia)</b>					
	BACTERIAL SOFT ROT	- BACTERIAL	1	0	1
	CHEMICAL INJURY	- GROWTH REGULATOR	1	0	1
		- HERBICIDE	1	0	1
	GRAY MOLD	- BOTRYTIS	0	1	1
	NO DISEASE		2	0	2
	NUTRITIONAL	- HIGH SOLUBLE SALTS	1	0	1
	ROOT/STEM ROT	- FUSARIUM	1	0	1
		- RHIZOCTONIA	1	0	1
<b>POPPY (Papaver)</b>					
	NUTRITIONAL	- UNKNOWN	1	0	1
<b>PORTULACA (Portulaca)</b>					
	NO DISEASE		1	0	1
<b>RUBBER PLANT (Ficus)</b>					
	CULTURAL	- OVERWATERING	1	0	1
<b>SALVIA (Salvia)</b>					
	NUTRITIONAL	- FERTILIZER BURN	1	0	1
<b>SCHEFFLERA (Brassaia)</b>					
	CULTURAL	- OEDEMA	3	0	3
	INSECT INJURY		2	0	2
	NO DISEASE		2	0	2
<b>SHAMROCK (Oxalis)</b>					
	INADEQUATE SPECIMEN		1	0	1
<b>SNAPDRAGON (Antirrhinum)</b>					
	CHEMICAL INJURY	- BURN	1	0	1
	INSECT INJURY		1	1	2
	NO DISEASE		2	0	2
	ROOT/STEM ROT	- RHIZOCTONIA	1	0	1
	VIRUS	- TOMATO SPOTTED WILT	1	0	1
<b>SPATHIPHYLLUM (Spathiphyllum)</b>					
	CULTURAL	- OVERWATERING	1	0	1

<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1° DIAGs</i>	<i>#2° DIAGs</i>	<i>TOTAL</i>
<b>STATICE (Limonium)</b>					
	CHEMICAL INJURY	- HERBICIDE	1	0	1
	CULTURAL	- POOR SOIL	1	0	1
	ROOT/STEM ROT	- RHIZOCTONIA	1	0	1
	UNKNOWN		1	0	1
<b>STRAWFLOWER (Helichrysum)</b>					
	NO DISEASE		1	0	1
	STEM ROT	- FUSARIUM	1	0	1
<b>TREE TOMATO (Cyphomandra)</b>					
	POWDERY MILDEW	- OIDIUM	2	0	2
<b>VERBENA (Verbena)</b>					
	NO DISEASE		1	0	1
<b>VINCA (Vinca)</b>					
	ANTHRACNOSE	- COLLETOTRICHUM	1	0	1
	CANKER/DIEBACK	- PHOMA	6	0	6
	CROWN/STEM ROT	- FUSARIUM	1	0	1
	CULTURAL	- OVERWATERING	0	1	1
		- UNKNOWN	1	0	1
	DIEBACK	- PHYTOPHTHORA	1	0	1
	ENVIRONMENTAL	- WET FEET	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		7	0	7
	NUTRITIONAL	- NITROGEN DEFICIENCY	1	0	1
		- HIGH SOLUBLE SALTS	1	0	1
	ROOT ROT	- FUNGAL	1	0	1
		- RHIZOCTONIA	3	1	4
	STEM DECAY	- COLLETOTRICHUM	1	0	1
	STEM ROT	- CHOANEPHORA	1	0	1
<b>VIRGINIA CREEPER (Parthenocissus)</b>					
	INADEQUATE SPECIMEN		1	0	1
<b>YARROW (Achillea)</b>					
	FLOWER MOLD	- FUNGAL	1	0	1
	INSECT INJURY		0	1	1
<b>YUCCA (Yucca)</b>					
	LEAF SPOT	- CONIOTHYRIUM	1	0	1
<b>ZEBRINA (Zebrina)</b>					
	INSECT INJURY		1	0	1
<b>ZINNIA (Zinnia)</b>					
	BACTERIAL LEAF SPOT	- XANTHOMONAS	1	0	1

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1° DIAGs</b>	<b>#2° DIAGs</b>	<b>TOTAL</b>
<u><b>TURFGRASS</b></u>					
<b>BENTGRASS (Agrostis)</b>					
	ANTHRACNOSE	- COLLETOTRICHUM	1	0	1
	BLIGHT	- PYTHIUM	2	0	2
	BROWN PATCH	- RHIZOCTONIA	1	0	1
	ENVIRONMENTAL	- WET FEET	1	0	1
	NO DISEASE		10	0	10
	NECROTIC RING SPOT	- LEPTOSPHAERIA	1	0	1
	ROOT ROT	- PYTHIUM	8	0	8
	SLIME MOLD	- species	1	0	1
	SUMMER PATCH	- PHIALOPHORA	1	0	1
	YELLOW TUFT	- SCLEROPHTHORA	1	0	1
<b>BERMUDAGRASS (Cynodon)</b>					
	ALGAE	- BLUE-GREEN	1	0	1
	CULTURAL	- OVERWATERING	0	1	1
	DOLLAR SPOT	- LANZIA./MOELL.	1	0	1
	NUTRITIONAL	- NITROGEN DEFICIENCY	1	0	1
<b>BLUEGRASS (Poa)</b>					
	BROWN PATCH	- RHIZOCTONIA	2	1	3
	CHEMICAL INJURY	- BURN	1	0	1
	CULTURAL	- HEAVY THATCH	2	0	2
	DOLLAR SPOT	- LANZIA./MOELL.	1	0	1
	ENVIRONMENTAL STRESSES		3	1	4
	NO DISEASE		9	0	9
	NECROTIC RING SPOT	- LEPTOSPHAERIA	3	0	3
	NUTRITIONAL	- FERTILIZER BURN	1	0	1
		- HIGH pH	0	1	1
	ROOT ROT	- RHIZOCTONIA	1	0	1
	SLIME MOLD	- PHYSARIUM	1	0	1
<b>FESCUE (Festuca)</b>					
	BROWN PATCH	- RHIZOCTONIA	31	1	32
	ENVIRONMENTAL STRESSES		3	2	5
	INADEQUATE SPECIMEN, NO DISEASE		10	0	10
	LEAF BLIGHT	- LEPTOSPHAERULINA	1	1	2
	LEAF SPOT	- ASCOCHYTA	0	1	1
		- FUNGAL	0	1	1
		- UNKNOWN	0	1	1
	NUTRITIONAL	- FERTILIZER BURN	1	0	1
	RED THREAD	- LAETISARIA	2	0	2
	ROOT/STEM ROT	- RHIZOCTONIA	2	0	2
	RUST	- PUCCINIA	1	0	1
<b>RYEGRASS (Lolium)</b>					
	BLIGHT	- PYTHIUM	2	0	2
	BROWN PATCH	- RHIZOCTONIA	3	1	4
	DOLLAR SPOT	- LANZIA./MOELL.	1	0	1
	ENVIRONMENTAL	- STRESS	1	0	1

<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1° DIAGs</i>	<i>#2° DIAGs</i>	<i>TOTAL</i>
<b>RYEGRASS (cont)</b>					
	NO DISEASE		1	0	1
	ROOT ROT	- RHIZOCTONIA	1	0	1
	SLIME MOLD	- species	1	0	1
<b>TURF (Various)</b>					
	BROWN PATCH	- RHIZOCTONIA	5	0	5
	ENVIRONMENTAL STRESSES		4	0	4
	NO DISEASE		1	0	1
	SLIME MOLD	- species	3	0	3
<u>WOODY ORNAMENTALS</u>					
<b>ALMOND (Prunus)</b>					
	TWIG BLIGHT	- MONILINIA	1	0	1
<b>ARBORVITAE (Thuja)</b>					
	CULTURAL	- TRANSPLANT SHOCK	1	0	1
	ENVIRONMENTAL STRESS		2	1	3
	INADEQUATE SPECIMEN, NO DISEASE		2	0	2
	INSECT INJURY		7	0	7
	NEEDLE DROP	- NORMAL	1	1	2
	PHYSICAL INJURY	- MAN	1	0	1
		- UNKNOWN	1	0	1
	SOOTY MOLD	- species	1	0	1
	TWIG BLIGHT	- PESTALOTIOPSIS	0	1	1
<b>ASH (Fraxinus)</b>					
	ANTHRACNOSE	- DISCULA	4	0	4
	ENVIRONMENTAL	- DROUGHT	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		4	0	4
	INSECT INJURY		5	2	7
	LEAF SCORCH	- ENVIRONMENTAL	0	1	1
		- UNKNOWN	1	0	1
	PHYSICAL INJURY	- UNKNOWN	1	0	1
<b>AUTUMN-OLIVE - See listing under RUSSIAN-OLIVE</b>					
<b>AZALEA - See listing under RHODODENDRON</b>					
<b>BAMBOO (Bambusa)</b>					
	INSECT INJURY		1	0	1
<b>BARBERRY (Berberis)</b>					
	CULTURAL	- TRANSPLANT SHOCK	1	0	1
	ENVIRONMENTAL	- STRESS	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		2	0	2
<b>BAYBERRY (Myrica)</b>					
	CULTURAL	- TRANSPLANT SHOCK	1	0	1



<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1° DIAGs</i>	<i>#2° DIAGs</i>	<i>TOTAL</i>
<b>BIRCH (Betula)</b>					
	ANTHRACNOSE	- DISCULA	3	0	3
	CULTURAL	- TRANSPLANT SHOCK	1	0	1
	DECLINE	- UNKNOWN	1	0	1
	ENVIRONMENTAL	- STRESS	1	1	2
	INADEQUATE SPECIMEN, NO DISEASE		7	0	7
	INSECT INJURY		1	1	2
	LEAF SCORCH	- UNKNOWN	2	0	2
	LEAF SPOT	- FUNGAL	2	1	3
	PHYSICAL INJURY	- PRUNING	1	0	1
	RUST	- MELAMPSORIDIUM	0	1	1
<b>BOXELDER (Acer)</b>					
	INSECT INJURY		3	0	3
<b>BOXWOOD (Buxus)</b>					
	CANKER	- PSEUDONECTRIA	2	0	2
	CHEMICAL INJURY	- UNKNOWN	1	0	1
	CULTURAL	- TRANSPLANT SHOCK	3	0	3
	ENVIRONMENTAL	- WINTER INJURY	5	0	5
	INSECT INJURY		2	0	2
	NO DISEASE		3	0	3
	PHYSICAL INJURY	- MOWER	0	1	1
		- UNKNOWN	1	0	1
	SOOTY MOLD	- species	1	0	1
<b>CATALPA (Catalpa)</b>					
	WILT	- VERTICILLIUM	1	0	1
<b>CEDAR - See listing under JUNIPER</b>					
<b>CHAMAECYPARIS (Chamaecyparis)</b>					
	INADEQUATE SPECIMEN, NO DISEASE		2	0	2
<b>CHERRY (Prunus)</b>					
	CULTURAL	- TRANSPLANT SHOCK	0	1	1
	ENVIRONMENTAL	- WET FEET	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		3	0	3
	INSECT INJURY		3	1	4
<b>CHESTNUT (Castanea)</b>					
	INADEQUATE SPECIMEN		2	0	2
	INSECT INJURY		1	0	1
<b>COTTONWOOD (Populus)</b>					
	INSECT INJURY		2	0	2
	LEAF SPOT	- FUNGAL	1	0	1
	NO DISEASE		1	0	1
	NUTRITIONAL	- HIGH pH	0	1	1

<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1° DIAGs</i>	<i>#2° DIAGs</i>	<i>TOTAL</i>
<b>CRABAPPLE (Malus)</b>					
	CEDAR/APPLE RUST	- GYMNOSPORANGIUM	1	0	1
	ENVIRONMENTAL	- WET FEET	1	0	1
	FIRE BLIGHT	- ERWINIA	5	0	5
	INADEQUATE SPECIMEN, NO DISEASE		5	0	5
	INSECT INJURY		3	1	4
	SCAB	- VENTURIA	11	0	11
<b>DOGWOOD (Cornus)</b>					
	ANTHRACNOSE	- DISCULA	20	0	20
	CHEMICAL INJURY	- UNKNOWN	2	0	2
	CULTURAL	- TRANSPLANT SHOCK	6	1	7
	ENVIRONMENTAL	- STRESS	27	1	28
	GRAY MOLD	- BOTRYTIS	0	1	1
	INADEQUATE SPECIMEN, NO DISEASE		42	0	42
	INSECT INJURY		9	2	11
	LEAF SCORCH	- ENVIRONMENTAL	11	1	12
		- UNKNOWN	5	0	5
	LEAF SPOT	- SEPTORIA	5	0	5
	NUTRITIONAL	- NITROGEN DEFICIENCY	1	0	1
	SHOESTRING ROOT ROT	- ARMILLARIA	1	0	1
	SPOT ANTHRACNOSE	- ELSINOE	9	0	9
<b>ELM (Ulmus)</b>					
	ANTHRACNOSE	- GLOEOSPORIUM	0	1	1
	BLACK SPOT	- STEGOPHORA	2	0	2
	DUTCH ELM DISEASE	- CERATOCYSTIS	2	0	2
	ENVIRONMENTAL	- STRESS	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		8	0	8
	INSECT INJURY		9	2	11
	WOOD DECAY	- BASIDIOMYCETE	1	0	1
<b>EUONYMUS (Euonymus)</b>					
	CROWN GALL	- AGROBACTERIUM	2	0	2
	ENVIRONMENTAL STRESSES		2	0	2
	INSECT INJURY		8	1	9
	LEAF SPOT	- EXOSPORIUM	1	0	1
	NO DISEASE		3	0	3
	POWDERY MILDEW	- MICROSPHAERA	1	0	1
<b>FIR (Abies)</b>					
	CULTURAL	- TRANSPLANT SHOCK	1	0	1
	ENVIRONMENTAL	- STRESS	1	0	1
	NO DISEASE		1	0	1
<b>FORSYTHIA (Forsythia)</b>					
	CHEMICAL INJURY	- UNKNOWN	1	0	1
	ENVIRONMENTAL	- COLD INJURY	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		4	0	4
	ROOT ROT	- FUNGAL	1	0	1
<b>GINKO (Ginko)</b>					
	ENVIRONMENTAL	- STRESS	1	0	1

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1° DIAGs</b>	<b>#2° DIAGs</b>	<b>TOTAL</b>
<b>HACKBERRY (Celtis)</b>					
	INADEQUATE SPECIMEN		1	0	1
	INSECT INJURY		4	0	4
<b>HAWTHORN (Crataegus)</b>					
	CEDAR-QUINCE RUST	- GYMNOSPORANGIUM	3	0	3
	DECLINE	- ENVIRONMENTAL	1	0	1
	FIRE BLIGHT	- ERWINIA	1	0	1
	INADEQUATE SPECIMEN		1	0	1
	INSECT INJURY		3	1	4
	LEAF SPOT	- ENTOMOSPORIUM	0	1	1
	SCAB	- VENTURIA	1	0	1
<b>HEMLOCK (Tsuga)</b>					
	CHEMICAL	- HERBICIDE	1	0	1
	ENVIRONMENTAL STRESSES		5	0	5
	INADEQUATE SPECIMEN, NO DISEASE		3	0	3
	INSECT INJURY		3	0	3
<b>HIBISCUS (Hibiscus)</b>					
	CROWN ROT	- FUSARIUM	1	0	1
	NO DISEASE		1	0	1
<b>HICKORY (Carya)</b>					
	INSECT INJURY		3	0	3
	NO DISEASE		1	0	1
	SOOTY MOLD	- species	1	0	1
<b>HOLLY (Ilex)</b>					
	BACTERIAL BLIGHT	- CORYNEBACTERIUM	3	0	3
	BLACK ROOT ROT	- CHARLARA	5	0	5
	CANKER	- BOTRYOSPHERA	2	0	2
	CULTURAL	- IMPROPER DEPTH	1	0	1
		- OVERWATERING	1	0	1
		- TRANSPLANT SHOCK	3	1	4
		- UNKNOWN	1	0	1
	ENVIRONMENTAL STRESSES		8	2	10
	INADEQUATE SPECIMEN, NO DISEASE		17	0	17
	INSECT INJURY		3	0	3
	LEAF SCORCH	- UNKNOWN	1	0	1
	NUTRITIONAL	- IRON DEFICIENCY	1	0	1
	SPINE SPOT	- SPINE INJURY	1	0	1
<b>HONEYLOCUST (Gleditsia)</b>					
	INADEQUATE SPECIMEN		1	0	1
	INSECT INJURY		2	1	3
	LEAF SPOT	- CERCOSPORA	1	0	1
<b>HONEYSUCKLE (Lonicera)</b>					
	CHEMICAL INJURY	- HERBICIDE	1	0	1
	CULTURAL	- OEDEMA	1	0	1
	NO DISEASE		1	0	1

<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1° DIAGs</i>	<i>#2° DIAGs</i>	<i>TOTAL</i>
<b>HORNBEAM (Carpinus)</b>	INSECT INJURY		1	0	1
<b>HYDRANGEA (Hydrangea)</b>	CHEMICAL INJURY	- UNKNOWN	1	0	1
	INSECT INJURY		1	0	1
	LEAF SPOT	- CERCOSPORA	1	0	1
		- FUNGAL	1	0	1
<b>JUNIPER (Juniperus)</b>	CEDAR/APPLE RUST	- GYMNOSPORANGIUM	1	0	1
	CEDAR/QUINCE RUST	- GYMNOSPORANGIUM	5	0	5
	CULTURAL	- TRANSPLANT SHOCK	1	0	1
	ENVIRONMENTAL STRESSES		6	1	7
	INADEQUATE SPECIMEN, NO DISEASE		24	0	24
	INSECT INJURY		13	1	14
	ROOT ROT	- PHYTOPHTHORA	3	0	3
	TWIG BLIGHT	- KABATINA	4	1	5
		- PHOMOPSIS	1	0	1
		- SPHAEROPSIS	0	1	1
<b>KENTUCKY COFFEETREE (Gymnocladus)</b>	CHEMICAL	- HERBICIDE	1	0	1
<b>LILAC (Syringa)</b>	CHEMICAL INJURY	- GROWTH REGULATOR	1	0	1
	ENVIRONMENTAL	- FROST INJURY	1	0	1
	INSECT INJURY		2	0	2
	LEAF SCORCH	- UNKNOWN	1	0	1
	LEAF SPOT	- FUNGAL	0	1	1
	NO DISEASE		4	0	4
	POWDERY MILDEW	- MICROSPHAERA	3	0	3
	SHOOT BLIGHT	- GLOEOSPORIUM	1	0	1
<b>LINDEN (Tilia)</b>	LEAF SPOT	- CERCOSPORA	1	0	1
	NO DISEASE		1	0	1
	PHYSICAL INJURY	- UNKNOWN	1	0	1
<b>LOCUST (Robinia)</b>	CHEMICAL INJURY	- HERBICIDE	1	0	1
	CULTURAL	- TRANSPLANT SHOCK	1	0	1
	INSECT INJURY		2	0	2
	LEAF SPOT	- CERCOSPORA	1	0	1
	NO DISEASE		1	0	1
	WOOD DECAY	- GANODERMA	1	0	1
<b>MAGNOLIA (Magnolia)</b>	BACTERIAL LEAF SPOT	- PSEUDOMONAS	1	1	2
	CHEMICAL INJURY	- HERBICIDE	2	0	2
	ENVIRONMENTAL STRESSES		3	0	3
	INADEQUATE SPECIMEN, NO DISEASE		5	0	5
	INSECT INJURY		9	1	10

<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1° DIAGs</i>	<i>#2° DIAGs</i>	<i>TOTAL</i>
<b>MAGNOLIA (cont)</b>					
	LEAF SCORCH	- ENVIRONMENTAL	3	0	3
	WILT	- VERTICILLIUM	1	0	1
<b>MAHONIA (Mahonia)</b>					
	ENVIRONMENTAL	- STRESS	1	0	1
<b>MAPLE (Acer)</b>					
	AIR POLLUTION	- FLOURIDE	1	0	1
	ANTHRACNOSE	- DISCULA	3	0	3
		- KABATIELLA	9	0	9
	BULLS-EYE SPOT	- CRISTULARIELLA	2	0	2
	CHEMICAL INJURY	- GROWTH REGULATOR	2	0	2
		- HERBICIDE	1	0	1
		- UNKNOWN	1	0	1
	CULTURAL	- TRANSPLANT SHOCK	2	0	2
	DECLINE	- ENVIRONMENTAL	1	0	1
	ENVIRONMENTAL STRESSES		10	1	11
	GIRDLING ROOT		1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		48	0	48
	INSECT INJURY		34	5	39
	LEAF SCORCH	- ENVIRONMENTAL, UNKNOWN	3	1	4
	LEAF SPOT	- FUNGAL	1	0	1
		- PHYLLOSTICTA	12	0	12
	NUTRITIONAL	- MANGANESE DEFICIENCY	1	0	1
		- MANGANESE TOXICITY	1	0	1
		- UNKNOWN	1	0	1
	PHYSICAL INJURY	- WOODPECKER	1	0	1
	SOOTY MOLD	- species	0	1	1
	WILT	- VERTICILLIUM	8	1	9
<b>MIMOSA (Albizia)</b>					
	INADEQUATE SPECIMEN		1	0	1
<b>MOUNTAIN ASH (Sorbus)</b>					
	ENVIRONMENTAL	- STRESS	1	0	1
<b>MOUNTAIN LAUREL (Kalmia)</b>					
	LEAF SPOT	- SEPTORIA	1	0	1
<b>OAK (Quercus)</b>					
	AIR POLLUTION	- FLOURIDE	2	0	2
	BACTERIAL SCORCH	- XYLELLA	15	0	15
	CANKER/DIEBACK	- CORYNEUM	1	0	1
	CHEMICAL INJURY	- GROWTH REGULATOR	7	0	7
		- HERBICIDE	2	0	2
	ENVIRONMENTAL STRESSES		10	3	13
	INADEQUATE SPECIMEN, NO DISEASE		17	0	17
	INSECT INJURY		31	6	37
	LEAF BLISTER	- TAPHRINA	8	1	9
	LEAF SCORCH	- ENVIRONMENTAL	2	0	2
	LEAF SPOT	- TUBAKIA	10	5	15

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1° DIAGs</b>	<b>#2° DIAGs</b>	<b>TOTAL</b>
<b>OAK (cont)</b>					
	NUTRITIONAL	- FE DEFICIENCY	7	1	8
		- HIGH pH	4	0	4
	POWDERY MILDEW	- species	5	4	9
	TIP BURN	- UNKNOWN	0	1	1
	WOOD DECAY	- UNKNOWN	2	0	2
<b>PEAR (Pyrus)</b>					
	CHEMICAL INJURY	- GROWTH REGULATOR	1	0	1
		- HERBICIDE	0	1	1
		- UNKNOWN	1	0	1
	COLLAR ROT	- PHYTOPHTHORA	0	1	1
	CULTURAL	- TRANSPLANT SHOCK	3	0	3
	ENVIRONMENTAL STRESSES		5	0	5
	FIRE BLIGHT	- ERWINIA	5	0	5
	LEAF SCORCH	- ENVIRONMENTAL	3	0	3
	NO DISEASE		5	0	5
	SHOESTRING ROOT ROT	- ARMILLARIA	1	0	1
<b>PHOTINIA (Photinia)</b>					
	LEAF SPOT	- ENTOMOSPORIUM	1	0	1
	NO DISEASE		1	0	1
<b>PIERIS (Pieris)</b>					
	DIEBACK	- BOTRYOSPHAERIA	1	0	1
<b>PINE (Pinus)</b>					
	AIR POLLUTION	- CHLORINE	1	0	1
		- OZONE	1	2	3
		- SULPHUR DIOXIDE	2	0	2
	CHEMICAL INJURY	- UNKNOWN	7	0	7
	CULTURAL	- TRANSPLANT SHOCK	9	2	11
	ENVIRONMENTAL STRESSES		18	4	22
	INADEQUATE SPECIMEN, NO DISEASE		43	0	43
	INSECT INJURY		27	10	37
	LEAF SCORCH	- UNKNOWN	3	0	3
	NEEDLE CAST	- CYCLANEUSMA	2	0	2
		- LOPHODERMIIUM	3	0	3
	NEEDLE DROP	- NORMAL	0	1	1
	NEEDLE RUST	- COLEOSPORIUM	3	0	3
	PHYSICAL INJURY	- BIRD	2	0	2
		- PRUNING	1	0	1
	PINEWOOD NEMATODE	- BURSAPHELENCUS	7	0	7
	ROOT ROT	- RHIZOCTONIA	1	0	1
	SOOTY MOLD	- species	5	1	6
	TIP BLIGHT	- SPHAEROPSIS	27	0	27
	WHITE PINE DECLINE	- ENVIRONMENTAL	16	0	16
<b>PLUM (Prunus)</b>					
	CULTURAL	- TRANSPLANT SHOCK	1	0	1
	INSECT INJURY		3	1	4

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1° DIAGs</b>	<b>#2° DIAGs</b>	<b>TOTAL</b>
<b>POPLAR (Populus)</b>					
	CHEMICAL INJURY	- HERBICIDE	1	0	1
	ENVIRONMENTAL	- STRESS	1	0	1
	INSECT INJURY		0	1	1
	NO DISEASE		2	0	2
	POWDERY MILDEW	- species	1	0	1
<b>PRIVET (Ligustrum)</b>					
	INSECT INJURY		1	0	1
<b>PYRACANTHA (Pyracantha)</b>					
	NO DISEASE		1	0	1
<b>REDBUD (Cercis)</b>					
	CULTURAL	- OVERWATERING	1	0	1
		- TRANSPLANT SHOCK	1	0	1
	ENVIRONMENTAL	- STRESS	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		3	0	3
	INSECT INJURY		1	0	1
	WILT	- VERTICILLIUM	1	0	1
<b>RHODODENDRON and AZALEA (Rhododendron)</b>					
	BLIGHT/DIEBACK	- PHYTOPHTHORA	2	0	2
	CULTURAL	- INSUFFICIENT WATER	1	0	1
		- TRANSPLANT SHOCK	10	0	10
	DIEBACK	- BOTRYOSPHERA	2	0	2
	ENVIRONMENTAL STRESSES		5	1	6
	INADEQUATE SPECIMEN, NO DISEASE		16	0	16
	INSECT INJURY		6	1	7
	LEAF SPOT	- FUNGAL	1	0	1
	LEAF/FLOWER GALL	- EXOBASIDIUM	4	0	4
	NUTRITIONAL	- FE DEFICIENCY	0	1	1
		- HIGH PH	2	1	3
	PHYSICAL INJURY	- UNKNOWN	2	0	2
	ROOT ROT	- PHYTOPHTHORA	2	1	3
	SOOTY MOLD	- species	1	0	1
<b>ROSE (Rosa)</b>					
	BLACK SPOT	- DIPLOCARPON	5	0	5
	BUD/TWIG BLIGHT	- BOTRYTIS	0	1	1
	CANKER, COMMON	- CONIOTHYRIUM	1	1	2
	CHEMICAL INJURY	- INSECTICIDE	1	0	1
		- PESTICIDE	1	0	1
	ENVIRONMENTAL STRESSES		2	0	2
	INADEQUATE SPECIMEN, NO DISEASE		12	0	12
	INSECT INJURY		6	1	7
	NUTRITIONAL	- GENERAL	1	1	2
	POWDERY MILDEW	- SPHAEROTHECA	1	0	1
	ROSETTE	- UNKNOWN	4	0	4
	SLIME MOLD	- species	1	0	1
	VIRUS	- UNKNOWN	1	0	1

<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1° DIAGs</i>	<i>#2° DIAGs</i>	<i>TOTAL</i>
<b>RUSSIAN-OLIVE and AUTUMN-OLIVE (Elaeagnus)</b>					
	INADEQUATE SPECIMEN		2	0	2
<b>SASSAFRAS (Sassafras)</b>					
	ANTHRACNOSE	- GLOMERELLA	1	0	1
	INSECT INJURY		1	0	1
<b>SERVICEBERRY (Amelanchier)</b>					
	FIRE BLIGHT	- ERWINIA	1	0	1
<b>SPRUCE (Picea)</b>					
	CHEMICAL INJURY	- HERBICIDE	1	0	1
		- UNKNOWN	1	0	1
	CULTURAL	- TRANSPLANT SHOCK	2	0	2
	ENVIRONMENTAL STRESSES		7	0	7
	INADEQUATE SPECIMEN, NO DISEASE		28	0	28
	INSECT INJURY		21	4	25
	NEEDLE CAST	- RHIZOSPHAERA	4	0	4
	PHYSICAL INJURY	- UNKNOWN	3	0	3
	SOOTY MOLD	- species	2	0	2
<b>SWEETGUM (Liquidambar)</b>					
	CHEMICAL	- UNKNOWN	1	0	1
	ENVIRONMENTAL	- STRESS	1	0	1
	NO DISEASE		3	0	3
<b>SYCAMORE and PLANETREE (Platanus)</b>					
	ANTHRACNOSE	- APIOGNOMONIA	3	0	3
	BACTERIAL SCORCH	- XYLELLA	1	0	1
	CANKER STAIN	- CERATOCYSTIS	1	0	1
	INADEQUATE SPECIMEN		1	0	1
	POWDERY MILDEW	- MICROSPHAERA	2	0	2
<b>TAXUS (Taxus)</b>					
	CHEMICAL INJURY	- GROWTH REGULATOR	1	0	1
		- HERBICIDE	7	0	7
	CULTURAL	- TRANSPLANT SHOCK	5	0	5
	ENVIRONMENTAL STRESSES		17	2	19
	INADEQUATE SPECIMEN, NO DISEASE		23	0	23
	INSECT INJURY		2	0	2
	PHYSICAL INJURY	- PRUNING	2	0	2
	ROOT ROT	- RHIZOCTONIA	1	0	1
	SLIME MOLD	- species	2	0	2
	TWIG BLIGHT	- PHOMOPSIS	1	0	1
<b>TULIPTREE (Liriodendron)</b>					
	INADEQUATE SPECIMEN, NO DISEASE		2	0	2
	INSECT INJURY		3	0	3
	LEAF SPOT	- FUNGAL	1	0	1
		- PHYLLOSTICTA	1	0	1
	POWDERY MILDEW	- species	1	0	1



<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1° DIAGs</i>	<i>#2° DIAGs</i>	<i>TOTAL</i>
<b>VIBURNUM (Viburnum)</b>					
	CULTURAL	- TRANSPLANT SHOCK	1	0	1
	ENVIRONMENTAL STRESSES		2	0	2
	INSECT INJURY		3	0	3
	NO DISEASE		3	0	3
	ROOT ROT	- RHIZOCTONIA	1	0	1
<b>WALNUT (Juglans)</b>					
	ANTHRACNOSE	- GNOMONIA	1	0	1
	ENVIRONMENTAL	- COMPACTION	1	0	1
	INSECT INJURY		3	0	3
<b>WILLOW (Salix)</b>					
	CULTURAL	- TRANSPLANT SHOCK	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		2	0	2
	INSECT INJURY		1	0	1
<b>WISTERIA (Wisteria)</b>					
	CANKER	- NECTRIA	1	0	1
	INSECT INJURY		1	0	1
<b>ZELKOVA (Zelcova)</b>					
	CULTURAL	- TRANSPLANT SHOCK	1	0	1
	NO DISEASE		1	0	1
<u>VEGETABLES</u>					
<b>ASPARAGUS (Asparagus)</b>					
	INSECT INJURY		1	0	1
	NO DISEASE		1	0	1
<b>BEAN (Phaseolus)</b>					
	AIR POLLUTION	- OZONE	1	0	1
	ANGULAR LEAF SPOT	- PHAEOSARIOPSIS	1	0	1
	ANTHRACNOSE	- COLLETOTRICHUM	4	0	4
	CHEMICAL INJURY	- GROWTH REGULATOR	1	0	1
		- HERBICIDE	1	0	1
		- UNKNOWN	1	0	1
	COMMON BLIGHT	- XANTHOMONAS	1	0	1
	DAMPING-OFF	- FUSARIUM	1	0	1
		- RHIZOCTONIA	1	0	1
	ENVIRONMENTAL STRESSES		2	0	2
	INADEQUATE SPECIMEN, NO DISEASE		7	0	7
	INSECT INJURY		6	2	8
	ROOT KNOT NEMATODE	- MELOIDOGYNE	1	0	1
	ROOT/STEM ROT	- FUSARIUM	1	0	1
		- RHIZOCTONIA	4	0	4
	RUST	- UROMYCES	5	1	6
	SOUTHERN BLIGHT	- ATHELIA	4	0	4
	VIRUS	- BEAN YELLOW MOSAIC	7	0	7
	YEAST SPOT	- NEMATOSPORA	1	0	1

<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1° DIAGs</i>	<i>#2° DIAGs</i>	<i>TOTAL</i>
<b>BROCCOLI - see listing under CRUCIFERS</b>					
<b>CABBAGE - see listing under CRUCIFERS</b>					
<b>CANTALOUPE - see listing under CUCURBITS</b>					
<b>CAULIFLOWER - see listing under CRUCIFERS</b>					
<b>CORN, sweet (<i>Zea</i>)</b>					
	BACTERIAL STALK ROT	- ERWINIA	2	0	2
	CHEMICAL INJURY	- HERBICIDE	0	1	1
		- UNKNOWN	1	0	1
	ENVIRONMENTAL	- STRESS	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		9	0	9
	INSECT INJURY		2	0	2
	MUTATION	- GENETIC	1	0	1
	NUTRITIONAL	- ACID SOIL	1	0	1
		- NITROGEN DEFICIENCY	1	0	1
		- ZN DEFICIENCY	2	0	2
	SMUT	- USTILAGO	3	0	3
	STEWART'S WILT	- ERWINIA	5	0	5
<b>CRUCIFERS - BROCCOLI, CABBAGE, CAULIFLOWER and TURNIP (<i>Brassica</i>) and RADISH (<i>Raphanus</i>)</b>					
	BLACK ROOT ROT	- APHANOMYCES	1	0	1
	BLACK SPOT	- ALTERNARIA	6	0	6
	CHEMICAL INJURY	- GROWTH REGULATOR	1	0	1
		- HERBICIDE	1	0	1
		- INSECTICIDE	0	1	1
	INSECT INJURY		5	3	8
	NO DISEASE		2	0	2
	NUTRITIONAL	- UNKNOWN	1	0	1
	ROOT/STEM ROT	- RHIZOCTONIA	0	1	1
	WIRE STEM	- RHIZOCTONIA	5	0	5
<b>CUCURBITS - CANTALOUPE, CUCUMBER (<i>Cucumis</i>), PUMPKIN, SQUASH (<i>Cucurbita</i>) and WATERMELON (<i>Citrus</i>)</b>					
	ANTHRACNOSE	- COLLETOTRICHUM	1	0	1
	BACTERIAL WILT	- ERWINIA	6	1	7
	CHEMICAL INJURY	- HERBICIDE	2	0	2
	CULTURAL	- IMPROPER LIGHT	1	0	1
	DAMPING-OFF	- RHIZOCTONIA	1	0	1
	DOWNY MILDEW	- PSEUDOPERONOSPORA	1	0	1
	ENVIRONMENTAL	- SUNSCALD	1	0	1
	FRUIT DECAY	- FUSARIUM	1	0	1
	GUMMY STEM BLIGHT	- DIDYMELLA	3	0	3
	INADEQUATE SPECIMEN, NO DISEASE		11	0	11
	INSECT INJURY		2	1	3
	LEAF BLIGHT	- ALTERNARIA	1	1	2
	LEAF SPOT	- CERCOSPORA	1	0	1
	POWDERY MILDEW	- ERYSPHE	5	0	5
	ROOT ROT	- FUSARIUM	1	0	1
	VIRUS	- UNKNOWN	1	0	1
	WILT	- FUSARIUM	1	0	1

<b>CROP</b>	<b>DIAGNOSIS</b>	<b>CAUSAL AGENT</b>	<b>#1° DIAGs</b>	<b>#2° DIAGs</b>	<b>TOTAL</b>
<b>LETTUCE (Lactuca)</b>	INSECT INJURY		1	0	1
<b>OKRA (Hibiscus)</b>	INADEQUATE SPECIMEN		2	0	2
	WILT	- FUSARIUM	1	0	1
<b>ONION (Allium)</b>	WILT	- VERTICILLIUM	1	0	1
<b>PEA (Pisum)</b>	BACTERIAL BLIGHT	- PSEUDOMONAS	1	0	1
	ENVIRONMENTAL	- COMPACTION	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		2	0	2
	INSECT INJURY		1	0	1
	ROOT ROT	- RHIZOCTONIA	2	0	2
<b>PEPPER (Capsicum)</b>	ANTHRACNOSE	- COLLETOTRICHUM	1	0	1
	BACTERIAL SPOT	- XANTHOMONAS	21	2	23
	BLOSSOM DROP	- UNKNOWN	1	0	1
	BLOSSOM END ROT	- CA DEFICIENCY/DRY	1	0	1
	CHARCOAL ROT	- MACROPHOMINA	2	0	2
	CHEMICAL	- HERBICIDE	1	0	1
		- UNKNOWN	2	0	2
	ENVIRONMENTAL STRESSES		2	1	3
	INSECT INJURY		1	1	2
	LEAF SCORCH	- ENVIRONMENTAL	1	0	1
	LEAF SPOT	- PHOMA	0	1	1
	NO DISEASE		5	0	5
	PHYSICAL INJURY	- UNKNOWN	1	0	1
	ROOT/STEM ROT	- FUSARIUM	1	0	1
		- RHIZOCTONIA	2	0	2
	SOUTHERN BLIGHT	- ATHELIA	2	0	2
	SLIME MOLD	- species	0	1	1
	SOOTY MOLD	- species	1	0	1
	VIRUS	- TOBACCO ETCH	1	0	1
		- TOBACCO MOSAIC	1	0	1
<b>POTATO (Solanum)</b>	BLACK LEG	- ERWINIA	6	0	6
	ENVIRONMENTAL	- STRESS	0	1	1
	INSECT INJURY		4	0	4
	NO DISEASE		5	0	5
	NUTRITIONAL	- FERTILIZER BURN	1	0	1
		- NITROGEN DEFICIENCY	1	0	1
	ROOT KNOT NEMATODE	- MELOIDOGYNE	4	0	4
	SOUTHERN BLIGHT	- ATHELIA	1	0	1
<b>PUMPKIN - see listing under CUCURBITS</b>					
<b>RADISH - see listing under CRUCIFERS</b>					

<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1° DIAGs</i>	<i>#2° DIAGs</i>	<i>TOTAL</i>
<b>RHUBARB (Rheum)</b>					
	CROWN ROT	- FUNGAL	1	0	1
<b>SQUASH - see listing under CUCURBITS</b>					
<b>SWEET POTATO (Ipomoea)</b>					
	NO DISEASE		1	0	1
	SCURF	- MONILOCHAETE	4	0	4
<b>TOMATO (Lycopersicon)</b>					
	ANTHRACNOSE	- COLLETOTRICHUM	1	0	1
	BACTERIAL CANCKER	- CLAVIBACTER	0	1	1
	BACTERIAL SOFT ROT	- ERWINIA	3	0	3
	BACTERIAL SPOT	- XANTHOMONAS	4	1	5
	BACTERIAL WILT	- PSEUDOMONAS	7	0	7
	BLACK MOLD	- STEMPHYLIUM	1	0	1
	BLOSSOM END ROT	- CA DEFICIENCY/DRY	4	0	4
	BUCKEYE ROT	- PHYTOPHTHORA	3	1	4
	CATFACING	- ENVIRONMENTAL	1	0	1
	CHEMICAL INJURY	- GROWTH REGULATOR	5	0	5
		- HERBICIDE	3	0	3
		- HORMONE	1	0	1
		- UNKNOWN	2	0	2
	CULTURAL	- TRANSPLANT SHOCK	3	0	3
	DAMPING-OFF	- RHIZOCTONIA	1	0	1
	EARLY BLIGHT	- ALTERNARIA	19	1	20
	ENVIRONMENTAL STRESSES		4	2	6
	FRUIT DECAY	- RHIZOCTONIA	1	0	1
	GRAY WALL	- PHYSIOLOGICAL	1	0	1
	GROWTH CRACK	- ENVIRONMENTAL	1	0	1
	INADEQUATE SPECIMEN, NO DISEASE		51	0	51
	INSECT INJURY		10	3	13
	LEAF MOLD	- CLADOSPORIUM	2	0	2
	LEAF SPOT	- SEPTORIA	7	2	9
	NUTRITIONAL	- FERTILIZER BURN	4	0	4
		- GENERAL	1	1	2
		- MAGNESIUM DEFICIENCY	2	0	2
		- MANGANESE DEFICIENCY	1	0	1
		- N DEFICIENCY	1	0	1
		- POTASSIUM DEFICIENCY	2	0	2
		- HIGH SOLUBLE SALTS	2	0	2
		- UNKNOWN	0	1	1
	PHYSICAL INJURY	- UNKNOWN	3	0	3
	ROOT KNOT NEMATODE	- MELOIDOGYNE	2	0	2
	ROOT ROT	- PYTHIUM	1	0	1
	ROOT/STEM ROT	- RHIZOCTONIA	2	0	2
	SOUTHERN BLIGHT	- ATHELIA	3	0	3
	STEM ROT	- SCLEROTINIA	10	0	10
	UNKNOWN	- UNKNOWN	1	0	1
	VIRUS	- CUCUMBER MOSAIC	0	1	1
		- TOBACCO MOSAIC	1	1	2
		- TOMATO SPOTTED WILT	2	0	2

<i>CROP</i>	<i>DIAGNOSIS</i>	<i>CAUSAL AGENT</i>	<i>#1° DIAGs</i>	<i>#2° DIAGs</i>	<i>TOTAL</i>
<b>TOMATO (cont)</b>					
	WALNUT WILT	- JUGLONE	3	0	3
	WILT	- FUNGAL	1	0	1
		- FUSARIUM	6	0	6
		- UNKNOWN	1	0	1
		- VERTICILLIUM	4	0	4
<b>TURNIP - see listing under CRUCIFERS</b>					
<b>WATERMELON - see listing under CUCURBITS</b>					
-----					
<b>TOTALS</b>			<b>6169</b>	<b>496</b>	<b>6665</b>

*Educational programs of the Kentucky Cooperative Extension Service serve all people regardless of race, color, age, sex, religion, disability, or national origin.*

UNIVERSITY OF KENTUCKY, KENTUCKY STATE UNIVERSITY, U.S. DEPARTMENT OF AGRICULTURE, AND KENTUCKY COUNTIES, COOPERATING