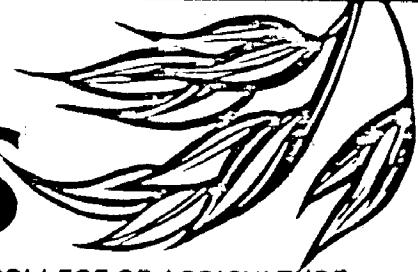


Raul

Prepared by the Department of Plant Pathology

Plant Diseases in Kentucky



UNIVERSITY OF KENTUCKY · COLLEGE OF AGRICULTURE
COOPERATIVE EXTENSION SERVICE
AGRICULTURE · HOME ECONOMICS · 4-H · DEVELOPMENT

PLANT DISEASE DIAGNOSTIC LABORATORY

SUMMARY OF PLANT DISEASES

1985

Compiled by

Cheryl A. Kaiser, Paul R. Bachi,

John R. Hartman, Richard E. Stuckey,

William C. Nesmith and Donald E. Hershman

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Turfgrass	25
Woody ornamentals	26
Vegetables	35
Total Specimens	38

Introduction

The Plant Disease Diagnostic Labs at Princeton and Lexington handled a total of 5210 plant specimens and nematode soil samples during 1985. Samples with more than one problem numbered 495, bringing the number of actual diagnoses to 5705. Specimens coming through the County Extension system accounted for 95% of the total, while 5% of the specimens came from non-extension clients. Princeton's specimen load totaled 2820 (1079 were soybean cyst nematode research samples). The Lexington Lab handled 2390 specimens.

An important change in our services occurred in January when the Plant Nematology Lab, previously located in Lexington, was moved to Princeton. The Lab is currently housed in the Plant Disease Diagnostic Lab facilities at the West Kentucky Research and Education Center. All soil samples for nematode analysis (the bulk of which are for soybean cyst analysis) are now submitted directly to Princeton.

The area of the state serviced by the Princeton Diagnostic Lab has been expanded with the addition of three counties previously served by the Lexington Lab. Princeton now serves the 27 counties in the Purchase, Pennyroyal and Green River areas, plus Logan, Warren and Butler counties. The remaining 93 counties in eastern and central Kentucky are served by the Lexington Lab.

Highlights

Highlights of some of the more notable disease problems observed in 1985 are given below:

Bacterial spot of pepper became a serious problem in several locations in the state. A large increase in the number of acres of commercially grown peppers under contract brought this disease into the limelight.

January's record cold temperatures resulted in significant winter injury to a number of woody ornamentals, including: barberry, boxwood, euonymous, forsythia, honeysuckle, Japanese black pine, southern magnolia and privet. Injury ranged from twig and branch dieback to complete death of the plant.

Late spring and early summer rains also brought a large number of spot anthracnose problems on oak. This disease prompted a lot of homeowner concern, especially in west Kentucky.

Sudden death syndrome (SDS) dramatically increased in importance on soybeans in west Kentucky. This disease, which occurred in 4 counties in 1984, has now spread to nearly every county in the Purchase and Green River Areas of the state. SDS has a unique combination of symptoms and can reduce yields up to 50%. To date,

there is no known cause for this potentially devastating disease. Researchers in 11 states, including Kentucky, are working both individually and cooperatively toward determining a cause and a method of control.

An increase in sorghum cropping has been reflected in the number of these specimens submitted to the two Labs. Only one sorghum sample was received in 1981; this number increased to 20 in 1984 and to 31 in 1985.

An unusually high number of tobacco plants with black root rot were diagnosed in 1985 (44 specimens) compared to the usual number of approximately 15 specimens. The cooler summer temperatures and adequate rainfall of 1985 were favorable to disease development. Several of the samples submitted with black root rot were varieties with medium or medium-high resistance.

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. anthracnose on Kentucky bluegrass). 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.

Referrals and consultations: Insect problems were generally identified or verified by a specialist in the Entomology Department. Chemical injury on all commercially grown crops was diagnosed by the 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 specific abiotic problems.

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

Acknowledgements

We wish to thank Barbara Jenkins for typing portions of this report.

We would also like to thank all the College of Agriculture Extensions Specialists and researchers who served as consultants to the Diagnostic Lab during 1985. Their services ranged from making actual diagnoses to providing answers to plant or pesticide questions. While some of these able consultants may have cringed at the sight of us with dying plant in hand, all were most cooperative. Because these individuals are numerous and any list is likely to leave someone out, we will not mention them by name (you know who you are). We are grateful to each for their valuable assistance.

Table 1. Total Diagnoses¹ according to crop category and problem area.

Crop Category	Abiotic Problems	Biotic ² Problems	Chemical Injury	Inadequate Specimen	Insect Injury	Other ³	Total Diagnoses
<u>Agronomic</u>							
Corn	101	62	8	8	34	42	255
Forages	28	94	1	10	10	12	155
Small grains	15	69	2	4	6	24	130
Soybeans	22	1499	9	4	1	24	1553
Tobacco	428	453	83	39	24	101	1128
<u>Fruit</u>							
Small fruit	17	60	5	14	13	14	123
Tree fruit	52	121	6	11	23	28	242
<u>Herbs</u>	0	11	0	2	0	1	14
<u>Identification</u>	0	45	0	3	1	17	66
<u>Ornamentals</u>							
Herbaceous and							
Houseplants	62	87	8	10	33	21	221
Turfgrass	11	91	0	11	0	3	116
Woody	416	278	52	67	195	222	1230
<u>Vegetables</u>	77	236	24	37	28	55	457
<u>Miscellaneous</u>	2	4	0	0	0	9	15
<u>Total</u>	1231	3110	198	220	368	573	5705

¹All counts and totals include primary diagnoses plus secondary diagnoses.

²Refer to Table 2 for a further breakdown of this category.

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

Table 2. A breakdown of biotic problems by crop category.

Crop Category	Bacterial	Fungal	Nematode	Virus	Other ¹
Agronomic					
Corn	3	58	0	1	0
Forages	3	91	0	0	0
Small grains	14	43	0	12	0
Soybeans	0	60	1431	2	0
Tobacco	91	268	0	90	4
Fruit					
Small fruit	0	60	0	0	0
Tree fruit	36	85	0	0	0
Herbs					
	0	10	1	0	0
Identification					
	0	28	0	0	17
Ornamentals					
Herbaceous and					
Houseplants	8	75	0	4	0
Turfgrass	0	88	2	0	1
Woody	15	258	3	2	0
Vegetables					
	74	148	3	11	0
Miscellaneous					
	0	1	3	0	0
Total	244	1273	1443	122	22

¹Other includes these categories: Animal (rodent and bird damage), Plant (plant identifications), and Algae.

Table 3. Summary of diagnoses by crop category, expressed as percentages.

Crop Category	Number of Specimens	Percentage of Total Specimens
Agronomic	1987	38.1
Tobacco	1001	19.2
Fruit	321	6.2
Herbs	14	0.3
Identifications	64	1.2
Ornamentals	1391	26.7
Vegetables	417	8.0
Miscellaneous	15	0.3
Total Specimens	5210	100.0

Table 4. Summary of diagnoses by crop and crop category.

Crop Category and Crop	Number of Primary Diagnoses ¹	Number of Secondary Diagnoses ²	Total Diagnoses ³
Agronomic			
Corn	228	27	255
Forage Crops	122	33	155
Small grains	110	20	130
Soybeans	1527	26	1553
Tobacco	1001	127	1128
Fruit Crops			
Small fruit	107	16	123
Tree fruit	214	28	242
Herbs			
	14	0	14
Identification			
	64	2	66
Ornamentals			
Herbaceous and			
Houseplants	196	25	221
Turfgrass	98	18	116
Woody	1097	133	1230
Vegetable			
	417	40	457
Miscellaneous			
	15	0	15
Total	5210	495	5705

¹The number of primary diagnoses corresponds to the number of different specimens examined.

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

³Total diagnoses equals the number of primary plus the number of secondary diagnoses.

Table 5. A Breakdown Of Samples Received By Grower Type And Crop Group.

Crop Group	Number Of Samples						Institution Ext ¹ Non-Ext ²	
	Commercial		Homeowner		Research			
	Ext ¹	Non-Ext ²	Ext ¹	Non-Ext ²	Ext ¹	Non-Ext ²		
Agronomic								
Tobacco	955	36	0	0	1	9	0	
Other ³	864	24	0	0	1085	12	1	
Fruit	103	3	205	6	2	1	1	
Ornamentals	86	23	1106	97	4	7	61	
Vegetables	118	4	265	15	1	13	0	
Other	28	0	57	4	0	1	1	
Total	2154	90	1633	122	1093	43	64	
Grand Total					1755	74	1136	

¹Ext = Extension samples submitted via County Extension Agents or Extension Specialists.

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

³Other includes: Corn, Forages, Small Grains, and Soybeans.

Table 6. Number of referrals and/or consultations made with other departments or UK lab facilities (1985).

Department or Facility	Agronomic Crops	Fruit Crops	Ornamental Crops	Vegetable Crops	Other	Total
Agronomy Department	42	0	1	3	11	57
Entomology Department	26	22	171	18	5	242
Horticulture Department	0	12	62	18	8	100
Regulatory Services	1	0	1	0	5	7

Table 7. Special Laboratory Tests Performed.

Test	Number of Cases
Culturing	109
Incubation	208
Nematode extractions (total = 1430)	
Pinewood nematode	10
Soybean cyst nematode	1415
Other	5
Virus assays (total = 31)	
ELISA (for BYDV)	24
Grafting	1
Inclusion staining	1
Indicator plants	5
Soil tests (total = 231)	
pH	225
Soluble salts	6
Miscellaneous tests (total = 20)	
Quick nitrate test (tobacco)	19
Greenhouse (grow-out)	1

Table 8. Total number of specimens received from Kentucky counties and out-of-state sources.

County	Total	Agronomicl	Tobacco	Fruit	Ornamentals	Vegetables	Other
Adair	7	1	1	0	3	2	0
Allen	30	4	12	2	8	2	2
Anderson	6	0	2	0	3	1	0
Ballard	43	29	10	1	1	2	0
Barren	46	3	20	3	14	1	5
Bath	25	6	13	0	3	3	0
Bell	15	0	0	1	5	8	1
Boone	27	1	12	6	8	0	0
Bourbon	52	4	29	3	6	8	2
Boyd	15	0	0	1	12	2	0
Boyle	62	13	4	1	38	6	0
Bracken	9	1	4	1	0	2	1
Breathitt	23	2	5	1	12	3	0
Breckinridge	23	6	10	1	5	1	0
Bullitt	46	4	6	11	16	3	6
Butler	20	16	1	1	1	0	1
Caldwell	83	20	20	13	13	15	2
Calloway	98	41	25	10	16	5	1
Campbell	3	0	0	0	1	2	0
Carlisle	54	36	12	1	2	3	0
Carroll	9	1	2	1	3	2	0
Carter	0	0	0	0	0	0	0
Casey	42	5	9	5	7	15	1
Christian	103	30	32	3	24	12	2
Clark	17	2	8	1	5	1	0
Clay	11	2	1	3	3	2	0
Clinton	14	0	8	0	3	3	0
Crittenden	42	27	3	4	5	3	0
Cumberland	1	0	1	0	0	0	0
Daviess	193	80	26	16	47	15	9
Edmonson	15	2	8	2	2	1	0
Elliott	7	2	2	1	0	2	0
Estill	19	1	5	2	4	7	0
Fayette	600	26	33	39	423	58	21
Fleming	23	6	14	1	2	0	0
Floyd	9	1	0	1	5	1	1
Franklin	68	4	18	11	33	2	0
Fulton	230	221	0	0	5	3	1
Gallatin	18	2	8	1	5	2	0
Garrard	10	3	2	0	3	2	0
Grant	54	1	21	4	16	10	2
Graves	195	147	29	5	12	2	0
Grayson	7	0	4	2	0	0	1
Greene	8	2	2	1	2	0	1
Greenup	4	0	0	1	2	1	0
Hancock	35	27	3	0	3	2	0
Hardin	64	16	8	5	27	8	0

County	Total	Agronomicl	Tobacco	Fruit	Ornamentals	Vegetables	Other
Harlan	6	0	0	1	5	0	0
Harrison	43	2	21	4	13	3	0
Hart	29	2	11	0	11	5	0
Henderson	22	14	3	1	4	0	0
Henry	29	5	16	0	7	1	0
Hickman	110	101	0	6	1	2	0
Hopkins	103	46	2	10	32	11	2
Jackson	9	1	2	0	5	1	0
Jefferson	66	2	0	5	54	3	2
Jessamine	17	0	7	1	4	5	0
Johnson	21	3	0	8	7	3	0
Kenton	15	1	1	2	11	0	0
Knott	1	0	1	0	0	0	0
Knox	7	2	1	2	1	1	0
Larue	35	4	17	3	8	3	0
Laurel	18	3	9	0	5	1	0
Lawrence	5	0	3	0	2	0	0
Lee	6	1	0	1	1	3	0
Leslie	5	0	1	1	3	0	0
Letcher	12	0	0	5	6	1	0
Lewis	27	3	15	2	4	3	0
Lincoln	10	5	2	0	3	0	0
Livingston	39	25	0	1	5	8	0
Logan	116	53	42	5	14	2	0
Lyon	28	24	2	0	2	0	0
Madison	110	5	34	13	50	7	1
Magoffin	4	1	1	1	0	1	0
Marion	12	2	5	1	4	0	0
Marshall	48	23	8	1	10	6	0
Martin	10	0	0	0	7	3	0
Mason	19	0	8	2	7	2	0
McCracken	47	9	5	1	22	9	1
McCreary	5	0	0	0	4	1	0
McLean	405	384	12	1	5	3	0
Meade	44	5	8	8	18	5	0
Menifee	5	0	4	1	0	0	0
Mercer	28	3	9	0	11	2	3
Metcalf	3	0	3	0	0	0	0
Monroe	11	0	5	0	1	2	3
Montgomery	48	8	13	1	23	2	1
Morgan	15	6	4	2	1	2	0
Muhlenburg	35	22	8	1	0	2	2
Nelson	50	7	9	5	22	5	2
Nicholas	12	0	10	1	0	0	1
Ohio	6	0	4	0	1	1	0
Oldham	5	1	0	1	3	0	0
Owen	21	3	10	3	3	2	0
Owsley	15	2	5	1	1	5	1
Pendleton	15	3	7	0	3	2	0
Perry	4	0	0	0	3	1	0
Pike	19	0	0	3	15	1	0
Powell	3	0	0	1	0	2	0

County	Total	Agronomic ¹	Tobacco	Fruit	Ornamentals	Vegetables	Other
Pulaski	35	7	7	1	14	6	0
Robertson	1	0	0	0	1	0	0
Rockcastle	11	1	6	0	3	1	0
Rowan	14	2	0	1	8	2	1
Russell	26	5	6	2	3	10	0
Scott	34	2	5	3	22	2	0
Shelby	55	10	14	3	26	2	0
Simpson	57	32	15	1	8	1	0
Spencer	10	4	0	1	3	2	0
Taylor	30	4	11	5	6	3	1
Todd	92	50	32	4	4	2	0
Trigg	76	55	10	2	5	4	0
Trimble	17	6	6	1	1	3	0
Union	82	73	1	2	4	1	1
Warren	57	10	24	6	17	0	0
Washington	15	3	0	1	8	3	0
Wayne	54	12	13	7	4	18	0
Webster	164	126	22	7	5	4	0
Whitley	6	2	2	2	0	0	0
Wolfe	5	1	2	0	1	1	0
Woodford	48	5	22	0	12	5	4
Out-of-State	51	1	42	0	4	3	1
Unknown	7	1	0	1	1	1	3
TOTAL	5210	1988	1001	322	1390	417	92

¹ Agronomic crops include corn, soybeans, forages and small grains; but in this particular case, it excludes tobacco.

CROP	DIAGNOSIS	CAUSAL AGENT	NO. OF PRIMARY DIAGNOSES	NO. OF SECONDARY DIAGNOSES	TOTAL
AGRONOMIC CROPS					
Corn					
CORN - Field corn and popcorn (<i>Zea</i>)					
ANTHRAACNOSE	- <i>COLLETOTRICHUM</i>		1	1	2
BLUE EYE	- <i>PENICILLIUM</i>		1	0	1
BROWN SPOT	- <i>PHYSODERMA</i>		1	1	2
CHEMICAL INJURY			8	0	8
EAR/KERNEL ROT	- <i>ASPERGILLUS</i>		1	1	2
	- <i>CLADOSPORIUM</i>		2	0	2
	- <i>DIPLODIA</i>		11	1	12
	- <i>FUSARIUM</i>		2	2	4
	- <i>PENICILLIUM</i>		2	2	4
ENVIRONMENTAL	- COMPACTION; POOR SOIL		6	0	6
	- OTHER STRESSES		4	0	4
GRAY LEAF SPOT	- <i>CERCOSPORE</i>		7	0	7
INADEQUATE SPECIMEN; NO DISEASE			42	0	42
INSECT INJURY			32	3	34
LEAF SPOTS/BLIGHTS - <i>HELMINTHOSPORIUM</i>					
	HELMINTHOSPORIUM LEAF SPOT		1	1	2
	NORTHERN CORN LEAF BLIGHT		1	0	1
	SOUTHERN CORN LEAF BLIGHT		1	0	1
NUTRITIONAL - ACID SOIL, MANGANESE TOXICITY			26	0	26
	- FERTILIZER BURN		3	0	3
	- POTASSIUM DEFICIENCY		2	1	3
	- MAGNESIUM DEFICIENCY		2	0	2
	- NITROGEN DEFICIENCY		5	0	5
	- PHOSPHORUS DEFICIENCY		5	1	6
	- ZINC DEFICIENCY		36	1	37
	- OTHER		4	1	5
REFERRALS TO AGRONOMY			6	0	6
ROOT ROT	- <i>RHIZOCTONIA</i>		1	0	1
RUST	- <i>PUCCINIA</i>		4	1	5
SMUT	- <i>USTILAGO</i>		2	0	2
STALK ROTS	- <i>DIPLODIA</i>		2	0	2
	- <i>FUSARIUM</i>		1	0	1
	- <i>GIBBERELLA</i>		2	0	2
STEWARTS WILT	- <i>ERWINIA</i>		3	0	3
VIRUS	- COMPLEX		1	0	1

Forages

ALFALFA (<i>Medicago</i>)					
ANTHRACNOSE	- <i>COLLETOTRICHUM</i>	3	2		5
BACTERIAL STEM BLIGHT	- <i>PSEUDOMONAS</i>	1	0	1	
CROWN/ROOT ROT	- COMPLEX	3	0	3	
	- <i>EUSARUM</i>	1	1	2	
	- <i>RHIZOCTONIA</i>	3	1	4	
CROWN/STEM ROT	- <i>SCLEROTINIA</i>	9	0	9	
DAMPING-OFF	- <i>RHIZOCTONIA</i>	1	0	1	
DOWNY MILDEW	- <i>PERONOSPORA</i>	1	0	1	
ENVIRONMENTAL; CULTURAL		5	1	6	
INADEQUATE SPECIMEN; NO DISEASE		18	0	18	
INSECT INJURY		6	4	10	
LEAF BLIGHT	- <i>RHIZOCTONIA</i>	1	0	1	
LEAF SPOTS- <i>LEPTOSPHAERULINA</i>		17	5	22	
	- <i>STEMPHYLLIUM</i>	2	3	5	
	- <i>PSEUDOMONAS, PSEUDOPEZIZA, OTHER</i>	1	2	3	
NUTRITIONAL	- ACID SOIL	5	0	5	
	- BORON DEFICIENCY	3	0	3	
	- OTHER	2	2	4	
RUST	- <i>UROMYCES</i>	1	1	2	
SPRING BLACK STEM	- <i>PHOMA</i>	2	2	4	
STEM CANKER	- <i>RHIZOCTONIA</i>	5	1	6	
CLOVER (<i>Trifolium</i>)					
CHEMICAL	- HERBICIDE	1	0	1	
CROWN/STEM ROT	- <i>SCLEROTINIA</i>	1	0	1	
INADEQUATE SPECIMEN; NO DISEASE		2	0	2	
RUST	- <i>UROMYCES</i>	2	0	2	
TARGET SPOT	- <i>STEMPHYLLIUM</i>	1	0	1	
FESCUE (<i>Festuca</i>)					
ANTHRACNOSE	- <i>COLLETOTRICHUM</i>	2	0	2	
BROWN PATCH	- <i>RHIZOCTONIA</i>	1	0	1	
DOLLAR SPOT	- <i>SCLEROTINIA</i>	1	0	1	
ENVIRONMENTAL STRESSES		3	0	3	
LEAF SPOTS	- <i>HELMINTHOSPORIUM</i>	3	0	3	
	- <i>SEPTORIA</i>	0	1	1	
RUST	- <i>PUCCINIA</i>	0	1	1	
HAY					
MOLDY	- ACTINOMYCETE, <i>ASPERGILLUS</i>	2	0	2	
ORCHARDGRASS					
ANTHRACNOSE	- <i>COLLETOTRICHUM</i>	1	0	1	
BROWN STRIPE	- <i>CERCOSPORIDIUM</i>	6	0	6	
ENVIRONMENTAL STRESSES		1	0	1	
RUST	- <i>PUCCINIA</i>	1	1	2	
MISCELLANEOUS FORAGES					
ENVIRONMENTAL STRESSES		2	0	2	

Soybeans

SOYBEAN (<i>Glycine</i>)					
ANTHRACNOSE	- <i>COLLETOTRICHUM</i>	5	7	12	
BROWN SPOT	- <i>SEPIORIA</i>	11	2	13	
BROWN STEM ROT	- <i>PHIALOPHORA</i>	2	0	2	
BUD BLIGHT	- <i>TOBACCO RINGSPOT VIRUS</i>	2	0	2	
CHEMICAL INJURY	- GROWTH REGULATOR	5	0	5	
	- OTHER	4	0	4	
DAMPING-OFF	- <i>PYTHIUM</i>	2	0	2	
DOWNY MILDEW	- <i>PERONOSPORA</i>	1	0	1	
ENVIRONMENTAL STRESSES		4	0	4	
INADEQUATE; NO DISEASE		23	0	23	
NUTRITIONAL		4	0	4	
POD/STEM BLIGHT - <i>DIAPORTHE</i>		2	5	7	
PURPLE SEED STAIN - <i>CERCOSPORA</i>		1	0	1	
REFERRALS		2	0	2	
ROOT/STEM ROTS - <i>PHYTOPHTHORA</i>		9	0	9	
	- <i>RHIZOCTONIA</i>	8	2	10	
SOYBEAN CYST NEMA - on plant samples		58	6	64	
HETERODERA - in soil samples*		1367	0	1367	
	- absent in soil samples*	2	0	2	
(*soil without plants submitted for SCN analysis)					
STEM CANKER - <i>DIAPORTHE</i>		1	0	1	
SUDDEN DEATH SYNDROME		14	0	14	

Small Grains

BARLEY (<i>Hordeum</i>)					
CHEMICAL INJURY		0	1	1	
ENVIRONMENTAL - FROST INJURY		1	0	1	
NO DISEASE; REFERRAL		2	0	2	
NET BLOTCH - <i>HELMINTHOSPORIUM</i>		3	0	3	
NUTRITIONAL		2	0	2	
RUST - <i>PUCCINIA</i>		0	1	1	
SCALD - <i>RHYNCHOSPORIUM</i>		1	0	1	
VIRUS - BARLEY YELLOW DWARF VIRUS PRESENT*		2	0	2	
- BARLEY YELLOW DWARF VIRUS ABSENT*		13	0	13	
(*ELISA test for BYDV)					

OAT (<i>Avena</i>)					
NO DISEASE		3	0	3	
VIRUS - BARLEY YELLOW DWARF VIRUS PRESENT*		2	0	2	
(*ELISA test for BYDV)					

RYE (<i>Secale</i>)					
NO DISEASE		1	0	1	
RUST - <i>PUCCINIA</i>		1	0	1	

SORGHUM (<i>Sorghum</i>)					
ANTHRACNOSE - <i>COLLETOTRICHUM</i>		1	0	1	
CHEMICAL BURN		1	0	1	

SORGHUM (cont'd)					
ENVIRONMENTAL STRESSES; NUTRITIONAL		2	0		2
GRAY LEAF SPOT - <u>CERCOSPORA</u>		3	0		3
HEAD BLIGHT - <u>FUSARIUM</u>		3	2		5
INADEQUATE SPECIMEN; NO DISEASE		4	0		4
INSECT INJURY		5	1		6
LEAF BLIGHT - <u>HELMINTHOSPORIUM</u>		2	0		2
NUTRITIONAL		1	0		1
ROOT PROBLEM		1	0		1
ROOT ROT - <u>PYTHIUM</u>		1	1		2
	- <u>RHIZOCIONIA</u>	5	0		3
VIRUS - MAIZE DWARF MOSAIC VIRUS		4	0		4
ZONATE SPOT - <u>GLOEOPERCOSPORA</u>		0	1		1

WHEAT and TRITICALE (Triticum)

ENVIRONMENTAL STRESSES		4	2		6
GLUME BLOTH - <u>SEPTORIA</u>		3	1		4
HEAD SCAB - <u>GIBBERELLA</u>		1	1		2
INADEQUATE SPECIMEN; NO DISEASE		10			10
LEAF BLOTH - <u>SEPTORIA</u>		1	2		3
LEAF BURN		1	0		1
LEAF SPOT - <u>HELMINTHOSPORIUM</u>		1	0		1
NUTRITIONAL - <u>NITROGEN DEFICIENCY</u>		3	0		3
POWDERY MILDEW - <u>ERYSIPHE</u>		3	1		4
REFERRAL TO AGRONOMY		1	0		1
RUST (leaf) - <u>PUCCINIA</u>		10	3		13
TAKE-ALL - <u>GAEUMANNOMYCES</u>		6	0		6
TAN SPOT - <u>PYRENOPHORA</u>		0	1		1
VIRUS - BARLEY YELLOW DWARF VIRUS PRESENT*		1	0		1
- BARLEY YELLOW DWARF VIRUS ABSENT*		5	0		5
- WHEAT SPINDLE STREAK MOSAIC VIRUS		1	2		3

(*ELISA test for BYDV)

Tobacco

TOBACCO (Nicotiana)

ALGAE - BLUE-GREEN		3	1		4
ANGULAR LEAF SPOT - <u>PSEUDOMONAS</u>		58	5		63
ANTHRACNOSE - <u>COLLETOTRICHUM</u>		5	2		7
BACTERIAL BLACK STALK - <u>ERWINIA</u>		1	0		1
BACTERIAL SOFT ROT - <u>ERWINIA</u>		2	5		7
BLACK ROOT ROT - <u>THIELAVIOPSIS</u>		42	2		44
BLACK SHANK - <u>PHYTOPHTHORA</u>		102	0		102
BLACKLEG - <u>ERWINIA</u>		3	2		5
BLUE MOLD - <u>PERONOSPORA</u>		22	2		24
BROWN SPOT - <u>ALTERNARIA</u>		25	3		28
CHEMICAL - BURN; UNKNOWN CHEMICALS		23	0		23
	- GROWTH REGULATORS	37	1		38
	- OTHER HERBICIDES	11	0		11
	- INSECTICIDES; FUNGICIDES	3	1		4
DAMPING-OFF - <u>PYTHIUM</u>		7	1		8
		1	0		1

TOBACCO (cont'd)

EARLY FLOWERING	- ENVIRONMENTAL	1	0	1
ENVIRONMENTAL	- COMPACTION; POOR SOIL	7	2	9
	- DROUGHT INJURY	3	1	4
	- HAIL INJURY	6	0	6
	- LIGHTNING	19	0	19
	- WET FEET	5	6	11
	- WEATHER SCALD	14	6	20
	- OTHER STRESSES	6	0	6
FALSE BROOMRAPE		1	0	1
FRENCHING		4	1	5
FROG-EYE LEAF SPOT - <u>CERCOSPORA</u>		5	6	11
GENETIC VARIEGATION; OTHER GENETIC MUTATION		2	0	2
HOLLOW STALK - <u>ERWINIA</u>		15	0	15
IMPROPER CURING		1	1	2
INADEQUATE SPECIMEN		39	0	39
INSECT INJURY		19	4	23
LEAF SPOTS	- <u>PHYLLOSTICIA</u>	1	0	1
	- PHYSIOLOGICAL	8	1	9
NO DISEASE		86	0	86
NUTRITIONAL	- ACID SOIL, MANGANESE TOXICITY	127	17	144
	- FERTILIZER BURN	22	1	23
	- POTASSIUM DEFICIENCY	12	3	15
	- NITROGEN DEFICIENCY	9	0	9
	- PHOSPHORUS DEFICIENCY	97	11	108
	- OTHER	7	4	11
PHYSICAL INJURY		13	3	16
PHYSIOLOGICAL PROBLEMS		2	0	2
REFERRALS		4	0	4
ROOT PROBLEMS		12	1	13
ROOT ROT	- <u>PYTHIUM</u>	1	0	1
	- <u>RHIZOCTONIA</u>	6	4	10
SOFT ROT	- <u>PYTHIUM</u>	7	2	9
SORE SHIN	- <u>RHIZOCTONIA</u>	25	2	27
STORAGE MOLDS	- <u>ASPERGILLUS; PENICILLIUM</u>	2	1	3
VIRUSES	- ALFALFA MOSAIC VIRUS	2	0	2
	- COMPLEX	48	6	54
	- POTATO VIRUS Y	2	1	3
	- TOBACCO ETCH	12	3	15
	- TOBACCO MOSAIC	1	0	1
	- TOBACCO RINGSOTP	3	0	3
	- TOBACCO VEIN MOTTLING	11	2	13
WEATHER FLECK	- OZONE	4	2	6

CROP	DIAGNOSIS	CAUSAL AGENT	NO. OF PRIMARY DIAGNOSES	NO. OF SECONDARY DIAGNOSES	TOTAL
FRUIT CROPS					
Small Fruits					
BRAMBLES - Blackberry and Raspberry (<i>Rubus</i>)					
ANTHRACNOSE	- <i>COLLETOTIRICHUM</i>		2	0	2
BLOSSOM BLIGHT	- <i>BOTRYTIS</i>		1	0	1
CANE BLIGHT	- <i>LEPIOSPHAERIA</i>		4	0	4

APPLE (cont'd)

CEDAR-APPLE RUST	- <u>GYMNOSPORANGIUM</u>	10	1	11
CEDAR-QUINCE RUST	- <u>GYMNOSPORANGIUM</u>	2	0	2
CHEMICAL INJURY		5	1	6
COLLAR ROT	- <u>PHYTOPHTHORA</u>	1	0	1
CROWN GALL	- <u>AGROBACTERIUM</u>	1	0	1
ENVIRONMENTAL	- COLD; FROST	4	0	4
	- OTHER	4	0	4
FIREBLIGHT	- <u>ERWINIA</u>	31	0	31
FLYSPECK (<u>MICROTHYRIELLA</u>) & SOOTY BLOTHC (<u>GLOEDES</u>)		3	2	5
FRUIT DECAY; MOLDY CORE; FRUIT CRACKING		5	0	5
INADEQUATE SPECIMEN; NO DISEASE		19	0	19
INSECT INJURY		13	0	13
LEAF SCORCH		1	1	2
MUTATION	- GENETIC	1	0	1
NECROTIC LEAF BLOTHC		4	1	5
NUTRITIONAL		2	0	2
PHYSICAL INJURY		4	2	6
POWDERY MILDEW	- <u>PODOSPHAERA</u>	1	0	1
ROOT PROBLEM		2	0	2
ROOT ROT	- <u>ARMILLARIA</u>	2	0	2
SCAB	- <u>VENTURIA</u>	8	4	12
SOOTY MOLD		1	0	1
THREAD BLIGHT	- <u>CERATOBASIDIUM</u>	2	0	2
WHITE ROOT ROT	- <u>CORTICICUM</u>	1	0	1
WHITE ROT (fruit)	- <u>BOTRYOSPHAERIA</u>	1	0	1
WOOD DECAY		2	0	2

CHERRY (Prunus)

CANKER	- <u>PHOMOPSIS</u> ; etc.	2	1	3
ENVIRONMENTAL STRESSES; PHYSICAL INJURY		4	0	4
INADEQUATE SPECIMENS; NO DISEASE		5	0	5
LEAF SPOT	- <u>COCCOMYCES</u>	4	0	4
POWDERY MILDEW	- <u>PODOSPHAERA</u>	2	0	2

FIG (Ficus)

RUSTY LEAF	- <u>CERCOSPORA</u>	1	0	1
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PEACH and APRICOT (Prunus)

CANKER	- <u>CYTOSPORA</u> , other	2	0	2
ENVIRONMENTAL	- WINTER INJURY	3	1	4
	- NUTRITIONAL; OTHER	3	0	3
GUMMOISIS		0	1	1
INADEQUATE SPECIMEN; NO DISEASE		2	0	2
INSECT INJURY		2	2	4
LEAF CURL	- <u>TAPHrina</u>	3	0	3
NUTRITIONAL	- NITROGEN DEFICIENCY	1	0	1
SCAB	- <u>CLADOSPORIUM</u>	3	1	4

PEAR (Pyrus)

ENVIRONMENTAL	- FROST INJURY	2	0	2
FIREBLIGHT	- <u>ERWINIA</u>	5	0	5
INSECT INJURY; SOOTY MOLD		1	2	3

PEAR	(cont'd)				
	NO DISEASE	3	0	3	
	PHYSICAL INJURY	2	0	2	
	THREAD BLIGHT - <u>CERATOBASIDIUM</u>	1	0	1	
PECAN	(<i>Carya</i>)				
	ENVIRONMENTAL - WINTER INJURY	1	0	1	
	INSECT INJURY	4	0	4	
	NO DISEASE	2	0	2	
PLUM	(<i>Prunus</i>)				
	BLACK KNOT - <u>DIBOTRYON</u>	6	0	6	
	ENVIRONMENTAL - HAIL INJURY	1	0	1	
	INADEQUATE SPECIMEN	2	0	2	
	INSECT INJURY	1	0	1	
	LEAF SPOT - PHYSIOLOGICAL	1	0	1	

CROP	DIAGNOSIS	CAUSAL AGENT	NO. OF PRIMARY DIAGNOSES	NO. OF SECONDARY DIAGNOSES	TOTAL
HERBS					
GINSENG (<i>Panax</i>)					
BLIGHT	- ALTERNARIA		6	0	6
INADEQUATE SPECIMEN; NO DISEASE			3	0	3
MILDEW/ROOT ROT	- PHYTOPHTHORA		1	0	1
ROOT KNOT NEMA	- MELOIDOGYNE		1	0	1
ROOT ROTS	- FUSARIUM, RHIZOCTONIA		2	0	2
SAGE					
ROOT ROT	- RHIZOCTONIA		1	0	1
IDENTIFICATIONS					
FUNGAL IDENTIFICATIONS					
BASIDIOMYCETES	- PUFFBALLS, MUSHROOMS, etc.	18		1	19
	- BIRD'S NEST FUNGI	2		1	3
FUNGI IMPERFECTI	- ASPERGILLUS, NIGROSPORA	2	0	0	2
MYXOMYCETES	- SLIME MOLDS	3	0	0	3
INSECT IDENTIFICATIONS					
REFERRALS TO ENTOMOLOGY					
			4	0	4
PLANT IDENTIFICATIONS					
ALGAE			1	0	1
FRUIT (Referrals to Horticulture)			3	0	3
LICHENS			3	0	3
INADEQUATE SPECIMEN; UNKNOWN			5	0	5
ORNAMENTALS (Referrals to Horticulture)			9	0	9
WEEDS (Referrals to Agronomy)			11	0	11
MISCELLANEOUS					
SOIL					
NEMATODE ANALYSIS	- NEMA PRESENT	3	0	0	3
	- NEMA ABSENT	1	0	0	1
(For SCN, see "Soybean Soil" under SOYBEANS)					
NO DISEASE			4	0	4
NUTRITIONAL	- HIGH SOLUBLE SALTS	1	0	0	1
REFERRALS	- ENTOMOLOGY	1	0	0	1
	- REGULATORY SERVICES	4	0	0	4
SWEET FEED					
MOLD	- RHIZOPUS		1	0	1

CROP	DIAGNOSIS	CAUSAL AGENT	NO. OF PRIMARY DIAGNOSES	NO. OF SECONDARY DIAGNOSES	TOTAL
<u>ORNAMENTALS</u>					
Herbaceous Ornamentals and Indoor Plants					
AFRICAN VIOLET (<i>Saintpaulia</i>)					
CULTURAL			2	2	4
INSECT INJURY			3	0	3
ROOT ROT	- RHIZOCTONIA		1	0	1
AJUGA (<i>Ajuga</i>)					
CROWN ROT	- SCLEROTIUM		2	0	2
ARTEMISIA (<i>Artemisia</i>)					
ROOT ROT	- RHIZOCTONIA		1	0	1
ASTER (<i>Aster</i>)					
INSECT INJURY			1	0	1
ROOT/STEM ROT	- RHIZOCTONIA, etc.		2	0	2
STEM ROT	- FUNGAL		1	0	1
AVOCADO (<i>Persea</i>)					
ANTHRACNOSE	- COLLETOTRICHUM		1	0	1
BEGONIA (<i>Begonia</i>)					
ANTHRACNOSE	- COLLETOTRICHUM		1	0	1
CULTURAL			1	0	1
LEAF SPOT	- ALTERNARIA		1	0	1
POWDERY MILDEW	- OIDIUM		4	0	4
BENJAMIN FIG (<i>Ficus benjamina</i>)					
CULTURAL			6	1	7
INADEQUATE SPECIMEN; NO DISEASE			2	0	2
INSECT INJURY			1	0	1
CACTUS (Various spp.)					
INSECT INJURY			1	0	1
ROOT ROT	- PYTHIUM		1	0	1
CARNATION and DIANTHUS (<i>Dianthus</i>)					
STEM ROT	- RHIZOCTONIA		1	0	1
CHRYSANTHEMUM (<i>Chrysanthemum</i>)					
BACTERIAL LEAF SPOT - <u>PSEUDOMONAS</u>			1	0	1
BLOSSOM BLIGHT - <u>BOTRYTIS</u>			1	0	1
LEAF SPOT - <u>SEPTORIA</u>			0	1	1
NUTRITIONAL; NO DISEASE			2	0	2
STEM ROT - <u>PYTHIUM</u>			1	0	1

CONEFLOWER	(<i>Echinacea</i>)				
VIRUS	- MOSAIC	1	0	1	
COREOPSIS	(<i>Coreopsis</i>)				
INSECT JURY		1	0	1	
SOUTHERN BLIGHT	- <u>SCLEROTIUM</u>	1	0	1	
CYCLAMEN	(<i>Cyclamen</i>)				
ROOT ROT	- <u>RHIZOCTONIA</u>	1	0	1	
TUBER ROT	- <u>ERWINIA</u>	1	0	1	
EUSTOMA	(<i>Eustoma</i>)				
CROWN/STEM ROT	- <u>FUSARIUM</u>	2	0	2	
FUCHSIA	(<i>Fuchsia</i>)				
ROOT ROT	- <u>PYTHIUM</u>	1	0	1	
GERANIUM	(<i>Pelargonium</i>)				
BACTERIAL BLIGHT	- <u>XANTHOMONAS</u>	4	0	4	
BLACKLEG	- <u>PYTHIUM</u>	1	1	2	
BLIGHT	- <u>BOTRYTIS</u>	1	1	2	
CULTURAL (oedema); CHEMICAL INJURY		2	0	2	
NO DISEASE		3	0	3	
SOIL SAPROPHYTE		0	1	1	
STEM ROT	- <u>FUSARIUM</u>	1	0	1	
VIRUSES	- LEAF CURL, RING SPOT	2	0	2	
GLADIOLUS	(<i>Gladiolus</i>)				
ABIOTIC PROBLEMS		4	0	4	
INSECT INJURY	- THrips	3	0	3	
HOLLYHOCK	(<i>Althaea</i>)				
RUST	- <u>PUCCINIA</u>	1	0	1	
IMPATIENS	(<i>Impatiens</i>)				
CULTURAL; NUTRITIONAL; INSECT INJURY		5	1	6	
NO DISEASE		2	0	2	
ROOT ROT	- <u>PYTHIUM, RHIZOCTONIA</u>	4	1	5	
IRIS	(<i>Iris</i>)				
LEAF SPOT	- <u>DIDYMELLINA</u>	1	0	1	
NO DISEASE		1	0	1	
IVY	(Various)				
NO DISEASE		1	0	1	
POWDERY MILDEW	- <u>OIDIUM</u>	1	0	1	
REFERRALS	- TO HORTICULTURE, ENTOMOLOGY	2	0	2	
LILY	(<i>Lilium</i>)				
LEAF SPOT	- FUNGAL	1	0	1	
MARIGOLD	(<i>Tagetes</i>)				
BLOSSOM BLIGHT	- <u>BOTRYTIS</u>	0	1	1	
CROWN GALL	- <u>AGROBACTERIUM</u>	1	0	1	

MARIGOLD (cont'd)				
CULTURAL; NUTRITIONAL; CHEMICAL INJURY	4	0	4	
INSECT INJURY	2	0	2	
LEAF SPOT - <u>ALTERNARIA</u>	2	0	2	
ROOT ROT - <u>RHIZOCTONIA</u>	2	0	2	
STEM DECAY - <u>COLLETOTRICHUM</u>	0	1	1	
MONDOGRASS (<i>Liriope</i>)				
ANTHRACNOSE - <u>COLLETOTRICHUM</u>	1	0	1	
ORCHID (Various spp.)				
CULTURAL; INSECT INJURY	2	1	3	
NO DISEASE	1	0	1	
ROOT ROT - <u>RHIZOCTONIA</u>	1	0	1	
PACHYSANDRA (<i>Pachysandra</i>)				
LEAF/STEM BLIGHT - <u>VOLUTELLA</u>	6	0	6	
PALMS (Various spp.)				
CULTURAL; NUTRITIONAL	2	1	3	
INSECT INJURY - MITES	3	1	3	
PETUNIA (<i>Petunia</i>)				
CULTURAL; ENVIRONMENTAL STRESSES	2	0	2	
ROOT/STEM ROTS - <u>PYTHIUM</u> , <u>RHIZOCTONIA</u>	2	0	2	
PHLOX (<i>Phlox</i>)				
BLACK ROOT ROT - <u>THIELAVIOSIS</u>	1	0	1	
POINSETTIA (<i>Euphorbia</i>)				
CULTURAL; NUTRITIONAL	2	0	2	
NO DISEASE	1	0	1	
ROOT/STEM ROT - <u>RHIZOCTONIA</u>	2	0	2	
VIRUS - UNKNOWN	1	0	1	
SCHEFFLERA (<i>Brassaia</i>)				
CULTURAL - ODEMA; OTHER	2	1	3	
INADEQUATE SPECIMEN	1	0	1	
INSECT INJURY - MITES	2	1	3	
SNAPDRAGON (<i>Antirrhinum</i>)				
BLACK ROOT ROT - <u>THIELAVIOSIS</u>	1	0	1	
STEM ROTS - <u>FUSARIUM</u> , <u>RHIZOCTONIA</u>	2	0	2	
SPATHIPHYLLUM (<i>Spathiphyllum</i>)				
CULTURAL; INSECT INJURY	1	2	3	
INADEQUATE SPECIMEN	1	0	1	
LEAF SPOT - BACTERIAL	1	0	1	
ROOT ROT - <u>PYTHIUM</u>	1	0	1	

STATICE (<i>Limonium</i>)				
BLOSSOM BLIGHT	- <i>BOTRYTIS</i>	1	0	1
INADEQUATE SPECIMEN		1	0	1
STEM/LEAF SPOT	- <i>COLLETOTRICHUM</i>	1	0	1
SYNGONIUM (<i>Syngonium</i>)				
CANE ROT	- <i>CERATOCYSTIS</i>	1	0	1
CULTURAL		1	0	1
LEAF SPOT	- <i>COLLETOTRICHUM</i>	2	0	2
VINCA (<i>Vinca</i>)				
ROOT ROT	- <i>PELLOULARIA</i>	2	0	2
STEM DECAY	- <i>COLLETOTRICHUM, GLOEOSPORIUM</i>	1	1	2
YUCCA (<i>Yucca</i>)				
LEAF SPOT	- <i>CONIOTHYRIUM</i>	1	0	1
CULTURAL		0	1	1
ZEBRA PLANT (<i>Aechmeandra</i>)				
ROOT ROT	- <i>RHIZOCTONIA</i>	1	0	1
ZINNIA (<i>Zinnia</i>)				
NUTRITIONAL; INSECT INJURY		2	0	2
POWDERY MILDEW	- <i>ERYSIPHE</i>	1	0	1

Turfgrass

BENTGRASS (<i>Agrostis</i>)				
BLIGHT	- <i>PYTHIUM</i>	1	0	1
BROWN PATCH	- <i>RHIZOCTONIA</i>	2	0	2
DOLLAR SPOT	- <i>LANZIA</i> and <i>MOELLERODISCUS</i>	1	0	1
FADING-OUT	- <i>CURVULARIA</i>	0	1	1
LANCE NEMATODE	- <i>HOPLOLAIMUS</i>	0	1	1
PINK SNOW MOLD	- <i>FUSARIUM</i>	2	0	2
RED LEAF SPOT	- <i>DRECHSLERA</i>	1	0	1
ROOT KNOT NEMA	- <i>MELOIDOGYNE</i>	1	0	1
TAKE-ALL PATCH	- <i>GAEUMANNOMYCES</i>	1	0	1
BERMUDAGRASS (<i>Cynodon</i>)				
BLIGHT (Gray snow mold)	- <i>TYPHULA</i>	1	0	1
LEAF SPOT	- <i>DRECHSLERA</i>	1	0	1
BLUEGRASS, Kentucky (<i>Foa</i>)				
ANTHRACNOSE	- <i>COLLETOTRICHUM</i>	0	1	1
BROWN PATCH	- <i>RHIZOCTONIA</i>	0	1	1
CULTURAL; ENVIRONMENTAL STRESSES				
	- HEAVY THATCH	3	0	3
	- LOCALIZED DRY SPOT; OTHER	1	1	2
DOLLAR SPOT	- <i>LANZIA</i> and <i>MOELLERODISCUS</i>	1	0	1
INADEQUATE SPECIMEN		2	0	2
LEAF BLIGHTS	- <i>ASCOCHYTA, LEPTOSPHAERULINA</i>	4	0	4
LEAF SPOT	- <i>DRECHSLERA</i>	5	1	6

BLUEGRASS, Kentucky (cont'd)				
NECROTIC RING SPOT - <u>LEPTOSPHAERIA</u>	4	0	4	
POWDERY MILDEW - <u>ERYSIPHE</u>	5	0	5	
RED THREAD - <u>LAETISARIA</u>	1	0	1	
RUST - <u>PUCCINIA</u>	3	0	1	
SLIME MOLD - <u>PHYSARUM</u>	1	0	1	

FESCUE (<i>Festuca</i>)				
BROWN PATCH - <u>RHIZOCTONIA</u>	4	1	4	
DOLLAR SPOT - <u>LANZIA</u> and <u>MOELLERODISCUS</u>	1	0	1	
ENVIRONMENTAL STRESSES	2	0	2	
INADEQUATE SPECIMEN	1	0	1	
LEAF BLIGHT - <u>ASCOCHYTA</u>	0	1	1	
LEAF SPOT - <u>DRECHSLERA</u>	3	0	3	
SEEDLING BLIGHTS - <u>PYTHIUM</u> , <u>RHIZOCTONIA</u>	2	2	4	
SLIME MOLD - <u>PHYSARUM</u>	2	0	2	

RYEGRASS (<i>Lolium</i>)				
DOLLAR SPOT - <u>LANZIA</u> and <u>MOELLERODISCUS</u>	1	0	1	
ENVIRONMENTAL - LOCALIZED DRY SPOT	1	0	1	
PINK SNOW MOLD - <u>FUSARIUM</u>	1	0	1	
RUST - <u>PUCCINIA</u>	2	1	3	

TURF (Various spp.)				
ANTHRACNOSE - <u>COLLETOTRICHUM</u>	1	2	3	
BLIGHT - <u>NIGROSPORA</u>	1	0	1	
BROWN PATCH - <u>RHIZOCTONIA</u>	5	0	5	
DOLLAR SPOT - <u>LANZIA</u> and <u>MOELLERODISCUS</u>	3	1	4	
ENVIRONMENTAL (wet feet); EARTHWORM KNOBS	2	0	2	
INADEQUATE SPECIMEN; NO DISEASE	10	0	10	
LEAF SPOT - <u>DRECHSLERA</u>	1	2	3	
NECROTIC RING SPOT - <u>LEPTOSPHAERIA</u>	1	0	1	
RED THREAD - <u>LAETISARIA</u>	1	0	1	
RUST - <u>PUCCINIA</u>	3	0	3	
SLIME MOLD - <u>PHYSARUM</u>	5	0	5	

ZOYSIA (<i>Zoysia</i>)				
CULTURAL - HEAVY THATCH	2	0	2	
FADING-OUT - <u>CURVULARIA</u>	0	1	1	
NO DISEASE	1	0	1	
RUST - <u>PUCCINIA</u>	1	1	2	

Woody Ornamentals

ARBORVITAE (<i>Ihuia</i>)				
ENVIRONMENTAL (wet feet); CHEMICAL INJURY	3	0	3	
INSECT INJURY - MITES	1	0	1	
NO DISEASE	6	0	6	
NORMAL NEEDLE DROP	4	0	4	
TRANSPLANT SHOCK	1	0	1	
TWIG BLIGHTS - <u>FESTALOTIA</u> , <u>PHOMOPSIS</u>	2	0	2	

-ASH	(<i>Fraxinus</i>)				
	ANTHRAUCNOSE	- <i>GLOEOSPORIUM</i>	5	0	5
	CHEMICAL INJURY		1	1	2
	DECLINE; OTHER ENVIRONMENTAL STRESSES		4	2	6
	DIEBACK	- FUNGAL	1	0	1
	INADEQUATE SPECIMEN; NO DISEASE		3	0	3
	INSECT INJURY		6	2	8
	TRANSPLANT SHOCK		1	0	1
AZALEA	- see RHODODENDRON				
BARBERRY	(<i>Berberis</i>)				
	ENVIRONMENTAL	- WINTER INJURY	7	1	8
		- OTHER	1	0	1
	INADEQUATE SPECIMEN; NO DISEASE		8	0	8
	ROOT ROT	- <i>PHYTOPHTHORA</i>	1	0	1
BEECH	(<i>Fagus</i>)				
	CANKER	- FUNGAL	1	0	1
	CHEMICAL INJURY; INSECT INJURY		1	1	2
	ENVIRONMENTAL	- FROST INJURY	2	0	2
	WETWOOD	- BACTERIAL	1	0	1
BIRCH	(<i>Betula</i>)				
	CULTURAL; ENVIRONMENTAL; INSECT INJURY		3	0	3
	INADEQUATE SPECIMEN; NO DISEASE		5	0	5
	INSECT INJURY		1	0	1
	LEAF SPOTS - <i>CYLINDROSPORIUM</i> , <i>GLOEOSPORIUM</i>		3	0	3
BOXWOOD	(<i>Buxus</i>)				
	CANKERS	- <i>MACROPHOMA</i> , <i>PSEUDONECTRIA</i>	2	0	2
	ENVIRONMENTAL	- WINTER INJURY	10	0	10
	LEAF SPOT	- <i>MACROPHOMA</i>	0	5	5
	NO DISEASE		1	0	1
	ROOT ROT	- <i>PHYTOPHTHORA</i>	1	0	1
CATALPA	(<i>Catalpa</i>)				
	INADEQUATE SPECIMEN; NO DISEASE		3	0	3
	LEAF SPOT	- <i>PHYLLOSTICTA</i>	1	0	1
	ROOT PROBLEM; CONSTRUCTION INJURY		1	1	2
CHERRY, ornamental	(<i>Prunus</i>)				
	ENVIRONMENTAL; PHYSICAL INJURY; CHEMICAL		3	1	4
	INADEQUATE SPECIMEN; NO DISEASE		2	0	2
	LEAF SPOT	- <i>COCCOMYCES</i>	1	0	1
	TRANSPLANT SHOCK		1	1	2
	WOOD DECAY		1	0	1
CHESTNUT	(<i>Castanea</i>)				
	CANKER	- FUNGAL	0	1	1
	ENVIRONMENTAL	- WINTER INJURY	4	0	4
	INADEQUATE SPECIMEN; NO DISEASE		3	0	3
	PHYSICAL INJURY; INSECT INJURY		2	0	2

CRABAPPLE (*Malus*)

ENVIRONMENTAL STRESS; CHEMICAL INJURY	2	0	2
INADEQUATE SPECIMEN; NO DISEASE	5	0	5
LEAF SPOT - <i>CONIOTHYRUM</i>	1	0	1
POWDERY MILDEW - <i>PODOSPHAERA</i>	0	1	1
ROOT PROBLEM	2	0	2
SCAB - <i>VENTURIA</i>	2	0	2

DOGWOOD (*Cornus*)

CANKER - <i>GLOEOSPORIUM</i>	1	0	1
ENVIRONMENTAL STRESSES	22	1	23
INADEQUATE SPECIMEN; NO DISEASE	7	0	7
INSECT INJURY	4	0	4
PHYSICAL INJURY; CHEMICAL INJURY	3	1	4
SPOT ANTHRACNOSE - <i>ELSINOE</i>	1	0	1
TRANSPLANT SHOCK; OTHER ROOT RELATED PROBLEMS	1	2	3
WOOD DECAY	1	0	1

ELM (*Ulmus*)

DUTCH ELM DISEASE - <i>CERATOCYSTIS</i>	1	0	1
INADEQUATE SPECIMEN; NO DISEASE	3	0	3
INSECT INJURY	4	0	4
LEAF SPOT - <i>GNOMONIA</i>	0	1	1
WILT - <i>VERTICILLIUM</i>	1	0	1
WOOD DECAY - <i>PORIA</i>	1	0	1

EUONYMUS (*Euonymus*)

CROWN GALL - <i>AGROBACTERIUM</i>	8	0	8
ENVIRONMENTAL STRESSES; NUTRITIONAL	6	0	6
INSECT INJURY	4	1	5
NATURAL SENESCENCE	1	0	1
TRANSPLANT SHOCK; OTHER ROOT RELATED PROBLEMS	3	0	3

FIR (*Abies*)

ABIOTIC PROBLEMS	3	1	4
INADEQUATE SPECIMEN	1	0	1
INSECT INJURY	2	0	2

FORSYTHIA (*Forsythia*)

CHEMICAL INJURY	1	0	1
ENVIRONMENTAL - WINTER INJURY	3	0	3
NO DISEASE	3	0	3
ROOT ROT - <i>RHIZOCTONIA</i>	2	0	2

HAWTHORN (*Crataegus*)

ENVIRONMENTAL - DROUGHT	1	0	1
HAWTHORN RUST - <i>GYMNOSPORANGIUM</i>	6	0	6
LEAF BLIGHT - <i>ENTOMOSPORIUM</i>	1	0	1
ROOT PROBLEM	1	0	1

HAZELNUT (*Corylus*)

LEAF SCORCH	1	0	1
ENVIRONMENTAL - BLANKS	0	1	1

•HEMLOCK (<i>Tsuga</i>)				
ENVIRONMENTAL STRESSES	2	4	15	
INSECT INJURY	9	1	10	
NORMAL NEEDLE DROP	1	0	1	
TRANSPLANT SHOCK; OTHER ROOT RELATED PROBLEMS	3	0	3	
HIBISCUS (<i>Hibiscus</i>)				
BLOSSOM BLIGHT	1	0	1	
INSECT INJURY	1	1	2	
LEAF SCORCH	1	0	1	
NO DISEASE	1	0	1	
HICKORY (<i>Carya</i>)				
INSECT INJURY	4	1	5	
NO DISEASE	2	0	2	
PHYSICAL INJURY - CONSTRUCTION	1	0	1	
HOLLY and INKBERRY (<i>Ilex</i>)				
ANTHRACNOSE - <i>GLOEOSPORIUM</i>	1	0	1	
BLACK ROOT ROT - <i>THIELAVIOSIS</i>	10	0	10	
CHEMICAL INJURY; INSECT INJURY	3	0	3	
ENVIRONMENTAL; NUTRITIONAL (Fe deficiency)	5	0	5	
INADEQUATE SPECIMEN; NO DISEASE	9	0	9	
LEAF SPOT - <i>PHYLLOSTICIA</i>	1	0	1	
ROOT PROBLEM	2	0	2	
ROOT ROT - <i>RHIZOCTONIA</i>	5	0	5	
SPINE SPOT	0	2	2	
HONEYSUCKLE (<i>Lonicera</i>)				
ENVIRONMENTAL - WINTER INJURY	3	0	3	
INADEQUATE SPECIMEN; NO DISEASE	2	0	2	
JUNIPER (<i>Juniperus</i>)				
CEDAR-APPLE RUST - <i>GYMNOSPORANGIUM</i>	2	0	2	
CEDAR-QUINCE RUST - <i>GYMNOSPORANGIUM</i>	1	0	1	
CHEMICAL INJURY	0	1	1	
ENVIRONMENTAL STRESSES	7	0	7	
INADEQUATE SPECIMEN; NO DISEASE	16	0	16	
INSECT INJURY - MITES	10	2	12	
NATURAL SENESCENCE	0	1	1	
NUTRITIONAL - HIGH SOLUBLE SALTS	1	0	1	
ROOT ROT - <i>PHYTOPHTHORA, RHIZOCTONIA</i>	3	1	4	
TRANSPLANT SHOCK; OTHER ROOT RELATED PROBLEMS	6	0	6	
TWIG BLIGHTS - <i>KABATINA</i>	5	0	5	
- <i>PHOMOPSIS</i>	1	0	1	
LILAC (<i>Syringa</i>)				
ENVIRONMENTAL STRESS; INSECT INJURY	2	0	2	
GRAY MOLD - <i>BOTRYTIS</i>	1	0	1	
INADEQUATE SPECIMEN	1	0	1	
LEAF SPOT - <i>CERCOSPORA</i>	1	0	1	
POWDERY MILDEW - <i>MICROSPHAERA</i>	5	0	5	
TRANSPLANT SHOCK; OTHER ROOT RELATED PROBLEMS	2	1	3	

LINDEN (<i>Tilia</i>)				
LEAF SCORCH	2	1		3
NO DISEASE	1	0		1
NUTRITIONAL - NITROGEN DEFICIENCY	0	1		1
TRANSPLANT SHOCK; PHYSICAL INJURY	2	0		2
MAGNOLIA (<i>Magnolia</i>)				
ENVIRONMENTAL STRESSES; PHYSIOLOGICAL	4	0		4
INADEQUATE SPECIMEN	2	0		2
INSECT INJURY; CHEMICAL INJURY	4	0		4
LEAF SCORCH - WINTER DRYING; OTHER	3	1		4
NATURAL SENESCENCE	2	1		3
TRANSPLANT SHOCK; PHYSICAL INJURY	2	0		2
MAPLE and BOXELDER (<i>Acer</i>)				
ANTHRACNOSE - <u>GLOEOSPORIUM</u>	16	0		16
CANKER - <u>NECIRIA</u> , OTHER FUNGAL	2	0		2
CHEMICAL INJURY	7	1		8
DECLINE	3	1		4
ENVIRONMENTAL - WINTER INJURY; FROST CRACKS	9	1		10
- OTHER STRESSES	9	1		10
GIRDLING ROOTS	3	0		3
INADEQUATE SPECIMEN; NO DISEASE	49	0		49
INSECT INJURY	28	5		33
LEAF SCORCH	18	2		20
LEAF SPOTS - <u>PHYLLOSTICTA</u>	8	2		10
- <u>SEPTORIA</u> , OTHER	0	3		3
PHYSICAL INJURY	7	0		7
TAR SPOT - <u>RHYTISMA</u>	13	0		13
TRANSPLANT SHOCK; OTHER ROOT PROBLEMS	16	0		16
WILT - <u>VERTICILLIUM</u>	5	0		5
MOUNTAIN ASH (<i>Sorbus</i>)				
FIREBLIGHT - <u>ERWINIA</u>	1	0		1
FROG-EYE LEAF SPOT - <u>PHYSALOSPORA</u>	1	0		1
LEAF SPOT - FUNGAL	1	0		1
MULBERRY (<i>Morus</i>)				
INSECT INJURY	1	1		2
NO DISEASE	2	0		2
POPCORN DISEASE - <u>CIBORIA</u>	1	0		1
OAK (<i>Quercus</i>)				
ANTHRACNOSE - <u>GNOMONIA</u>	2	0		2
CANKER - <u>POXYLON</u>	1	0		1
CHEMICAL INJURY	5	1		6
DECLINE	2	1		3
ENVIRONMENTAL STRESSES	6	4		10
INADEQUATE INJURY; NO DISEASE	9	0		9
INSECT INJURY	25	5		30
LEAF BLISTER - <u>TAPHRINA</u>	1	0		1
LEAF SCORCH	5	2		7

DAK (cont'd)

LEAF SPOTS	- <i>ACTINOPELTIE</i>	10	4	14
	- <i>MARSSONINA</i> , other	3	0	3
NUTRITIONAL	- IRON DEFICIENCY	12	2	14
	- OTHER	1	0	1
POWDERY MILDEW		3	1	4
SPOT ANTHRACNOSE - <i>ELSINDE</i>		16	0	16
SOOTY MOLD		1	0	1
TRANSPLANT SHOCK; OTHER ABIOTIC INJURIES		4	0	4
WETWOOD		1	0	1
PINE (<i>Pinus</i>)				
AIR POLLUTION	- OZONE	11	0	11
BLUE STAIN	- <i>CERATOCYSTIS</i>	1	0	1
CANKER	- <i>ATROPELLIS</i>	1	0	1
CHEMICAL INJURY		3	0	3
ENVIRONMENTAL	- WINTER INJURY	4	0	4
	- WET FEET	3	0	3
	- OTHER STRESSES	7	0	7
INADEQUATE SPECIMEN; NO DISEASE		25	0	25
INSECT INJURY		7	6	13
NEEDLECAST	- FUNGAL	0	1	1
NORMAL NEEDLE DROP		5	0	5
NUTRITIONAL	- HIGH SOIL PH	0	1	1
PINEWOOD NEMA	- <i>BURSAPELLENCUS</i>	3	0	3
ROOT ROTS	- <i>PHYTOPHTHORA</i> , <i>RHIZOCTONIA</i>	2	0	2
SOOTY MOLD	- FUNGAL	6	0	6
TIP BLIGHT	- <i>DIPLODIA</i>	12	0	12
TIP BURN		4	0	4
TRANSPLANT SHOCK; OTHER ROOT PROBLEMS		19	1	20
WHITE PINE DECLINE		1	0	1
PLUM, ornamental (<i>Prunus</i>)				
BLACK KNOT	- <i>DIBOIRYON</i>	1	0	1
ENVIRONMENTAL	- WINTER INJURY	1	1	2
INADEQUATE SPECIMEN		1	0	1
INSECT INJURY		1	0	1
POPLAR and ASPEN (<i>Populus</i>)				
INADEQUATE SPECIMEN		1	0	1
INSECT INJURY; CHEMICAL INJURY		4	0	4
LEAF SCORCH		1	0	1
LEAF SPOT	- <i>GLOEOSPORIUM</i>	0	1	1
POWDERY MILDEW		2	0	2
TRANSPLANT SHOCK		1	0	1
PRIVET (<i>Ligustrum</i>)				
ENVIRONMENTAL	- WINTER INJURY	3	0	3
PHYSICAL INJURY; NO DISEASE		1	1	2
PYRACANTHA (<i>Pyracantha</i>)				
ABIOTIC PROBLEMS		2	0	2
SCAB	- <i>FUSICLADIUM</i>	1	0	1

REDBUD (<i>Cercis</i>)					
CHEMICAL INJURY		3	1	4	
ENVIRONMENTAL STRESSES; NUTRITIONAL		1	2	3	
INADEQUATE SPECIMEN; NO DISEASE		5	0	5	
INSECT INJURY		0	2	2	
LEAF SCORCH		1	0	1	
PHYSICAL INJURY		3	0	3	
TRANSPLANT SHOCK; OTHER ROOT RELATED PROBLEMS		3	0	3	
WILT	- VERTICILLIUM	2	0	2	
RHODODENDRON and AZALEA (<i>Rhododendron</i>)					
CANKER	- BOTRYOSPHAERIA	0	1	1	
CHEMICAL INJURY		0	2	2	
CROWN ROT	- PHYTOPHTHORA	2	0	2	
DIEBACK	- DIPLODIA, PHOMOPSIS	1	1	2	
ENVIRONMENTAL	- WINTER INJURY	3	0	3	
	- WET FEET	2	2	4	
	- OTHER STRESSES	2	0	2	
GRAY BLIGHT	- PESTALOTIA	1	0	1	
INADEQUATE SPECIMEN; NO DISEASE		14	0	14	
INSECT INJURY		3	0	3	
LEAF SCORCH	- WINTER DRYING	4	2	6	
	- OTHER	1	0	1	
LEAF SPOT		1	0	1	
NATURAL SENESCENCE		0	2	2	
NUTRITIONAL		1	1	2	
POWDERY MILDEW	- MICROSPHAERA	1	0	1	
TRANSPLANT SHOCK; OTHER ROOT RELATED PROBLEMS		9	0	9	
ROSE (<i>Rosa</i>)					
BLACK SPOT	- DIPLOCARPON	4	0	4	
CHEMICAL INJURY		3	0	3	
CROWN GALL	- AGROBACTERIUM	1	0	1	
CULTURAL; ENVIRONMENTAL STRESSES		4	0	4	
INADEQUATE SPECIMEN; NO DISEASE		3	0	3	
INSECT INJURY		1	0	1	
POWDERY MILDEW	- Sphaerotilus	1	1	2	
TRANSPLANT SHOCK		1	0	1	
VIRUS	- ROSE MOSAIC	2	0	2	
SERVICEBERRY (<i>Amelanchier</i>)					
FIREBLIGHT	- ERWINIA	1	0	1	
SMOKETREE (<i>Cotinus</i>)					
WILT	- VERTICILLIUM	1	0	1	
SPRUCE (<i>Picea</i>)					
CANKER	- CYTOSPORA	1	0	1	
CHEMICAL INJURY		1	1	2	
ENVIRONMENTAL STRESSES		6	2	8	
INADEQUATE SPECIMEN; NO DISEASE		14	0	14	
INSECT INJURY	- MITES	23	0	23	
	- OTHER	2	1	3	
NEEDLECAST	- FUNGAL	1	0	1	

SPRUCE (cont'd)				
NUTRITIONAL	3	1		4
PHYSICAL INJURY	2	0		2
ROOT ROT - FUNGAL	1	0		1
SOOTY MOLD	1	0		1
TRANSPLANT SHOCK; OTHER ROOT RELATED PROBLEMS	6	0		6
SWEETGUM (<i>Liquidambar</i>)				
CULTURAL (pruning injury); INSECT INJURY	2	0		2
NO DISEASE	1	0		1
TRANSPLANT SHOCK	2	0		2
SYCAMORE and PLANETREE (<i>Platanus</i>)				
ANTHRAUCNOSE - <i>Gnomonia</i>	1	0		1
POWDERY MILDEW - <i>Microsphaera</i>	1	0		1
TAXUS (<i>Taxus</i>)				
CHEMICAL	4	0		4
ENVIRONMENTAL; CULTURAL	7	1		8
INADEQUATE SPECIMEN; NO DISEASE	20	0		20
PHYSICAL INJURY; INSECT INJURY	2	1		3
ROOT ROT - <i>Phytophthora</i>	1	0		1
TRANSPLANT SHOCK; OTHER ROOT RELATED PROBLEMS	5	0		5
TULIPTREE (<i>Liriodendron</i>)				
BLACK LEAF SPOT - <i>Rhytisma</i>	1	0		1
ENVIRONMENTAL STRESSES; TRANSPLANT SHOCK	2	1		3
INSECT INJURY	4	0		4
NO DISEASE	5	0		5
POWDERY MILDEW	4	0		4
WILT - <i>Verticillium</i>	2	0		2
WOOD DECAY	1	0		1
VIBURNUM (<i>Viburnum</i>)				
CHEMICAL INJURY; INSECT INJURY	2	0		2
POWDERY MILDEW - <i>Microsphaera</i>	1	0		1
ROOT PROBLEM; NO DISEASE	2	0		2
WALNUT (<i>Juglans</i>)				
BACTERIAL BLIGHT - <i>Xanthomonas</i>	1	0		1
BROWN LEAF SPOT - <i>Gnomonia</i>	1	0		1
ENVIRONMENTAL STRESSES; TRANSPLANT SHOCK	2	0		2
INADEQUATE SPECIMEN; NO DISEASE	4	0		4
INSECT INJURY	2	0		2
LEAF SPOT - <i>Marssonina</i>	1	0		1
WEIGELA (<i>Weigela</i>)				
ENVIRONMENTAL - WINTER INJURY	1	0		1
ROOT PROBLEM	1	0		1
ROOT ROT - FUNGAL	1	0		1

-WILLOW (*Salix*)

BLACK CANKER	- <u>PHYSALOSPORA</u>	1	0	1
CANKER	- <u>CYTOSPORA</u>	4	0	4
	- <u>BOTRYOSPHAERIA</u> , other	2	0	2
CROWN GALL	- <u>AGROBACTERIUM</u>	1	0	1
INADEQUATE SPECIMEN; NO DISEASE		4	0	4
INSECT INJURY; SOOTY MOLD		3	2	5
TRANSPLANT SHOCK		1	0	1

MISCELLANEOUS WOODY ORNAMENTALS

CHEMICAL INJURY		2	0	2
ENVIRONMENTAL STRESSES; NUTRITIONAL		3	0	3
INADEQUATE SPECIMEN; NO DISEASE		14	0	14
INSECT INJURY		6	1	7
ROOT PROBLEM		4	0	4

CROP	DIAGNOSIS	CAUSAL AGENT	NO. OF PRIMARY DIAGNOSES	NO. OF SECONDARY DIAGNOSES	TOTAL
VEGETABLES					
ASPARAGUS (Asparagus)					
CROWN ROT			1	0	1
ENVIRONMENTAL	- FREEZE INJURY		1	0	1
BEAN (<i>Phaseolus</i>)					
AIR POLLUTION	- OZONE		1	1	2
ANTHRACNOSE	- <i>COLLETOTRICHUM</i>		1	0	1
BLACK ROOT ROT	- <i>THIELAVIOPSIS</i>		1	1	2
BROWN SPOT	- <i>PSEUDOMONAS</i>		2	0	2
INADEQUATE SPECIMEN; NO DISEASE			12	0	12
INSECT INJURY			3	0	3
LEAF SCORCH			2	0	2
LEAF SPOT	- <i>PHYLLOSTICIA</i>		1	0	1
NUTRITIONAL	- ACID SOIL; MANGANESE TOXICITY		2	1	3
ROOT ROTS	- <i>RHIZOCTONIA</i>		16	2	18
	- <i>FUSARIUM</i> , OTHER		2	1	3
RUST	- <i>UROMYCES</i>		1	0	1
SEED PITTING (lima bean)	- STINKBUG		1	0	1
SOUTHERN STEM BLIGHT	- <i>SCLEROTIUM</i>		1	0	1
STEM ROT	- <i>PHYTOPHTHORA</i>		1	0	1
VIRUS	- BEAN YELLOW MOSAIC VIRUS, OTHER		8	0	8
CORN, sweet (<i>Zea</i>)					
ANTHRACNOSE	- <i>COLLETOTRICHUM</i>		0	1	1
ENVIRONMENTAL STRESSES			1	0	1
INADEQUATE SPECIMEN; NO DISEASE			10	0	10
INSECT INJURY			2	0	2
MUTATION	- GENETIC		1	0	1
NUTRITIONAL	- ACID SOIL, MANGANESE TOXICITY		3	1	4
	- ZINC DEFICIENCY		2	0	2
	- OTHER		2	1	3
ROOT ROT	- <i>RHIZOCTONIA</i>		2	0	2
STEWARTS WILT	- <i>ERWINIA</i>		1	0	1
VIRUS	- COMPLEX		1	0	1
CRUCIFERS (Broccoli, Cabbage, Cauliflower, Kale, Turnip	- <i>Brassica</i>)				
AIR POLLUTION			1	0	1
ANTHRACNOSE	- <i>COLLETOTRICHUM</i>		4	0	4
BACTERIAL SOFT ROT	- <i>ERWINIA</i>		3	0	3
BLACK ROT	- <i>XANTHOMONAS</i>		3	0	3
CHEMICAL INJURY			4	0	4
CULTURAL	- OEDEMA		1	0	1
DOWNY MILDEW	- <i>PERONOSPORA</i>		1	1	2
INADEQUATE SPECIMEN; NO DISEASE			6	0	6
INSECT INJURY			1	0	1
LEAF SPOTS	- <i>ALTERNARIA</i> , <i>CERCOSPORA</i>		2	1	3

CRUCIFERS (cont'd)

NUTRITIONAL - TIP BURN (Ca def.); ACID SOIL	4	0	4
POWDERY MILDEW	1	1	2
WHITE SPOT - <u>CERCOSPORELLA</u>	1	0	1
WIRESSTEM - <u>RHIZOCTONIA</u>	5	0	5

CUCURBITS (Cantaloupe & Cucumber (<i>Cucumis</i>); Gourds, Pumpkin & Squash (<i>Cucurbita</i>); Watermelon (<i>Citrullus</i>); and Honeydew melon			
BACTERIAL WILT - <u>ERWINIA</u>	8	0	8
FRUIT DECAY; STORAGE DECAY - <u>ALTERNARIA</u> , etc.	3	1	4
GUMMY STEM BLIGHT - <u>MYCOSPHAERELLA</u>	3	0	3
INADEQUATE SPECIMEN; NO DISEASE	12	0	12
INSECT INJURY; PHYSICAL INJURY	2	1	3
NUTRITIONAL - NITROGEN DEFICIENCY	1	0	1
POLLINATION PROBLEM	1	0	1
POWDERY MILDEW - <u>ERYSIPHE</u>	3	0	3
VIRUS	1	0	1

EGGPLANT (*Solanum*)

WILT - <u>VERTICILLIUM</u>	1	0	1
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OKRA (*Hibiscus*)

INSECT INJURY	1	0	1
NO DISEASE	1	0	1
WILT - <u>VERTICILLIUM</u>	1	0	1

ONION (*Allium*)

BACTERIAL SOFT ROT - <u>ERWINIA</u>	2	0	2
BLACK MOLD - <u>ASPERGILLUS</u>	1	1	2
INSECT INJURY	0	1	1
NO DISEASE	2	0	2
SMUDGE - <u>COLLETOTRICHUM</u>	1	0	1

PEA (*Pisum*)

ABIOTIC PROBLEMS	4	0	4
INSECT INJURY	1	0	1
LEAF/POD SPOT - <u>ASCOCHYTA</u>	1	0	1
POD DECAY - <u>FUNGAL</u>	1	0	1
RUST - <u>UROMYCES</u>	1	0	1
STEM ROT - <u>FUNGAL</u>	1	0	1
VIRUS - BEAN YELLOW MOSAIC VIRUS	1	0	1

PEPPER (*Capsicum*)

BACTERIAL SPOT - <u>XANTHOMONAS</u>	35	0	35
BLIGHT - <u>PHYTOPHTHORA</u>	1	0	1
ENVIRONMENTAL - LIGHTNING; SUNSCALD; ACID SOIL	3	0	3
FRUIT ROT - <u>ALTERNARIA</u>	1	1	2
GENETIC MUTATION	0	1	1
INADEQUATE SPECIMEN; NO DISEASE	5	0	5
INSECT INJURY	2	0	2
ROOT ROT - <u>PYTHIUM</u>	1	0	1
- <u>RHIZOCTONIA</u>	8	0	8
ROOT/STEM ROT - <u>FUSARIUM</u> , other	3	1	4
SOUTHERN STEM BLIGHT - <u>SCLEROTIUM</u>	1	0	1

PEPPER (cont'd)			
TRANSPLANT SHOCK	2	1	3
POTATO (<i>Solanum</i>)			
AIR POLLUTION - OZONE	1	0	1
BLACK DOT ROOT ROT - <i>COLLETOTRICHUM</i>	0	1	1
BLACKLEG - <i>ERWINIA</i>	2	0	2
CHEMICAL INJURY	4	0	4
DRY ROT (tuber rot) - <i>FUSARIUM</i>	2	1	3
EARLY BLIGHT - <i>ALTERNARIA</i>	1	0	1
ENVIRONMENTAL STRESSES; GREENING	5	1	6
INADEQUATE SPECIMEN; NO DISEASE	9	0	9
INSECT INJURY	2	0	2
NUTRITIONAL	3	0	3
REFERRAL TO KY STATE DIV. OF PESTICIDES	1	0	1
ROOT KNOT NEMA - <i>MELOIDOGYNE</i>	1	0	1
ROOT ROT - <i>RHIZOCTONIA</i>	1	0	1
SCAB - <i>STREPTOMYCES</i>	4	0	4
WILT - <i>FUSARIUM</i>	1	0	1
RHUBARB (<i>Rheum</i>)			
CROWN ROT - <i>PHYTOPHTHORA</i>	1	0	1
INADEQUATE SPECIMEN	2	0	2
LEAF SPOT - <i>ASCOCHYTA</i>	1	0	1
SWEET POTATO (<i>Ipomea</i>)			
INADEQUATE SPECIMEN	1	0	1
INSECT INJURY	1	0	1
SCURF - <i>MONILIOCHAETE</i>	3	0	3
SLIME MOLD - <i>STEMONITIS</i>	1	0	1
SURFACE ROT - <i>FUSARIUM</i>	0	1	1
SWISS CHARD (<i>Beta</i>)			
ROOT KNOT NEMA - <i>MELOIDOGYNE</i>	1	0	1
TOMATO (<i>Lycopersicon</i>)			
AIR POLLUTION	2	0	2
ANTHRACNOSE - <i>COLLETOTRICHUM</i>	1	0	1
PITH NECROSIS ("hollow stalk") - <i>PSEUDOMONAS</i>	1	0	1
BACTERIAL SPOT - <i>XANTHOMONAS</i>	2	0	2
BACTERIAL WILT - <i>PSEUDOMONAS</i>	6	0	6
BLOSSOM END ROT - CALCIUM DEFICIENCY/DROUGHT	1	0	1
CHEMICAL INJURY	11	0	11
EARLY BLIGHT - <i>ALTERNARIA</i>	13	4	17
ENVIRONMENTAL; CULTURAL	6	0	6
GRAY WALL	1	0	1
INADEQUATE SPECIMEN; NO DISEASE	23	0	23
INSECT INJURY	5	4	9
LEAF SPOT - <i>SEPTORIA</i>	19	2	21
NUTRITIONAL	7	1	8
PHYSIOLOGICAL LEAF ROLL	1	0	1
REFERRAL TO HORTICULTURE	1	0	1
ROOT KNOT NEMA - <i>MELOIDOGYNE</i>	1	0	1
SOUTHERN STEM BLIGHT - <i>SCLEROTIUM</i>	1	0	1

TOMATO (cont'd)				
STEM/ROOT ROT	- RHIZOCTONIA	3	0	3
WALNUT WILT	- JUGLONE	2	1	3
WILTS	- FUSARIUM	6	2	8
	- VERTICILLIUM	1	0	1
	- OTHER VASCULAR PROBLEMS	2	0	2
MISCELLANEOUS VEGETABLES				
ABIOTIC PROBLEMS		6	0	6
NO DISEASE		1	0	1
<hr/> TOTALS		5210	495	5705