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THE PLANT DISEASE REPORTER

Issued By

The Office of Plant Disease Survey
and
Pathological Collections

Supplement 42

Diseases of Forest and Shade Trees, Ornamental and Miscellaneous Plants
in the United States in 1924

September 15, 1925

BUREAU OF PLANT INDUSTRY

UNITED STATES DEPARTMENT OF AGRICULTURE

PLANT DISEASE SURVEY

1924

List of collaborators of the Plant Disease Survey who have made the principal contribution to the 1924 annual summary.

It should be understood that many other collaborators and pathologists have assisted in gathering data within the States but the following list includes those who actually furnished state reports to the Washington office.

Arkansas.....	Dept. Pl. Path. V. H. Young	Missouri.....	W. E. Maneval
Colorado.....	C. D. Learn	Montana.....	W. N. Christopher
Connecticut.....	G. P. Clinton E. M. Stoddard	New Jersey.....	Sect. Pl. Path. W. H. Martin
Delaware.....	J. F. Adams	New Mexico.....	R. F. Crawford
Florida.....	G. F. Weber	New York.....	Charles Chupp
Georgia.....	O. C. Boyd	North Dakota.....	Wanda Weniger
Illinois.....	L. R. Tehon	Ohio.....	H. C. Young Freda Detmers
Indiana.....	M. W. Gardner T. C. Yuncker	Pennsylvania.....	C. R. Orton R. S. Kirby W. A. McCubbin L. O. Overholtz H. W. Thurston
Iowa.....	I. E. Melhus H. S. Conard	South Carolina.....	C. A. Ludwig
Kansas.....	R. F. White	South Dakota.....	E. J. Petry A. T. Evans
Kentucky.....	W. D. Valleau	Texas.....	J. J. Taubenhaus
Louisiana.....	C. W. Edgerton	Vermont.....	A. H. Gilbert B. F. Lutman
Maryland.....	J. B. S. Norton	Virginia.....	F. D. Fromme
Massachusetts.....	W. H. Davis	Washington.....	Dept. Pl. Path. Arthur Frank
Michigan.....	G. H. Coons Ray Nelson	Wisconsin.....	R. E. Vaughan
Minnesota.....	Sect. Pl. Path.		
Mississippi.....	D. C. Neal H. D. Barker J. M. Wallace		

DISEASES OF FOREST AND SHADE TREES, ORNAMENTAL AND MISCELLANEOUS PLANTSIN THE UNITED STATES IN 1924

Plant Disease Reporter
Supplement 42

July 15, 1925

Prepared by
G. Hamilton Martin

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Foreword

This summary of the diseases of forest and shade trees, ornamental and miscellaneous plants in the United States in 1924 follows the same general plan as those of the preceding years. The sources upon which the information is based are as follows: (1) collaborators, (2) specialists in the Office of Forest Pathology, (3) articles in botanical journals, and (4) special reporters.

Many reports of new occurrences were received for 1924 both for states and for the United States. In the accompanying summary these first occurrences have been noted by symbols before each individual report. Many occurrences are given which have been obtained from literature, from the herbarium of Pathological Collections, or from past records of the Plant Disease Survey. Quite a number of diseases have been omitted due to their unimportance or the fact that they have been reported in other years. It is not the object of this summary to enumerate all of the diseases that have been reported during the year, but to give facts concerning only some of the more important ones. "Standardized Plant Names" has been used as the source for the names of the hosts.

Where specimens are not indicated the report is based on the authority of the person cited. The date given is that of its earliest reported appearance in 1924. Reports from British Columbia are given on account of the

probable occurrence of the disease being also in Washington and Idaho.

The following symbols are used: * indicates a specimen in Pathological Collections; + preceding disease indicates the first report of the disease to the Plant Disease Survey; + preceding state indicates the first report from the state to the Plant Disease Survey; P.r. indicates prior reports of the disease to the Plant Disease Survey.

References have been given and in some instances brief abstracts made of recent articles which may be of service to those who do not have access to all the botanical journals. A list of collaborators is given on the first page. The names of the special reporters are as follows:

Boyce, J. C.	Hanson, Albert	Miles, G. F.
Cook, Mel. T.	Hildebrandt, Mr.	Muenschler, W. C.
Dietz, H. F.	Hunt, W. R.	Newhall, A. G.
Emigh, Dr.	Jenkins, Anna E.	Nolla, J. A. B.
Gravatt, A. E.	Johnston, C. O.	Paxton, Glenn E.
Gravatt, G. F.	Martin, J. F.	Weiss, Freeman
Graves, Arthur	Matteson, Julius	Welch, D. S.
Guba, E. F.	McClintock, Mr.	Wright, B.
Hahn, G. G.	McDonnell, Mr.	

STATUS OF WHITE PINE BLISTER RUST CONTROL IN THE U. S. IN 1924
(Prepared by J. F. Martin, Office of Blister Rust Control)

This destructive disease of five-needled pines (white pines) is present in the New England States, New York, New Jersey, Pennsylvania, Michigan, Wisconsin, Minnesota, and Washington. In Canada it occurs in the provinces of British Columbia, Ontario, Quebec, New Brunswick, Nova Scotia, and Prince Edward Island. The results of scouting show that the European or cultivated black currant (*Ribes nigrum*) is one of the most important factors in the long distance spread and local establishment of this disease. Gradually the important white pine states are declaring it a public nuisance and prohibiting its further cultivation. The U. S. Department of Agriculture also recognizes this species as a distinct menace to the white pine timber supply of the country and is opposed to its growth in the United States.

Progress of control in the East

The control campaign in New England and New York has made good progress since its inception in 1922. Public interest and cooperation in the work has been very satisfactory as shown by the following tables:

Table 91. Cooperating communities and individuals.

New England and New York	:	1922	:	1923	:	1924
No. of communities cooperating	:	59	:	122	:	148
No. of individuals cooperating	:	971	:	1968	:	3059

Table 92. Acreage eradicated and currants and gooseberries destroyed.

New England and New York	1922	1923	1924
No. acres eradicated of currants and gooseberries	476,621	892,639	*1,008,042
No. currants and gooseberries destroyed (wild and cultivated)	4,865,875	8,024,991	9,540,129

*See Table 92.

In the White Mountain National Forest an additional 4,944 acres were eradicated of 151,489 currants and gooseberries in cooperation with the Forest Service.

There has been no marked change in the blister rust situation in New Jersey, Pennsylvania, Michigan, Wisconsin and Minnesota. The rust is present in these states in much less abundance than in New England and north-eastern New York. This appears to be largely due to (1) fewer original introductions of diseased host plants and (2) the period of establishment of the rust being affected by less favorable field conditions.

Progress of control in the West.

In the West a blister rust control program covering a period of 10 years has been undertaken in cooperation with the states concerned. Scouting during the past year showed no spread of the rust southward of the limits of the infected area as determined in 1923. This probably was due primarily to dry weather conditions that prevailed in the northwest and to the extensive eradication of cultivated black currants. Additional pine infections were found in western Washington indicating that the rust is beginning to establish itself on the native pine host in this region.

Cultivated black currants (*Ribes nigrum*) have been systematically located and eradicated in western Montana, Idaho, Washington, Oregon and northern California and part of this region is now being reexamined for any plantings that may have been overlooked. Field data show that these plants become infected at great distances from diseased pines and establish new centers of infection from which the rust spreads locally to other currants and gooseberries and to white pines.

Effective quarantines are being maintained to prevent the spread of the rust into disease-free regions through the shipment of infected host plants. These quarantines are enforced by the Federal Horticultural Board, the inspection work being done by trained inspectors of the Bureau of Plant Industry. During 1924, 30 violations by nurseries and 51 by private individuals ignorant of the quarantines were located. The number of violations by nurserymen has been reduced from 193 in 1921 to 30 in 1924. Meanwhile experimental work in developing and applying control practices is being carried forward as rapidly as possible. The results obtained have been favorable and indicate protective measures can be worked out and applied at costs which will make control practical under western forest conditions.

CEDAR BLIGHT CAUSED BY PHOMOPSIS JUNIPEROVORA HAHN

(Prepared by Glenn Gardner Hahn, Office of
Investigations in Forest Pathology)

Cedar blight was first observed by F. C. Stewart as a destructive disease of young red cedar trees caused by a *Phoma* in a nursery at Kent, Iowa, 1896-7. (Phytopathology 8: 33-34. July 1918). At that time specimens were sent to B. M. Duggar (1897) who obtained the *Phoma* in pure culture but did not proceed further with the investigation. The destructiveness of this blight organism as a virulent parasite of young red cedar trees was later observed by G. G. Hedgecock (1903-4) when he surveyed heavy infections in nursery seedling stock at Albert Lea, Minnesota; Charles City and Shenandoah, Iowa; and Missouri. He reports one nursery in Iowa as being practically wiped out with the disease. In 1915-16 R. G. Pierce observed the cedar blight as an important disease causing large damage in nurseries at Cedar Bluff and North Bend, Nebraska; Hays, Kansas; Dundee and Glenview, Illinois; and Charles City, Iowa. He states that one nursery in Nebraska growing a million seedlings of eastern red cedar was practically wiped out by the blight. G. Hartley and the writer investigated the disease at nurseries in Illinois (1916-17) isolating and proving a causal parasite which was assigned tentatively to the genus *Phoma*. (Jour. Agric. Res. 10: 533-539. Sept. 1917). This *Phoma* was a little later definitely identified and described as *Phomopsis juniperovora* n. sp. Hahn. (Phytopathology 10: 249-253. Apr. 1920).

Where the blight has been under observation it has proven a most important parasitic disease. Certain of the horticultural cedar varieties are particularly susceptible. In behavior the blight is typical. The smaller twigs first show up brown and dead. The disease may move downward into the older parts causing cankers to form which may completely girdle or kill only one side of the stem. Where girdling occurs all the parts beyond die. Cedar blight may be the cause of serious loss in coniferous nursery seedling beds. The blight and cankers may also appear as a destructive disease in older stock both in nurseries and in ornamental plantings. Plants affected with the blight are often not recognized as diseased and consequently have been widely distributed.

The seriousness of the cedar blight is further increased by the fact that *Juniperus virginiana* and the horticultural varieties of *Juniperus* are not the only cedar group attacked by the parasite. *Cupressus*, *Thuja*, *Retinospora*, *Cryptomeria* are also subject to the disease. The blight and canker have been produced artificially by the writer on *Larix decidua* (European Larch) and *Pseudotsuga douglasii* (California type). *Phomopsis* spp. closely agreeing morphologically with *P. juniperovora* have been also identified by the writer as infecting naturally *Taxus baccata fastigiata*, *Cephalotaxus drupaceae*, *Taxodium distichum*, and *Pseudotsuga douglasii* (California type) with the *Phomopsis* from *Juniperus*. These *Phomopsis* species are for the present regarded as strains of *P. juniperovora*.

Phomopsis has been investigated in Transvaal, South Africa, as causing a serious blight in 1919 among nursery grown seedlings of *Cupressus arizonica*, *C. macrocarpa* and *C. torulosa* (So. African Jour. Sci. 15: 613-617. July 1919). This parasite is regarded as possibly identical with *P. juniperovora*.

Suggestions for the control of cedar blight are given in the paper on a nursery blight of cedars referred to above. Spraying with an adhesive Bordeaux spray designed to keep the seedling and transplant growth completely

and continually covered throughout the growing season, the initial spraying being performed very early in the spring to prevent the blight from gaining a foothold in the seedling beds, seems to be the most likely means of control. Seasons of exceptional rainfall when excessive moisture is present are conducive to the spread of the disease. Methods of cutting down an undue moisture supply are therefore of benefit. Cankers should be pruned out of large trees to prevent the further spread of the parasite.

No systematic survey to determine the geographical distribution of cedar blight has been made, but from a study of the specimens mentioned below and from reports it is definitely known to extend in certain states along the Atlantic Seaboard from New York to Florida; throughout the Middle West from southern Minnesota to Alabama; and it is not known farther west than eastern Nebraska and Kansas.

Diagnoses of the disease has been made from specimens of the fungus on affected stems and leaves received from the following states:

- Alabama - Young native red cedar reported badly infected, October 10, 1924. Specimens not personally examined by the writer.
- District of Columbia - Infected ornamental planting of Juniperus chinensis var. procumbens, and J. sabina, May 3, 1920. Collections made by G. G. Hahn. Infected ornamental planting of J. chinensis var. procumbens, August 6, 1924. Collections by G. G. Hedgecock and G. G. Hahn. Infected J. sabina var. tamariscifolia, August 10, 1924. Collections made by G. G. Hahn. Infected ornamental trees, U. S. Department of Agriculture grounds, of Taxus baccata fastigiata and Cephalotaxus dripacosa, May 1925. Collections made by G. G. Hedgecock and G. G. Hahn. Infected ornamental tree, Taxus baccata fastigiata, May 13, 1925. Collection made by G. G. Hahn and G. F. Gravatt. Infected tree, Taxodium distichum, June 10, 1925. Collections made by G. G. Hahn and M. Mitchell.
- Illinois - Dundee, Glenview, 1916, 1917. Collections by R. G. Pierce, C. Hartley, and G. G. Hahn. Dundee, October 20, 1924. Loss 100 percent in red cedar seedling beds. Heavy loss among transplants.
- Iowa - Charles City, 1916. Collections by R. G. Pierce. Shenandoah, November 7, 1924. Loss 60-80 percent in red cedar trees 2-1/2 feet high. Thuja occidentalis also affected.
- Kansas - Manhattan, Kansas Experiment Station, March 22, 1917. Collections by L. E. Melders and C. A. Scott. Blight destroyed entire beds of J. virginiana seedlings. The blight was reported serious and specimens collected by C. A. Scott in 1915. Manhattan, July 17, 1924. Collections by A. H. Holder.
- Kentucky - Lexington, Louisville, August 27, 1924. Collections by H. Garman. Blight very destructive.
- Maryland - Berlin, July 20, 1923. Collections by G. G. Hahn. Cankers found on four and five year old transplant stock. Bell, June 8, 1925. Collections by G. F. Gravatt. Seedling Cupressus arizonica infected.
- Missouri - St. Joseph, June 26, 1925. Blight affects J. virginiana and its varieties to such an extent that unless controlled, their growing must be discontinued.
- Nebraska - Cedar Bluff and North Bend, July 23, 1917. Collections by F. F. Weinard. Fremot, October 8, 1924. Blight seriously affecting Platte River type of J. virginiana.

- New York - Lynbrook, Westbury, Long Island, 1915, reported by R. G. Pierce. Specimens not personally examined by writer. Niskayuna, August 4, 1923. Three year old transplants of red cedar from North, West, and South all infected with blight.
- North Carolina - Greensboro, September 1924. Collected on Juniperus virginiana, Cupressus arizonica, C. sempervirens var. pyramidalis, C. macrocarpa, C. benthami, C. lawsoniana, Thuja orientalis, T. plicata, Retinospora obtusa, Cryptomeria japonica, by G. G. Hahn. Heavy losses to the extent of 500,000 seedlings occurred in the seedling beds of Cupressus sempervirens (Italian cypress), C. arizonica (Arizona cypress) and C. macrocarpa (Monterey cypress), and 200,000 Cryptomeria japonica seedlings. Greensboro, June 15, 1925. Collections made of diseased Cupressus sempervirens, J. communis, and Pseudotsuga taxifolia (California type) by G. G. Hahn. About 75 percent loss in seedling beds of Douglas fir. These seedlings (three years old) still continue to blight and die.
- Ohio - Yellow Springs, 1919. Specimen submitted for diagnosis by A. E. Jenkins. Blight serious in two year old red cedar. Painesville, October 1924. Infected transplant nursery stock of red cedar.
- Pennsylvania - Philadelphia, August 1916. Collections made by J. F. Collins. Pennsylvania State College, June 2, 1922. Collection made by L. O. Overholts. Specimen submitted by A. E. Jenkins. On blighted Thuja trees. Dresher, July 19, 1923. Collections made by G. G. Hahn. Total loss of red cedar and J. sabina transplant stock. West Chester, June 14, 1924. Collections made by G. G. Hahn. Badly infected red cedar transplant stock. Retinospora plumosa also affected.
- Tennessee - McMinnville, July 18, 1923. Collections made by G. G. Hahn of plants at Dresher, Pennsylvania, shipped from the above source. On transplant red cedar stock.

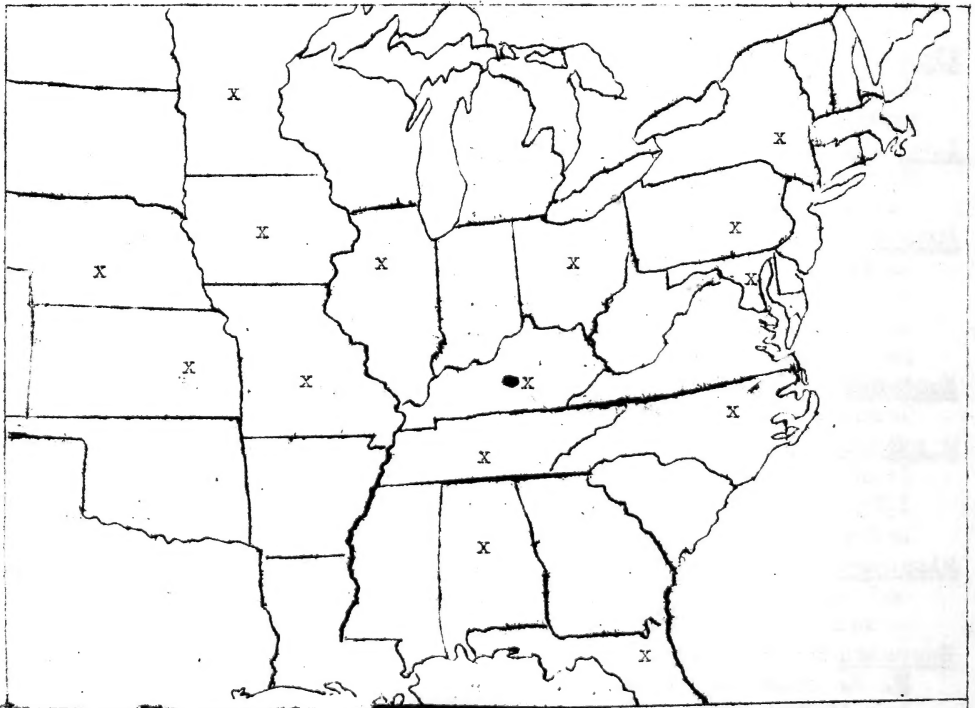


Fig. 9. Distribution of Phomopsis juniperovora Hahn. in the U. S.
(Map prepared by G. G. Hahn)

CHESTNUT BLIGHT CAUSED BY *ENDOTHIA PARASITICA* (MURR.) AND.
(Prepared by A. F. Gravatt, Office of Investigations in Forest Pathology)

During the summer and fall of 1924, D. V. Baxter, G. F. Gravatt, R. P. Marshall and R. A. Studhalter of the Office of Forest Pathology made a general inspection of the Southern Appalachians for chestnut blight. The following table shows the amount of blight in 200 important counties within the commercial range of chestnut in the Southern Appalachians. Very detailed inspection would probably show that the blight is present in all of the important chestnut growing counties of the Southern Appalachians.

Table 93. Summary of the chestnut blight survey of the Southern Appalachians in 1924.

Degree of Blight	Number of Counties Inspected								Total
	Ga.	Ky.*	N.C.	S.C.	Tenn.	Va.	W.Va.		
No Infection	5	12	0	1	11	0	4	33	
Loss than 1%	4	10	10	0	19	7	13	63	
1-9%	4	0	6	2	1	5	7	25	
10-29%	1	0	6	0	1	4	15	27	
30-79%	1	0	2	1	0	7	7	18	
80-100%	0	0	0	0	0	25	9	34	
Total	15	22	24	4	32	48	55	200	

*But partially covered at close of season.

There are two very unusual advance infections in the South. The first one centers along the boundary between North and South Carolina, covering most of the chestnut growth in Greenville County, S. C. and Henderson and Polk Counties, N. C. This infection will soon be simply a part of the main diseased area as the blight is rapidly spreading along the eastern slopes of the Blue Ridge Mountains in North Carolina. The other large advance infection is located principally in Union and Fannin Counties in Georgia and in Polk County in Tennessee. Many thousands of acres of chestnut are heavily infected, indicating that the blight must have been present in that section for many years.

In the states north of the Potomac the blight has continued its steady progress. Even in Maine where the chestnut is represented by only a few scattered individual trees the blight has also spread to the most isolated

trees known. Reports from Ontario state that it is steadily spreading in the Niagara peninsula.

Search for resistant American chestnut has resulted in the finding of only a few trees which are not at all promising. Many people are cooperating by reporting surviving trees of both the American chestnut and planted foreign species. These trees are examined as field work permits and the most promising are propagated that their resistance to blight may be further tested.

DISEASES OF CONIFERS

ARBORVITAE, AMERICAN (*Thuja occidentalis*)

Drought injury

Connecticut - one special injury resulting from drought this year, and probably of last year's effect too, which caused comment, was the browning and premature dropping off of the older leaves back on the branches of arborvitae trees over the state. (Clinton)

ARBORVITAE, GIANT (*Thuja plicata*)

Keithia thujina E. J. Durand (Leaf blight)

Idaho - above Upper Priest Lake, Boundary County, July 28. (Boyce)
 +Oregon - Rhododendron, Clackamas County, May 29. (Boyce)
 Abundant on small trees. (Boyce). P.r.: Ida., *Wash.

ARBORVITAE, PARSONS (*Thuja orientalis compacta*)

+Diplodia sp. (Dieback)

Florida - caused considerable damage to ornamental plantings in Jacksonville; widespread; generally not considered severe. (Weber)

CEDAR, DEODAR (*Cedrus deodara*)

Trametes pini (Brot.) Fr. (Honeycomb rot)

Singh, S. The liability of deodar to the attack of *Trametes pini* (Brot.) Fr., in Lolab, Kashmir. Indian For. 50: 361-365. 1924.

Key

- * = specimen in Pathological Collections.
- + preceding disease = first report of the disease to the Plant Disease Survey.
- + preceding state = first report from the state to the Plant Disease Survey.
- P.r. = prior reports of the disease to the Plant Disease Survey.

CEDAR, CALIFORNIA INCENSE (*Libocedrus decurrens*)

Gymnosporangium blasdaleanum (Diet. & Holw.) Kern (Rust)

Oregon - near Sutherlin, Douglas County, May 13. (Boyce)

Frequent. (Boyce). P.r.: *Calif., *Oreg.

CEDAR, RED (*Juniperus virginiana*)

Gymnosporangium juniperi-virginianae Schw. (Rust)

*Michigan - reported from Alma, Detroit and Washtenaw Counties. (Coons)

CEDAR (*Juniperus* sp.)

Gymnosporangium germinale (Schw.) Kern (Rust)

New York - of slight importance; local; Orange County, May. (Holch)

P.r.: *Ala., Conn., D. C., Ind., Iowa, Ky., *Md., *Mass., *Miss.,

N. J., *N. Y., *N. Car., Ohio, *Penn., S. Car., Tenn., Va.

CYPRESS, NOOTKA (*Chamaecyparis nootkatensis*)

Gymnosporangium nootkatensis (Trel.) Arth. (Rust)

*Oregon - Government Camp, Clackamas County, May 28. (Boyce)

Sparse on small trees. (Boyce). P.r.: Wash.

FIR, CASCADE (*Abies amabilis*)

*Echinodontium tinctorium Ell. & Ev. (Brown stringy rot)

Washington - occasional on living trees; Red Mountain, Skamania County,

August 13. (Boyce)

FIR, BALSAM (*Abies balsamea*)

Stereum sanguinolentum (Alb. & Schw.) Fr.

Faull, J. H. and Irene Mounce. Stereum sanguinolentum as the cause of 'sapin rouge' or red heartrot of Balsam. (Abstract) Phytopath.

14: 349-350. 1924. In Canada 50% or more of affected stems may be discarded as unmerchantable. The rot extends throughout the length of the trunk down to breast height. The fungus fruits abundantly on dead trees and slash. It is possible that living trees with this fungus may be utilized for newspaper pulp.

FIR, GREAT SILVER (*Abies grandis*)Uredinopsis mirabilis (Pk.) Magn. (*U. copelandi* Syd.) (Leaf blister rust)

*Montana - Troy, Lincoln County, July 25. (Boyce)

Idaho - above Upper Priest Lake, Boundary County, July 28. (Boyce)

Abundant on saplings killing many of the current season's needles.

(Boyce). P.r.: Ida., Oreg., *Wash.

FIR, ALPINE (*Abies lasiocarpa*)

Calyptospora columnaris (Alb. & Schw.) Kuhn (Leaf blister rust)

Montana - killed some of the season's needles; West Yellowstone, Gallatin County, September 9. (Boyce). P.r.: *Colo., *Mont.,

*Oreg., *Wyo.

FIR, NOBLE (*Abies nobilis*)

Echinodontium tinctorium Ell. & Ev. (Brown stringy rot)

*Oregon - occasional on living trees; Government Camp, Clackamas County, July 16. (Boyce)

FIR, SILVER (*Abies pectinata*)Rehmiellopsis bohémica Bubak. (*Phoma bohémica* Bubak. & Kabat) (Leaf blight)

Wilson, M. and J. McDonald. A new disease of the silver firs in Scotland. Trans. R. Scott. Arbor. Soc. 38: 114-118. 1924.
Bubak, Natur. Zeitsch f. Forst-u. Landw., 8: 313. 1910.

FIR (*Abies* sp.)

Peridermium pycnogrando Bell, *Peridermium pycnoconspicuum* Bell,
Urodinopsis polypodophila Bell.

Bell, H. P. Fern rust of *Abies*. Bot. Gaz. 77: 1-31. 1924.

FIR, DOUGLAS (*Pseudotsuga douglasii*)

Polyporus schweinitzii Fr.

Boyce, J. S. An unusual infection of *Polyporus schweinitzii* Fr.
Phytopath. 14: 588. 1924.

Poria incrassata (Berk. & Curt.) Burt. (Rot)

Zeller, S. M. Decay of Douglas fir due to *Poria incrassata*. (Abstract)
Phytopath. 14: 119. 1924.

Wood decay

Schmitz, Henry. Studies in wood decay. IV. The effect of sodium carbonate, bicarbonate, sulphate, and chlorid on the rate of decay of Douglas fir sawdust induced by *Lenzites saepiaria* Fr. with special reference to the effect of alkaline soils on the rate of decay of wood in contact with them. Amer. Jour. Bot. 11: 108-121. 1924.

HEMLOCK, CANADA (*Tsuga canadensis*)

+*Armillaria mellea* (Vahl) Quel. (Rootrot)

Pennsylvania - Charteroak, Huntingdon County, October 23. (Overholts)

+*Asterina nuda* Pk.

New York - Poughkeepsie, Dutchess County, June 6. (Guba)

+*Conangium balsameum* var. *abiotinum* Pk. (Canker)

Pennsylvania - Stone Valley, Huntingdon County, November 15.
(Overholts)

Albication - physiological

New York - unimportant; local; St. Lawrence County, September 12.
(Welch)

HEMLOCK, WESTERN (*Tsuga heterophylla*)

Dimorפורium tsugae Dearn. (Sooty mold)

Washington - unimportant; Government Mineral Springs, Skamania County,
August 23. (Boyce). P.r.: Wash., Oreg.

Uredo holwayi Arth. (Rust)

+Idaho - abundant; caused considerable premature needle cast on small
trees; Upper Priest Lake, Boundary County, July 28. (Boyce)

P.r.: Mont.

HEMLOCK, MOUNTAIN (*Tsuga mertensiana*)

+*Trametes pini* (Brot.) Fr. (Honeycomb rot)

Oregon - occasional; Government Camp, Clackamas County, May 28.
(Boyce)

JUNIPER, COMMON (*Juniperus communis*)

Gymnosporangium juniperinum (L.) G. Martius (Rust)

+Washington - causes galls on the twigs; Red Mountain, Skamania
County, August 12. (Boyce). P.r.: Colo., Iowa, Utah.

JUNIPER, COLORADO (*Juniperus scopulorum*)

Gymnosporangium juvenescens Kern (Rust)

+Idaho - found on the twigs; Upper Priest Lake, Bonner County, August 2. (Boyce)

P.r.: *Colo., *Mont., *N. Mex., *Utah.

JUNIPER - See also Cedar, Red.

LARCH, WESTERN (*Larix occidentalis*)

Hypodermella laricis Tubeuf (Leafcast)

British Columbia - Kelowna, August 30. (Boyce)

Idaho - near Lake View, Bonner County, June 2; above Upper Priest Lake, Boundary County, July 31. (Boyce)

Epidemic in stands of young larch, particularly in northern Idaho. (Boyce). P.r.: *Ida., Mont., *Oreg.

Melampsora bigelovii Tuom. (Rust)

+Montana - frequent on the current season's needles of small trees, damage resulting; Sylvanite, Lincoln County, July 24. (Boyce)

P.r.: *Ida.

PINE, JACK (*Pinus banksiana*)

Cronartium cerebrum (Pk.) Hedge. & Long (Oak rust)

Minnesota - common on young pines; Bomidji, Beltrami County, (Seot. Pl. Path.). P.r.: Conn., Mich., Minn.

PINE, SHORE (*Pinus contorta*)

Coleosporium solidaginis (Schw.) Tuom. (Rust)

Montana - Sylvanite, Lincoln County, July 24. (Boyce)

Washington - Red Mountain, Skamania County, August 14. (Boyce)

+Oregon - Government Camp, Clackamas County, May 27. (Boyce)

P.r.: Colo., *Mont., Wash.

Cronartium filamentosum (Pk.) Hedge. & Long (Pine gall rust)

Washington - killing a few small trees; Red Mountain, Skamania County, August 14. (Boyce). P.r.: Ida., Oreg., Wash.

Cronartium harknessii (Moore) Meinicke (Western pine gall rust)

+Montana - Sylvanite, Lincoln County, July 24. (Boyce)

Idaho - Coolin, Bonner County, July 27; Priest River, Bonner County, July 25. (Boyce)

Washington - Red Mountain, Skamania County, August 14. (Boyce)

Oregon - Summit Ranger Station, Clackamas County, July 17; Rhododendron, Clackamas County, May 29; Government Camp, Clackamas County, May 28. (Boyce)

Was common on small trees causing witches brooms and killing branches. (Boyce). P.r.: Calif., *Ida., *Oreg., *Wash., *British Columbia.

Cronartium pyriforme (Pk.) Hedge. & Long (Rust)

+Vermont - infections on older trees (5-10 years) have been found in the experimental nursery of the Vermont Experiment Station. The Sweet Fern (*Myrica asplenifolia*) is very abundant in the region surrounding this nursery. The chief damage is in the case of the seedling trees of Scotch Pine which will be removed in the effort to control the disease. (Gilbert).

P.r.: *Ida., Mont.

+*Hypodermella* sp. (Leafcast)

Wyoming - over a small area in the Yellowstone National Park. (Boyce)

Montana - epidemic over an extensive area in the Jefferson National Forest. (Boyce)

PINE, SWISS MOUNTAIN (*Pinus montana*)

Melin, Elias. Zur Kenntnis der mykorrhizapilze von *Pinus montana* Mill.
Bot. Not. 1924 (1): 69-92. 1924.

PINE, WESTERN WHITE (*Pinus monticola*)

Cronartium ribicola Fischer - See Status White Pine Blister Rust page 314.

+*Hypodermia lineare* Pk. (Needle cast)

Idaho - above Upper Priest Lake, Boundary County, July 28. (Boyce)

Washington - Red Mountain, Skamania County, August 15. (Boyce)

Oregon - Government Camp Clackamas County, May 20. (Boyce)

Occasional on saplings; only slightly injurious. (Boyce)

+*Hypodermella sulcirostris* (Ik.) Tub. (Needle cast)

British Columbia - rare, Daisy Lake, October 8. (Boyce)

PINE, LODGEPOLE (*Pinus Murrayana*)

Colosporium solidaginis (Schw.) Tuom. (*C. montanum* Arth. & Korn) (Rust)

+Wyoming - Camp Roosevelt, Yellowstone Park, July 5. (Conard).

P.r.: Wash.

+*Cronartium pyriforme* (Pk.) Hodge. & Long (Rust)

Wyoming - Camp Roosevelt, Yellowstone Park, July 1. (Conard)

PINE, AUSTRIAN (*Pinus nigra*)

+*Cronartium comptoniae* Arth. (Sweetfern rust)

Connecticut - Woodmount, May 27. (Clinton & Stoddard)

PINE, LONGLEAF (*Pinus palustris*)

Colosporium delicatulum (Arth. & Korn) Hodge. & Long (Rust)

+Florida - the cones of the host have become completely covered with the fungus, the cones on the top of the tall pines look more like oranges, because the bright color of the rust, than like cones; generally well distributed. (Tobler). P.r.: Ga., Miss., S. Car.

PINE, WESTERN YELLOW (*Pinus ponderosa*)

Conangium abietis (Pers.) Rehm (Twig blight)

Long, W. H. The self pruning of Western Yellow Pine. *Phytopath.* 14: 336-337. 1924. New Mexico and Arizona; P.r.: Mont.

Cronartium pyriforme (Pk.) Hodge. & Long (Rust)

+Vermont - infections on older trees (5-10 years) have been found in the experimental nursery of the Vermont Experiment Station.

The Sweet Fern (*Myrica asplenifolia*) is very abundant in the region surrounding the nursery; the chief damage is in the case of the seedling trees of Scotch Pine which will be removed in the effort to control the disease. (Gilbert)

Washington - Squillechuck Creek, near Wenatchee, Douglas County, May. (Boyce)

Oregon - Dufur, Wasco County, June 11. (Boyce)

Kills trees in the seedling and sapling stage; locally severe. (Boyce)

P.r.: Calif., Ida., Mont., Oreg., Wash.

Hypodermia deformans Weir (Leafcast)

British Columbia - Kelowna, August 30. (Boyce)

Idaho - Payette Lakes, Valley County, July 6; Priest River, Bonner County, July 25. (Boyce)

Epidemic over a large area. (Boyce). P.r.: *Ida., *Wash.

PINE, MONTEREY (*Pinus radiata*)

Sapstain

Yeates, J. S. Sapstain in timber of *Pinus radiata* (*insignis*) New Zeal. Jour. Sci. & Techn. 7: 248-252. 1924.

PINE, RED (*Pinus resinosa*)

+*Cronartium pyriforme* (Pk.) Hedge. & Long. (Rust)

Vermont - slight infections in the state nursery near Burlington. (Gilbert)

Spray injury

Connecticut - young tender bases of the leaves of seedling pines injured. (Clinton)

Sun scorch

Connecticut - (Clinton & Stoddard)

PINE, PITCH (*Pinus rigida*)

+*Armillaria mellea* (Vahl.) Quel. (Rootrot)

Pennsylvania - Charteroak, Huntingdon County, October 17. (Overholts)

Cronartium comptoniae Arth. (Sweetfern rust)

+Pennsylvania - Caldwell, Clinton County, July 22. (Orton & Thurston)

P.r.: Mass., N. H., N. Y., Vt.

PINE, WHITE (*Pinus strobus*)

+*Armillaria mellea* (Vahl.) Quel. (Rootrot)

Pennsylvania - Charteroak, Huntingdon County, October 17-18. (Overholts)

Cronartium ribicola Fischer - See Status White Pine Blister Rust page 314.

+*Cytospora* sp.

Pennsylvania - fruiting abundantly on tree recently killed by ants;

Charteroak, Huntingdon County, October 18. (Overholts)

Cronartium ribicola Fischer (White Pine Blister Rust) - See page 314.

+*Hypoderma lineare* Pk. (Needle cast)

Pennsylvania - causes considerable defoliation on young trees; very prevalent in Huntingdon and Clinton Counties, May 3. (Overholts)

Phoma sp. (Basal canker)

+New York - local, Rockland, May 7. (Welch). P.r.: Conn.

Septobasidium pinicola Snell (Bark canker)

Pennsylvania - rare; Laurel Run, Huntingdon County, October 18.

(Overholts). P.r.: *N. H., *Pa.

Trametes pini (Brot.) Fr. (Honeycomb rot)

+Pennsylvania - Stone Valley, Huntingdon County, November 15. (Overholts)

P.r.: Mo., N. H.

General diseases

Metcalf, Haven. Less serious diseases of white pine. Bul. Green Sect.

U. S. Golf Assoc. 4: 147-148. 1924.

PINE, SCOTCH (*Pinus sylvestris*)

+*Cronartium cerebrum* (Pk.) Hedge. & Long. (Oak rust)

Pennsylvania - Laurel Run, Huntingdon County, December 6. (Overholts)

Cronartium comptoniae Arth. (Sweetfern rust)

+Connecticut - Mt. Carmel, May 27. (Clinton & Stoddard)

P.r.: N. Y., Ohio.

Cronartium pyriforme (Pk.) Hedge. & Long (Rust)
+Vermont - occurred in considerable abundance in the state nursery
near Burlington. (Gilbert). P.r.: Conn.

Cytospora pinastri Fr. (Needle blight)
+Pennsylvania - on the needles; Laurel Run, Huntingdon County,
December 6. (Overholts). P.r.: *Mc.

PINE, SCRUB (*Pinus virginiana*)

Cronartium cerebrum (Pk.) Hedge. & Long (Oak rust)
+Ohio - Portsmouth. (Dotmers)

PINE, LOBLOLLY (*Pinus taeda*)

Septoria acicola (Thuom.) Sacc. (*Cryptosporium acicolum* Thuom.) (Leafspot)
+Louisiana - Bogalusa, Washington, January 7. (Dotmers). P.r.: *Fla.
Cronartium comptoniae Arth. (Sweetfern rust)
New Jersey - found on seedlings one foot high, Burlington, May 9.
(Martin). P.r.: Ga.

PINE (*Pinus* sp.)

Cronartium fisiforme (Pk.) Hedge. & Long (Rust)
Mississippi - important locally; prevalent in south Mississippi.
Jackson County, April 10. (Neal)

+*Sphaeropsis pinastri* (Lev.) Sacc.? (abnormal cone or Terminal bud)
Colorado - Fort Collins, Larimer County, June 9. (Learn)

Trametes spp.

Durand, J. P. *Le Trametes du Pin.* (The Trametes of the Pine.)
Rev. Eaux et Forêts 62: 59-61. 1924.

Root nodules

Yeates, J. S. The root nodules of New Zealand Pines. New Zealand
Jour. Sci. & Tech. 7: 121-124. 1924.

YEW, PACIFIC (*Taxus brevifolia*)

+*Pomes hartigii* Allesenr. (Heartrot)

Oregon - not common on living trees; Wendling, Lane County, July 17.
(Boyce)

DISEASES OF HARDWOODS

ACACIA, SHEET (*Acacia Farnesiana*)

Aecidium sp. (Rust)

Florida - caused some damage to the foliage; not prevalent; Oneco.
(Tober)

ALMOND, FLOWERING (*Prunus landulosa*)

+*Sclerotinia cinerea* (Bon.) Schroet. (Brownrot)

Pennsylvania - five percent of the twigs infected on one bush; State
College, June 12. (Thurston)

ALDER, EUROPEAN (*Alnus glutinosa*)

Monilia foliicola Woronichin (Leafblight)

Siemaszko, W. Pleśń liściowa, *Monilia foliicola* Woronichin, w świetle spostrzeżeń i badań biologicznych. (The leafblight, *Monilia foliicola* Woronichin; in the light of biological observations and investigations). Reprinted from Acta Soc. Bot. Poloniae 2 (2): 18. 1924. (English summary).

ALDER, HAZEL (*Alnus rugosa*)

- +*Gnomoniella tubiformis* (Tode) Sacc. (*Leptothyrium alneum* (Lev.) Sacc.)
(Blackspot)
- Pennsylvania - rare; Charterock, Huntingdon County, September 12.
(Overholts)

ALDER (*Alnus* sp.)

- +*Stereum purpureum* Pers. (Silver leaf)
- *Washington - (Dept. Pl. Path.)

ASH, WHITE (*Fraxinus americana*)

- Cercospora fraxinites* Ell. & Ev. (Leafspot)
- +Florida - caused considerable damage in several instances resulting in partial defoliation. (Weber). P.r.: *Tex.
- Puccinia fraxinata* (Ik.) Arth. (Rust)
- +Florida - attacked the seed covering and petiole, deforming them and causing premature dropping. (Weber)

ASH (*Fraxinus* sp.)

- Gloeosporium aridum* Ell. & Holw. (Anthracnose)
- +Pennsylvania - Gettysburg, Adams County, June 5. (Kirby)
P.r.: Conn., Mass., Mich., Ohio, Va., Wis.
- Puccinia fraxinata* (Ik.) Arth. (Rust)
- +Texas - (Taubenhaus)
- +South Dakota - general. (Evans)

ASH, MOUNTAIN (*Sorbus americana decora* Sarg.)

- +*Bacillus amylovorus* (Burr.) Trev. (Fireblight)
- Minnesota - unimportant; Ramsey, August 1. (Sect. Pl. Path.)
- +*Gymnosporangium juniperinum* (L.) C. Martius (Rust)
- Washington - abundant; Red Mountain, Skamania County, August 14. (Boyce)

BEECH, AMERICAN (*Fagus americana*)

- +*Gloeosporium fagi americana* Ell. & Ev. (Anthracnose)
- Connecticut - not serious; apparently new to state; Wallingford, June 16. (Clinton)

BEECH (*Fagus* sp.)

- Weather injury (Scald or Sunburn)
- Pennsylvania - injury persisted throughout season; in late May and early June. (Orton)

BIRCH, WATER (*Betula fontinalis*)

- Septoria* sp. (Leafspot)
- Oregon - occasional; Government Camp, Clackamas County, July 18. (Boyce)

BIRCH, SWEET (*Betula lenta*)

Septoria microsperma Pk. (Leafspot)

+Pennsylvania - appears late in the season; Center, Huntingdon and Mifflin Counties, September 17. (Overholts). P.r.: *W. Va.

BIRCH, RIVER (*Betula nigra*)

Gloeosporium betularum Ell. & Mart. (Leafspot)

Pennsylvania - prevalent; Montour County, September 28. (Orton)

P.r.: *D. C., Ill., Ind., *Mass., Pa., *Wis.

+*Nectria ditissima* Tul. (European canker)

Pennsylvania - Beaver Meadows, Carbon County, October 9. (Overholts)

BIRCH (*Betula* sp.)

Melanconium betulinum Schm. & Kze. (Twig blight)

Pennsylvania - seems to be doing considerable damage in killing back twigs; Butler County, June 23. (Fright). P.r.: *Iowa, *Ohio.

BUCKEYE, TEXAS (*Aesculus arguta*)

**Aecidium aesculi* Ell. & Kell. (Rust)

Kansas - common around Manhattan. (Johnston)

BUCKTHORN, COMMON (*Rhamnus cathartica*)

Puccinia coronata Cda. (Rust)

+Vermont - Burlington, July 8. (Gilbert)

+New York - probably statewide; Tompkins County, June 7. (Chupp)

+Connecticut - new to state; one report only; Berlin, July 1. (Clinton)

+Massachusetts - June 9. (Davis)

+Wisconsin - June 5. (Vaughan)

Minnesota - less than last year; general; Newport, Washington County, June 6. (Sect. Pl. Path.)

+South Dakota - June 10. (Evans)

+Montana - Froid, Roosevelt County, July 21. (Christopher)

BUTTERNUT (*Juglans cinerea*)

Cylindrosporium sp. (Blight)

Minnesota - Hancock, July 23. (Sect. Pl. Path.)

CAMPHOR-TREE (*Cinnamomum camphora*)

Cephaluros virescens Kze. (Leafspot)

**Georgia - Thomasville, Thomas County, November 8. (Boyd). P.r.: *La.

+*Diplodia tubericola* (Ell. & Ev.) Taub. (Canker)

Texas - (Taubenhaus)

Franching (Physiological)

Florida - observed on the leaves of several trees apparently from lack of correct environment. (Weber)

CATALPA (*Catalpa* sp.)

Macrosporium catalpae Ell. & Mart. (Leafspot)

**+Pennsylvania - Mercer, Mercer County, August 6. (Kirby). P.r.: Ala.,

*Conn., *D. C., Ind., Mass., Mich., N. J., N. Y., *Ohio, R. I.,

Tex., W. Va.

- CHERRY, BLACK (*Prunus serotina*)
Coccomyces lutescens Hig. (Leafblight)
 **Pennsylvania - generally prevalent in Center County, July 14. (Orton)
 P.r.: Ga., Ill., N. Y.
- Exoascus pruni* Fekl. (Pockets)
 **Virginia - Scottsville, Albemarle County, May 22. (Fromme). P.r.: Ala.
- Sclerotinia scaverii* Rehm (Brownrot)
 Pennsylvania - Montrose, July 23. (Kirby). P.r.: *Iowa., *N. Y., *Va.,
 *Wis.
- CHESTNUT, AMERICAN (*Castanea dentata*)
Endothia parasitica (Murr.) And. (Chestnut blight) - See page 319.
- +*Leptothyrium castaneae* (Sprong) Sacc. (Leafspot)
 Florida - common on several trees in the vicinity of Gainesville. (Weber)
- Microsphaera alni* (Wallr.) Wint. (Powdery mildew)
 **Pennsylvania - fairly abundant; Center County, July 27. (Kirby)
 P.r.: Conn., *N. Y.
- +*Monochaetia pachyspora* Bubak (Leafspot)
 Florida - caused some defoliation. (Weber)
- +*Mycosphaerella maculiformis* (Pers.) Sehr. (*Phyllosticta maculiformis* Sacc.)
 Pennsylvania - prevalent; Center and Huntingdon County, October 1.
 (Overholts)
- +*Scoleosporium fagi* Lib. (Leafspot)
 Florida - unimportant; Gainesville. (Weber)
- CHINQUAPIN (*Castanea pumila*)
Monochaetia pachyspora Bubak (Leafspot)
 Florida - caused considerable spotting of leaves. (Weber)
- CHINQUAPIN, GIANT (*Castanopsis chrysophylla*)
Dothidella castanopsidis Dearn. (Leafspot)
 Oregon - common, but caused little injury to the host; Government Camp,
 Clackamas County, May 27. (Boyce)
- CHOKECHERRY, COMMON (*Prunus virginiana*)
Podosphaera oxycanthae (DC.) D By. (Powdery mildew)
 **Pennsylvania - Montrose, Susquehanna County, August 15. (Kirby)
 P.r.: *Colo., Conn., *Mass., Minn., *Mont., N. Y., *N. D., *S. Car.
- Sclerotinia angustior* Rehm (Brown rot)
 **Pennsylvania - Duncannon, Perry County, May 17. (Kirby). P.r.: *N. Y.,
 *N. D.
- Sclerotinia cinorea* (Bon.) Schroot. (Brown rot)
 +Florida - very serious during the early growing season; in certain
 instances a large percent of the new shoots were killed. (Weber)
 P.r.: Wis.
- CHOKECHERRY, WESTERN (*Prunus demissa*)
Podosphaera oxycanthae (DC.) D By. (Powdery mildew)
 +Washington - Whitman County. (Dept. Pl. Path.). P.r.: *Colo., *Nebr.,
 *Utah, *Iyo.

ORAB, PRAIRIE (*Malus ivensis*)

- +*Bacillus amylovorus* (Burr.) Trev. (Fireblight)
- Indiana - Henry County, May 26. (Gardner)

DOGWOOD, P.GODD. (*Cornus alternifolia*)

- +*Botrytis* (Twig blight)
- Pennsylvania - on young twigs; York Spring, York County, June 5.
- (Kirby)

DOGWOOD, FLOWERING (*Cornus florida*)

- Septoria cornicola* Desm. (Leafspot)
- *Pennsylvania - Stone Valley, Huntingdon County, August 10. (Kirby & Overholts). P.r.: *D. C., Ind., *Ky.

DOGWOOD (*Cornus* sp.)

- Cercospora comicola* Tr. & Earle (Leafblight)
- +Georgia - somewhat severe; caused a premature defoliation; general;
- Thomasville, July. (Boyd)

ELDER, AMERICAN (*Sambucus canadensis*)

- Microsphaera* sp. (Powdery mildew)
- *Pennsylvania - Hecla Park, Center County, September 17. (Kirby)
- Phyllosticta* sp. (Leafspot)
- +Pennsylvania - Charteroak, Huntingdon County, September 12. (Overholts)
- P.r.: *N. Y.
- Puccinia sambuci* (Schw.) Arth. (Rust)
- +Florida - (Weber)
- Ramularia sambucina* Pk. (Leafspot)
- *Missouri - Columbia, Boone County, October 2. (Manoval). P.r.: N. Y.
- Septoria sambucina* Pk. (Leafspot)
- +Florida - general. (Weber). P.r.: Ala., Ind., *Kans., *La., *Mich.,
- *Nebr., *N. Y.

+Mosaic

- *Pennsylvania - Lebanon, Lebanon County, September 25. (Kirby)
- Florida - found in a typical condition stunting the plants. (Weber)

ELDER, EUROPEAN RED (*Sambucus racemosa*)

- Microsphaera grosulariae* (Kellr.) Lev.? (Powdery mildew)
- British Columbia - attacks the leaves; Stanley Park, Vancouver,
- August 25. (Boyce). P.r.: *Del., *N. Y., *Pa.

ELM, AMERICAN (*Ulmus americana*)

- Gnomonia ulmea* (Sacc.) Thum. (Blackspot)
- +Pennsylvania - Conowingo, Lancaster County, September 25. (Kirby)

ELM, CHINESE (*Ulmus parvifolia*)

- +Slime flux (fermentation of oozing sap)
- Texas - (Taubenhaus)

ELM (*Ulmus* sp.)

- +*Phyllosticta confertissima* Ell. & Ev. (Leafspot)
- Pennsylvania - caused defoliation; *Ulmus fulva* apparently resistant,
- for nearby it was not attacked; Charteroak, Huntingdon County,
- September 12. (Overholts)

Pleurotus ulmarius Bull.

+Iowa - serious. (Melhus). P.r.: Ind., Ohio.

Ozonium omnivorum Shear (Rootrot)

Texas - prevalent. (Taubenhaus). P.r.: Ariz., *Texas.

+*Valsa ambigua* (Pers.) Fr.

Pennsylvania - parasitism not very evident; Charteroak, Huntingdon County, October 18. (Overholts)

Twig blight (unknown)

Ohio - this disease is rapidly destroying elms along the Ohio River. (Young)

EUCALYPTUS (*Eucalyptus* sp.)

Gloeosporium eucalyptorum Turconi, *Macrophoma eucalyptorum* Turconi,

Physalospora eucalyptorum Turconi.

Turconi, M. Una moria di giovani piante di eucaliptii. Atti Inst. Bot. Univ. Pavia III, 1: 125-135. 1924.

HAWTHORNE (*Crataegus* sp.)

Bacillus amylovorus (Burr.) Trev. (Fire blight)

Connecticut - one report on the English hawthorne; new to state on this host; the blossom twigs all over the tree were killed; New Haven, July 1. (Clinton)

+*Cylindrosporium brevispina* Deam. (Leafspot)

Idaho - on *Cylindrosporium douglasii* (Black Hawthorn); locally frequent; little injury to host; Upper Priest Lake Boundary County July 27. (Boyce)

+*Gymnosporangium clavariiforme* (Jacq.) DC. (Rust)

Connecticut - eight reports; Lyme, June 19. (Hunt)

Gymnosporangium globosum Earl. (Rust)

+Florida - was collected at Micanopy showing the asexual stage in a very virulent form; severe on these plants but not common otherwise. (Weber). P.r.: Alaska, Conn., *Ind., *Ill., *Iowa, *Kans., *Ky., *Mass., *Mich., Minn., *Miss., *Mo., *Nebr., *N. J., *N. Y., Ohio, *Pa., *Texas, Vt., *Wis.

+*Myriangium durcui* Mont. & Berk.

Pennsylvania - State College, Center County, January 13. (Overholts)

Physalospora cydoniae Arnaud

+Connecticut - New Haven, July 3. (Clinton). P.r.: *Md.

HAZLENUT (*Corylus* sp.)

Gloeosporium coryli Ell. & Ev. (Anthracnose)

+Pennsylvania - Charteroak, Huntingdon County, September 12. (Overholts). P.r.: *Co., *N. J., *Oreg., *Wash.

HICKORY (*Hicoria* sp.)

Gnomonia caryae Wolf (*Gloeosporium caryae*) (Anthracnose)

+Pennsylvania - Brooklyn, Susquehanna County, August 14. (Kirby)

+Missouri - common and general. (Manoval)

Microstroma juglandis (Berong.) Sacc. (Leafspot)

+Florida - collected on several trees in the vicinity of Gainesville, it caused a serious deformation of the leaves. (Weber).

P.r.: *Ala., *Ga., *Ill., Ind., Iowa, Kans., *Md., *Mass., *Mich., *Miss., *N. Y., *N. Car., *S. Car., W. Va., *Wis.

Phyllosticta caryae Pk. (Leafspot)

- *+Pennsylvania - Brooklyn, Susquehanna County, August 14. (Kirby)
- +*Strumella corynoides* Sacc. & Wint. (Canker)
- Pennsylvania - Rutz Gap, Center County, October 9. First record in Pennsylvania. (Overholts)

HORNBELN, AMERICAN (*Carpinus caroliniana*)*Gloeosporium robergei* Desm. (Leafspot)

- +Pennsylvania - not prevalent; Charteroak, Huntingdon County, September 12. (Overholts). P.r.: *N. Y., *N. Va.

LINDEN, AMERICAN (*Tilia americana*)***Melanconium tiliae* Pk. (Twig disease)

Ohio - Painesville, May 22. (A. E. Gravatt)

Umicinula clintoni Pk. (Powdery mildew)

- +Pennsylvania - not common, Charteroak, Huntingdon County, October 5. (Overholts). P.r.: *Conn., *Fla., *Ill., *Ind., Iowa, Mass., *Mich., *Minn., *N. H., *N. Y., *N. D., Ohio, *Wis.

MAPLE, SILVER (*Acer dasycarpum*)*Gloeosporium apocryptum* Ell. & Ev. (Leafblight)

- +Virginia - severe; Lawrenceville, May 28. (Fromme)

MAPLE, ROCKY MOUNTAIN (*Acer glabrum*)*Cylindrosporium consociatum* Desm. (Leafspot)

British Columbia - Kelowna, August 30. (Boyce)

Idaho - Coolin, Bonner County, July 27. (Boyce)

Frequent, but resulted in little damage. (Boyce). P.r.: Ida., Wsh.

Phyllosticta minutissima Ell. & Ev. (Leafspot)

British Columbia - abundant, but caused little injury; Kelowna, August 30. (Boyce). P.r.: *Colo., *Ida., *Mont., *Nebr., *Wyo.

MAPLE, BOXELDER (*Acer negundo*)+*Fusarium negundi* Shorb. (Red stain)

Minnesota - University Farm, St. Paul. (Sect. Pl. Path.)

Hubert, E. E. The red stain in the wood of the boxelder. *Am. Forests & Forest Life* 30: 443. 1924.

Pleurotus ulmarius Bull. (White saprot)

Iowa - serious. (Molhus). P.r.: Iowa, Kans.

MAPLE, JAPANESE (*Acer palmatum*)+*Myxosporium* sp. (Canker)

Pennsylvania - State College, Center County, May 1. (Overholts)

Nectria cinnabarina Fr. (Canker)

+Pennsylvania - not as active as usual. (Orton). P.r.: *Conn.

+*Phoma palmarum* Sacc. (Twigblight)

Pennsylvania - on twigs which were dead; State College, Center County, May 1. (Overholts)

MAPLE, STRIPED (*Acer pennsylvanicum*)+*Cylindrosporium acerinum* Tr. & Earle (Leafspot)

Pennsylvania - new for state; Stone Valley, Huntingdon County, August 10. (Kirby & Overholts)

MAPLE, NORWAY (*Acer platanoides*)

Vorticillium sp. (Wilt)

- *Michigan - reported very serious, Grand Rapids, June 10. (Coons)
P.r.: Conn., D. C., Ill., Ind., Md., N. Y., N. Car., Pa., Tenn.,
Va., W. Va. Wis.

Sun scald

- *Pennsylvania - in late May and early June the Norway maple particularly developed scald or sunburn to an unusual extent; the vitality of many trees were severely taxed; this injury persisted throughout the season; Lewistown, Mifflin County. (Kirby)
P.r.: *D. C., N. Y.

MAPLE, RED (*Acer rubrum*)

Phyllosticta sp. (Leafspot)

- +Delaware - Wyoming, July 25. (Adams)
*Minnesota - (*P. minima* Berk. & Curt.) Ell. & Ev.) Forest Lake.
(Sect. Pl. Path.). P.r.: Ala., D. C., Fla., La., Md., Miss.,
N. J., N. Y., Ohio, Pa., Va., W. Va.

Uncinula circinata Cke. & Pk. (Powdery mildew)

- +Pennsylvania - not prevalent; Coburn, Center County, October 5.
(Overholts). P.r.: *Ala., *D. C., *Ind., *Mo., *Md., *Mass.,
*Mich., *N. H., Ohio, *Pa., *Va.

MAPLE, SUGAR (*Acer saccharum*)

+*Gloeosporium apocryptum* Ell. & Ev. (Anthracnose)

- Pennsylvania - less than usual; Bushkill, Pike County, July 29. (Orton)

Phyllosticta minutissima Ell. & Ev. (Leafspot)

- +Pennsylvania - very prevalent; Coburn, Center County, October 5.
(Overholts). P.r.: Ind., Mass., *Mo.

**Rhytisma punctatum* (Pers.) Fr. (Black-specked leafspot)

- +Pennsylvania - first collection in state on this host; two or three trees heavily infected; Charter Oak, Huntingdon County, October 19. (Overholts)

+*Septoria* sp. (Leafspot)

- Pennsylvania - associated with the *Phyllosticta* spot; rare; Coburn, Center County, October 5. (Overholts)

Vorticillium sp. (Wilt)

- *Pennsylvania - Laceyville, Washington County, August 29. (Kirby)
P.r.: Conn., D. C., Md., N. Y., Pa., Tenn., Va., W. Va.

Sunscald

- *Pennsylvania - Bushkill, Pike County, July 29. (Orton). P.r.: *N. Y.

MAPLE, MOUNTAIN (*Acer spicatum*)

Rhytisma punctatum (Pers.) Fr. (Black-specked leafspot)

- +Pennsylvania - State College, Center County, October 5. (Overholts)
P.r.: Mo., *Mass., *N. Y., *Vt.

MAPLE (*Acer* spp.)

Coryneum negundinis Berk. & Curt. (Twig blight)

- Howitt, J. E. *Coryneum* twig blight of Manitoba Maple. (abstract)
Phytopath. 14: 345. 1924. (In the vicinity of Ontario Agricultural College, Ontario, the trees have many blighted twigs.)

- Fomes applanatus* (Pers.) Wallr. (*Ganoderma applanatum* (Pers.) Pat.
(White streaked rot)
Connecticut - North Haven, July 26. (Clinton)
- Gloeosporium apocryptum* Ell. & Ev. (Anthracnose)
New York - Oswego County, August 13. (Chupp). P.r.: Conn., Del., Ill.,
Ind., Kans., Mo., Mich., Minn., N. H., N. J., N. Y., *Ohio, Okla.,
S. Car., Wis.
- +*Gnomonia veneta* (Sacc. & Spog.) Kleb. (Anthracnose)
Michigan - (Coons)
- Phyllosticta minima* (Berk. & Curt.) Ell. & Ev. (Leafspot)
*New Jersey - New Brunswick, Middlesex County, July 28. (Dept. Pl. Path.)
P.r.: Conn., *Del., *Mo., Mass., *Mo., *Va.
- Rhytisma acerinum* (Pers.) Fr. (Tarspot)
*Arkansas - Rich Mountain, Polk County, August 14. (Young). P.r.: Ark.,
Conn., Fla., Ind., Iowa, *Kans., Ky., *Md., *Mass., Mich., Minn.,
Nebr., N. H., N. J., *N. Y., *N. Car., Ohio, Pa., *R. I., *S. Car.,
Vt., Wash., W. Va., Wis.
Brucher, Rose. Notes on *Rhytisma acerinum* and *Rhytisma pseudoplatani*.
Trans. Brit. Mycol. Soc. 9: 133-186. 1924.
- Rhytisma pseudoplatani* Mueller - See *R. acerinum* literature reference.
- Rhytisma punctatum* (Pers.) Fr. (Black-speckled leafspot)
Missouri - University campus, Columbia. (Meneval). P.r.: Mass., Minn.,
*N. Y., N. Car., Ohio, Pa., S. Car., *Wash., W. Va.
- +*Stereum purpureum* Pers. (Silver leaf)
Washington - Walla Walla County. (Dept. Pl. Path.)
- Drought injury
*Vermont - noted as of frequent occurrence in vicinity of Burlington.
(Lutman). P.r.: Wash.
- Leaf scorch
**Kentucky - Louisville, Jefferson County, August 22. (Valleau).
P.r.: Conn., Del., Ill., Ky., Mo., Md., Mass., Mich., Minn., N. J.,
N. Y., N. Car., Ohio, Pa., R. I., Va., W. Va.
- +Lightning injury
Connecticut - New Haven, July. (McClintock)

MIMOSA INVISA

- Palm, B. T. and L. Fulmek. Ziekten en plagen van *Mimosa invisa*. (Diseases and pests of *Mimosa invisa*.) Meded. Deli Proefstat. te Medan-Sumatra. Ser. 2, 35: 27-36. 1924.

MULBERRY, FRENCH - See Beautyberry, American.

MULBERRY (*Morus* sp.)

- +*Armillaria mellea* (Vahl) Quel. (Rootrot)
Delaware - Wilmington, June 8. (Adams)

OAK, SILK (*Grevillea robusta*)

- +*Diplodia* sp. (Gumming)
Florida - this disease was found to be the foregoing symptom of the complete girdling and killing of the tree, especially nursery stock. (Weber)

OAK, WHITE (*Quercus alba*)

- +*Armillaria mellea* (Vahl) Quel. (Rootrot)
Pennsylvania - Charteroak, Huntingdon County, October 18. (Overholts)
- +*Cytospora paucispora* Pk. (Dieback)
Pennsylvania - on terminal twigs; Lamar, Clinton County, July 4.
(Overholts)
- Gnomonia veneta* (Sacc. & Speg.) Kleb. (Anthracnose)
+Indiana - a very serious foliage injury, June. (Gardner).
P.r.: *Conn., D. C., Ga., *Ill., *Ind., Iowa, *Mass., Mich., Minn.,
N. J., *N. Y., *Pa., R. I. Tenn., *Wis.
- +*Polyporus dryadeus* Fr. (White rootrot)
Pennsylvania - not common; State College, Center County, November 3.
(Overholts)
- +Papery Leafspot
Michigan - occurred on a street tree in dry soil. (Coons)

OAK, SCARLET (*Quercus coccinea*)

- +*Septobasidium pedicellatum* Schw. (Canker)
New Jersey - (Taubenhaus)

OAK, LAUREL (*Quercus laurifolia*)

- **Taphrina coerulescens* (Mont. & Desm.) Tul. (Leaf blister)
Florida - Fort Barnacas; September 9. (Jenkins)

OAK, CHESTNUT (*Quercus prinus*)

- +*Coryneum (kunzei?)* (Canker)
Pennsylvania - Mauch Chunk; Carbon County, July 7. (Orton)
- Physalospora cydoniae* Arnaud (Twig blight)
Rankin, W. H. The blackstreak canker of chestnut oak. Tree Talk 6:
8-10. 1924. First found 1911 in Pennsylvania. Found at Yonkers,
New York, July 1912.
- +*Polyporus rheades* Fr. (*P. dryophilus* Berk.) (White pocket rot)
Pennsylvania - new host; Stone Valley, Huntingdon County, November 16.
(Overholts)
- +*Sphaeropsis quercina* Cke. & Ell. (*Dothiorella quercina* (Cke. & Ell.) Sacc.)
(Twig canker)
Pennsylvania - apparently common; Carbon County, July 7. (Rahm);
somewhat common in York Springs, Adams County, June 5. (Kirby);
Monroe County, July 29. (Anderson)

OAK, RED (*Quercus rubra*)

- +*Armillaria mellea* (Vahl) Quel. (Rootrot)
Pennsylvania - Charteroak, Huntingdon County, October 18. (Overholts)
- +*Monochaetia desmazierii* Sacc. (Large leafspot)
Pennsylvania - occurs in association with *Taphrina coerulescens* and
appears to extend the damage considerably; Nittany Mountain,
Center County, July 16. (Overholts)
- +*Strumella coryneoidea* Sacc. & Wint. (Canker)
Pennsylvania - Beaver Meadows, Center County, October 9. (Overholts)
- Taphrina coerulescens* (Mont. & Desm.) Tul. (Leaf blister)
**Pennsylvania - scattered; Gettysburg, Adams County, June 5. (Kirby)
+Michigan - (Coons). P.r.: Ala., *Ga., Iowa, N. H., *N. Y.

OAK, NORTHERN RED (*Quercus rubra ambigua*)

Taphrina coerulescens (Mont. & Desm.) Tul. (Leaf blister)

*+Virginia - Hot Spring, July 17; collected by P. Gravatt. (Jenkins)
P.r.: Mass.

OAK, BLACK (*Quercus velutina*)

Taphrina coerulescens (Mont. & Desm.) Tul. (Leaf blister)

**Pennsylvania - Mont Alto, September 13; collected by G. G. Hahn.
(Jenkins). P.r.: D. C., Md., Mass., N. Y.

OAK, LIVE (*Quercus virginiana*)

+*Poria medula-panis* Pers. (Butt rot) *

South Carolina - Sommerville, April 21. (Ludwig)

***Taphrina coerulescens* (Mont. & Desm.) Tul. (Leaf blister)

South Carolina - Landrum, May 16. (Jenkins)

OAK (*Quercus* spp.)

Cronartium cerebrum (Pk.) Hedge. & Long (*C. quercus* (Brond.) Schroet.)

*+South Carolina - unimportant; northwestern part of state; Calhoun,
Pickens County, June 29. (Ludwig). P.r.: *Calif., Del., *Fla.,
Ga., *Ill., Kans., *Md., Minn., Mo., N. Car., Pa., Va.

Endothia parasitica (Murr.) P. J. & H. W. Anderson (Blight)

+Connecticut - little injury; Mt. Carmel, July 14. (Graves)
P.r.: *Md., *Pa.

***Endothia radicalis mississippiensis* Shear and Stevens

South Carolina - Society Hill, Darlington County, December 18, 1916.
(Ludwig)

Gloeosporium sp.

Westerdijk, Johanna and A. Van Lwijk. Die Gloeosporien der Eiche und
der Platane. II. (The Gloeosporium species of the oak and of the
plane. II.) Meded. Phytopath. Lab. 'Willie Commelin Scholten',
Baarn (Holland) 6: 31-33. 1924.

Macrophoma sp. (Limb rot)

Florida - caused some trouble in nursery stock. (Weber)

Polystictus pergamenus Fr. (*Polyporus pergamenus* Fr.) (Sapwood rot)

New York - severe; local; Suffolk, October 18. (Welch). P.r.: *Ill.,
*Md., *N. Y., *N. Car., *Wis.

Taphrina coerulescens (Mont. & Desm.) Tul. (Leaf blister)

*South Carolina - McColl, October 28. (Jenkins)

Florida - was more plentiful and widespread than ever before; almost
every oak tree examined had from 10 to 100 percent of the leaves
infected; the disease caused considerable shedding in certain
places. (Weber)

Recent literature on other oak diseases.

Boodle, L. A. Mistletoe on oaks. Bul. Misc. Inform. Kew 8: 331-333.
1924.

Braid, K. W. Some observations on *Fistulina hepatica* and hollow
stag-headed oaks. Trans. Brit. Mycol. Soc. 9: 210-213. Aug.
1924.

Buchheim, A. Zur Kenntnis des Eichenmehltaus. (Contribution to the
knowledge of oak mildew.) Zeitschr. fur Pflanzenkrankh. 34: 1-11.
1924.

- Koning, M. de. Nieuwe onderzoekingen betreffende den eikenmeeldauw. Tijdschr. Plantenzie. 31: 15-17. Jan. 1925.
- Pator, B. Eine Beobachtung am Eichenmehltau, *Microsphaera quercina* Burrill. (An observation relating to oak mildew, *Microsphaera quercina* Burrill.) Bulletin de l'Institut de Botanique, (Cluj), 4: 25-26. 1924.
- Petri, L. Sur la formation des chlamydo-spores chez l'*Oidium* des chênes. (On the formation of chlamydo-spores in the *Oidium* of the Oak.) Congrès Path. Veg. (Centenaire de Pasteur), Strasbourg, 1923: 36-37. 1923.

PALMS

- Graphiola phoenicis* (Moug.) Dit. (False smut)
Florida - was well distributed but seldom proved of any consequence.
(Weber)
- Phyllactinia* sp. (Leafspot)
Florida - not important. (Weber)
- Thielaviopsis* sp. (Rootrot)
Florida - the disease was destructive where found. (Weber)
- Robertson-Proschowsky, N. Un champignon destructeur de Palmiers sur la Côte d'Azur. (A fungus destructive to Palms on the Riviera.) Rev. de Bot. Appliquée, IV, 30: 106-108. 1924.

PALM, PLUMOSA (*Coccotheca plumosa*)

- +*Alternaria* sp. (Leafspot)
Florida - (Weber)

PALM, CHINESE FAN (*Livistona chinensis*)

- +*Corcospora* sp. (Blotch)
Florida - (Weber)
- +*Thielaviopsis* sp. (Rootrot)
Florida - did considerable damage to nursery stock on the West coast; not prevalent but severe. (Weber)

PALM, ROYAL (*Roystonea regia*)

- +*Colletotrichum* sp. (Anthracnose)
Florida - caused a considerable amount of breaking over of leaf petioles; well distributed. (Weber)
- +Curly leaf (unknown)
Florida - a serious condition; eventually kills the plants; Miami, Vera and Tarpon Springs. (Weber)
- +*Nematodes* (Rootknot)
Florida - caused a definite stunting of small plants in the nursery.
(Weber)

PALM, MEXICAN WASHINGTON (*Washingtonia robusta*)

- +*Corcospora* sp. (Leafspot)
Florida - not plentiful; distribution scattered. (Weber)
- +*Pestalozzia palmicola* Sacc. & Syd. (Leafspot)
Florida - very common on the host, attacking the older leaves; causing them to die back from the margins. (Weber)

PALM, DATE (*Phoenix dactylifera*)

- +*Xoosporium palmivorum* Sacc. (Leafspot)

- Texas - prevalent but unimportant. (Taubenhaus). P.r.: *La.
 Graphiola phoenicis (Moug.) Poit. (False smut)
 Texas - quite prevalent but important. (Taubenhaus). P.r.: *Ariz.,
 *Calif., *Cuba, *D. C., *Fla., *Hawaii, Porto Rico, *Texas.
 Pestalozzia sp. (Blight)
 Texas - trace; unimportant. (Taubenhaus)

- PALM, CAROLINA (Sabal palmetto)
 +Septobasidium pedicellatum Schw. (Canker)
 Florida - (Taubenhaus)

- PITHECOLLOBRIMUM (Pithecollobium sp.)
 +Napicladium sp. (Leafspot)
 Florida - Little River. (Weber)

- PLANETREE (Platanus sp.)
 Gloeosporium sp. - See Oak (Quercus sp.) Gloeosporium sp. literature
 reference.

- PLUM, WILD GOOSE (Prunus munsoniana)
 +Coccomyces sp. (Leafspot)
 Arkansas - Waldron, Scott County, September 4. (Young)

- PLUM, BLACK SICE (Prunus umbellata)
 +Bacterium pruni EFS. (Bacterial spot)
 Florida - not common. (Weber)
 +Diplodia pruni Fekl. (Gummosis)
 Florida - a very serious disease of plum trees in the vicinity of
 Gainesville and also at DeFuniak Springs, where it killed
 trees several years old. (Weber)
 +Podospaera oxycantha (DC.) D By. (Powdery mildew)
 Florida - caused a definite twig blight in which the younger parts
 were attacked and as a result they became swollen, deformed
 and gradually died; the fungus appeared to be very much more
 virulent than is usually considered for this fungus. (Weber)
 +Sclerotinia cinerea (Bon.) Schroet. (Monilia frustigena Pers.) (Brown rot)
 Florida - collected on the young twigs of the host plant which were
 being killed back; leaves and fruit were also attacked; common.
 (Weber)

- POPLAR, WHITE (Populus alba)
 +Dothichiza populea Saec. & N. Briard)
 Pennsylvania - State College, Center County, June 17. (Kirby)

- POPLAR, LARGETOOTH ASPEN (Populus grandidentata)
 +Diplodia populi Fekl. (Twig blight)
 Pennsylvania - on dead twigs, Susquehanna County, July 23. (Kirby)
 +Fomes igniarius (L.) Fr. (White heart rot)
 Pennsylvania - new host for state; Laurel Run, Huntingdon County,
 November 27. (Overholts)
 +Valsa nivea (Hoffm.) Fr. (Canker)
 Pennsylvania - slight loss; State College, November 1. (Overholts)

POPLAR, LOMBARDY (*Populus nigra italica*)*Cytospora chrysosperma* (Pers.) Fr. (Canker)

*+Pennsylvania - Chambersburg, Franklin County, August 21. (Kirby)

*+Missouri - the damage from this canker at a nursery at St. Joseph has been quite severe, the company lost about a thousand trees from this disease last year; the trees are from 3 to 4 years old; according to their observation the trees appear healthy until fall when the disease spreads and the trees die; first report for state, July 16. (Maneval)

P.r.: Ariz., *Kans., Mich., N. Mex., Texas, Utah.

Long, W. H. Journal of Agricultural Research 13: 331-345. 1918.

Since Doctor Long's publication the fungus has been found to be scattered more or less over the eastern United States and is now found around Washington, D. C.

Valsa nivea (Hoffm.) Fr. (Canker)

+Pennsylvania - State College, Center County, November 1. (Overholts)

P.r.: *Kans.

POPLAR, QUAKING ASPEN (*Populus tremuloides*)*+*Marssonina brunnea* Ell. & Ev. (Sacc.) (Anthracnose)

Washington - Whitman County. (Dept. Pl. Path.)

Melampsora albertensis Arth. (Rust)

*+Alaska - collected on farm of United States Experiment Station at Fairbanks; trace; August 3. (Paxton)

British Columbia - found occasionally, Kelowna, August 30. (Boyce)

P.r.: *Colo., *Ida., *Mont., *Utah, *Wash., *Wyo.

Valsa nivea (Hoffm.) Fr. (Canker)

+Pennsylvania - State College, Center County, November 1. (Overholts)

P.r.: Mont., *N. Y.

POPLAR, BLACK COTTONWOOD (*Populus trichocarpa*)*Melampsora occidentalis* Jack. (Rust)

British Columbia - very abundant, Revelstoke, September 2, and Kelowna, August 30. (Boyce)

P.r.: *Calif., Ida., Mont., *Oreg., *Wash.

**Stereum purpureum* Fr. (Silver leaf)

Washington - Walla Walla, February 7. (Dept. Pl. Path.)

POPLAR (*Populus* spp.)*Cytospora chrysosperma* (Pers.) Fr. (Canker)

Colorado - Delta, Denver, and Larimer Counties, May 14; the disease shows practically no difference in choice of species of hosts in state. (Learn). P.r.: Ariz., Colo., Ida., Ind., *Me., Mass., Mich., Minn., Nev., N. H., N. Mex., *N. Y., N. D., Ohio, Texas, *Utah.

Hypoxyton pruinatum (Klotzsch) Cke. (Canker)

Provan, Alfred. *Hypoxyton* poplar canker. *Phytopath.* 14: 140-145. 1924.

P.r.: N. Y., Mich., Me.

Melampsora medusae Thuem. (Rust)

+North Dakota - common and general; on *P. deltoides* and *P. tremuloides*. (Jeniger). P.r. on former: *Ill., *Ind., Iowa, *Mass., N. Y.,

N. D., Okla., *Texas, *W. Va., *Wis.; on the latter: *Ind., Mont.

Schenk, P. J. Canker van Canada-populier. *Floralia* 45: 89. 1924.

REDBUD, AMERICAN (*Cercis canadensis*)+*Pestalozzia* sp. (Leafspot)

Florida - was causing considerable defoliation. (Weber)

SASKATOON (*Amelanchier alnifolia*)*Dimerosporium collinsii* (Schw.) Thuem.

+Montana - Lincoln County, July 25. (Boyce)

Idaho - frequent above Upper Priest Lake, Boundary County, July 29.

(Boyce). P.r.: *Calif., *Ida., *Mont., *N. D., *Oreg., Wash., *Wyo.

SASSAFRAS (*Sassafras variifolium*)+*Armillaria mellea* (Vahl) Quel. (Rootrot)

Pennsylvania - new host for state; Stone Valley, Huntingdon County, November 16. (Overholts)

SCREWPINE, COMMON (*Pandanus utilis*)+*Colletotrichum* sp. (Anthracnose)

Florida - very common on the leaves. (Weber)

+*Melanconium pandani* Lev. (Leafspot)

Florida - Bradentown. (Weber)

+*Pestalozzia* sp. (Leafspot)

Florida - caused a considerable dying back of the leaves from the leaves from the tip; common. (Weber)

SERVICEBERRY, DOWNY (*Amelanchier canadensis*)*Phyllosticta virginiana* (Ell. & Hals.) Seaver (Leafspot)

+Pennsylvania - new for state; Stone Valley, Huntingdon County, August 9. (Kirby & Overholts). P.r.: N. Y.

SERVICEBERRY (*Amelanchier florida*)+*Phyllactinia corylea* (Pers.) Karst. (Powdery mildew)

Washington - Whitman County. (Dept. Pl. Path.)

SUMAC, POISON (*Rhus toxicodendron*)*Uromyces toxicodendri* (Berk. & Rav.) Arth.

Pennsylvania - Charteroak, Huntingdon County, September 12.

(Overholts). P.r.: Ala., Colo., Ga., Ill., Ind., Iowa, Kans., La., Mass., Minn., Miss., Mo., Mont., Nebr., N. J., N. Y., N. Car., N. D., Ohio, Pa., S. Car., Texas, Vt., W. Va., Wis., Wyo.

Septoria irregularis Pk. (Leafspot)

**New Jersey - New Brunswick, Middlesex County, August. (Dept. Pl. Path.)

P.r.: Ill., Ind., Minn.

SUMAC, STAGHORN (*Rhus typhina*)***Sphaerotheca humuli* (DC.) Burr. (Powdery mildew)

Pennsylvania - common on host on the low ground around the Lake in Heola Park, Center County, September 7. (Kirby)

SYCAMORE (*Platanus occidentalis*)*Gnomonia veneta* (Sacc. & Speg.) Kleb. (Anthracnose)

The disease was worse than usual in Mass., Conn., *N. Y., *Pa., D. C., W. Va., Ind., Ohio, Mich., Iowa, Mo., Ill. The following states reported this disease for the first time to the

Plant Disease Survey: *N. J., Tenn., Ark. All reported that the disease was most severe. Mr. G. Flippo Gravatt in a note to the Plant Disease Survey on the prevalence of blight on sycamore during May 1924 said:

"The blight is present in varying quantities practically every year and has for the past few years been a serious factor affecting the vitality of sycamores. This year it is even worse than it has been for the past few years. The depletion of the vigor of the trees due to the killing of a large percentage of the leaves and twigs is becoming apparent. A number of trees were observed which had more than one-half of their limbs killed, apparently due to the repeated attacks of this fungus."

Hysterium pulcherrimum Tehon & Young

Illinois - White Heath.

Tehon, L. R. and P. A. Young. A new *Hysterium* from Illinois. *Mycologia* 16: 30-32. 1924.

WALNUT, BLACK (*Juglans nigra*)

Gnomonia leptostyla (Fr.) Ces. & De Not. (*Marssonina juglandis* (Lib.) Magn.) (Anthracnose)

**Missouri - probably occurs to some extent every year; first collected by Doctor Maneval at McBaine, Boone County, September 29, 1917; Columbia, Boone County. (Maneval)

WILLOW (*Salix* sp.)

Bacterium tumefaciens EFS. & Town. (Crown gall)

Connecticut - two reports; Westville, July 25. (Hunt). P.r.: Conn., Tex.

+*Melampsora humboldtiana* Speg. (*M. americana* Arth.) (Rust)

Pennsylvania - Charteroak, Huntingdon County, (Overholts); Danville, Montour County. (Orton)

+*Polystictus hirsutus* (Wulf.) Fr. (White rot)

Connecticut - one report on bark of living tree; Fairfield, August 24. (Clinton). P.r.: *La.

Fusicladium saliciperdatum (All. & Tub.) Lind. (*Septogloeum salicipordum*) All. & Tub. (Dieback)

Alcock, N. L. A dieback and bark disease of willows, attacking the young twigs. *Trans. R. Scott. Arbor. Soc.* 38: 128-130. 1924.

EVERGREEN TREES

Chlorosis (Smoke fumes)

Wisconsin - the effect was very noticeable on the evergreen trees from the smoke and fluoride from an enamel factory at Kohlor; it produced a reddening and occurred when the host was in full leaf at mid-summer. (Vaughan)

Rhizoctonia sp. and *Pythium* sp. (Damping-off)

Wisconsin - attacked the seedlings at Trout Lake, was also bad at Pine Lake and Sturgeon Bay; may be successfully controlled by sulphuric acid 9 ounces in 6 gallons of water to a bed 4 x 12; two applications applied 4-1/2 ounces and three gallons of water after the bed is tamped and 4-1/2 ounces and three gallons after sanding. (Vaughan)

Recent literature on general forest disease subjects:

- Anderson, M. L. Heartrot in Conifers. Trans. Roy. Scot. Arbor Soc. 30: 37-45. 1924.
- Bray, M. W. and T. M. Andrews. Chemical changes of groundwood during decay. Indus. & Engin. Chem. 16: 137-139. 1924.
- Boyce, J. S. Status of forest tree diseases on the Pacific Coast. Timberm. 26: 60. 1924.
- _____ Decay in Douglas fir in relation to cruising. The Timberm. 26 (1): 51-54. 1924.
- _____ An unusual infection of *Polyporus schweinitzii* Fr. Phytopath. 14: 588. 1924.
- _____ Report on the forest disease situation. Lumber World Rev. 47 (12): 44. 1924.
- Durt, E. A. Some wood-destroying fungi of Java. Ann. Missouri Bot. Gard. 11: 37-42. 1924.
- Codding, G. M. Defoliation of shade trees due to heat. Tree Talk 6: 25-26. 1924.
- Colley, R. H. Rotten wood. Timberm. 25: 56-57. 1924.
- _____ A laboratory projection apparatus. Phytopath. 14: 424-426. 1924.
- Collins, J. Franklin. Cavity work. Connecticut Agr. Exp. Sta. Bul. 263: 154-155. Dec. 1924.
- _____ Protection of wounds in nut trees. No. Nut. Grow. Assoc. Proc. 15th Ann. Meeting, Sept. 3-5, 1924. P. 61-63. 1924.
- Costantin, J. Remarques sur les relations des arbres avec les champignons souterrains. (Notes on the relations of trees with underground fungi.) Comptes Rendus Acad. des Sciences, 178: 158-161. 1924.
- Ellis, E. H. Dryrot disease of timber. Unem. News 127, 3324: 402-403. 1924.
- Fritz, C. W. Cultural criteria for the distinction of wood-destroying fungi. Proc. & Trans. Roy. Soc. Canada 17: 191-288. 1923.
- Henkel, J. S. Preservative treatment of indigenous timbers. Rhod. Agr. Jour. 21: 61-63. 1924.
- Hubert, E. E. The sapstain problem and a ten million dollar loss. So. Lumberm. 114: 47-48. 1924.
- _____ The diagnosis of decay in wood. Jour. Agr. Res. 29: 523-567. 1924.
- _____ and N. Karl Loughborough. Problems in the seasoning of southern hardwoods. Southern Lumberman 117: 170-174. 1924.
- _____ The heat treatment of infected wood. Hardwood Record 57: 15, 17, 20; 58: 18, 20. 1924.
- _____ Effect of kiln drying, steaming and air seasoning on certain fungi in woods. U. S. Dept. Agr. Bul. 1262: 1-20. 1924.
- Humphrey, C. J. Decay of mine timber. Mimeo-graphed from Proc. 18th Ann. Meet. Amer. Wood Pres. Assoc. P. 213-222. 1922.
- Kallbrunner, H. Law for the protection of a riculture and forests against smoke injury in Austria. Intern. Rev. Sci. & Pract. of Agric., N. S., 2: 224-230. 1924.
- Lane, P. Sur la coloration des bois. (The discoloration of timber.) La Vie Agric. et Rurale 25: 121-123. 1924.

- Lawrence, C. C. Cankers and canker treatment. *Tree Talk* 6: 12-13. 1924.
- Mangin, L. Les champignons destructeurs du bois. (Wood-destroying fungi.) *Comptes Rendus Acad. d'Agric. de France* 10: 428-429. 1924.
- Melin, E. Ueber den Einfluss der Wasserstoffionkonzentrationen auf die Virulenz der Wurzelpilze von Kiefer und Fichte. (The influence of hydrogen-ion concentrations on the virulence of Pine and Fir root fungi.) *Botaniska Notiser* 1924: 38-48. 1924.
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DISEASES OF ORNAMENTSAMARYLLIS, HOUSE (*Hippeastrum equestre*)

Mosaic

Kunkel, L. O. Further studies on the intracellular bodies associated with certain mosaic diseases. Hawaiian Sugar Plant. Assoc. Exp. Sta. Bul. Bot. Ser. 3: 108-114. 1924. Describes mosaic of *Hippeastrum*; states that it is probably the same disease as the mosaic that attacks tulips, narcissi, and hyacinths.

AMPELOPSIS or VIRGINIA CREEPER (*Ampelopsis quinquefolia*)*Cercospora ampelopsidis* Pk. (Leafspot)

*Missouri - Columbia, Boone County, July 4. (Maneval). P.r.: Ala., *Del., *D. C., *Ill., *Ind., *Iowa, *Kans., *Minn., Nebr., N. J., N. Y., *Pa., *W. Va.

Guignardia bidwellii (Ell.) Viala & Ravaz (*Phoma uvicola* Berk. & Curt.) (Blackrot)

*Florida - general throughout state; both on wild and cultivated; it was undoubtedly a source of infection for the disease on cultivated grapes. (Weber)

Uncinula necator (Schw.) Burt. (Powdery mildew)

**Pennsylvania - State College, Center County, September 13. (Kirby)

AMPELOPSIS or JAPANESE CREEPER (Boston Ivy) (*A. veitchii*) (*A. tricuspidata*)*Guignardia bidwellii* (Ell.) Viala & Ravaz (Leafspot)

*Florida - severe; Gainesville. (Weber)

Plasmopara viticola (Berk. & Curt.) Berl. & DeToni (Downy mildew)

Lustner, G. Ueber das auftreten der *Plasmopara viticola* Berlese et de Toni auf *Ampelopsis veitchii* im Rheingau. Nachrichtenbl. Deut. Pflanzenschutzd. 4: 74-75. 1924.

Zum "Auftreten von *Plasmopara* (*Peronospora*) *viticola* auf *Ampelopsis veitchii*." Nachrichtenbl. Deut. Pflanzenschutzd. 4: 92-93. 1924.

ARTICHOKE, JERUSALEM (*Helianthus tuberosus*)*Puccinia helianthi* Schw. (Rust)

*Kansas - very common in the vicinity of Manhattan. (Johnston)
P.r.: *Ark., Ind., *Iowa, *Kans., *Ky., *La., *Md., Miss., *Mo., *Nebr., *N. J., *N. Y., *N. D., *Ohio, *Okla., *S. Car.

ASTER, CHINA (*Callistephus chinensis*)*Coleosporium solidaginis* (Schw.) Thuem. (Rust)

Pennsylvania - State College, October 6. (Orton). P.r.: Conn., *Ga., *Ind., Md., Mass., Miss., *N. Y., N. Car., N. D., Pa., *Va.

Fusarium oxysporum Schlecht. (Wilt)

*Kentucky - Lexington, Fayette County. (Ky. Agr. Exp. Sta.)

Yellows

*Arkansas - very common and severe and frequently noted in association with similar symptoms on *Erigeron canadensis*. ((Dept. Pl. Path.))

- +Indiana - destroyed practically all asters grown; worse than the previous years; a similar trouble was widespread on Erigeron sp. which is related to the aster; it seems possible that the weed may serve as a source of infection; no cross inoculations were made. (Gardner)
- +Michigan - more than last year; general; one report stated that the various varieties from seedhouses were almost a failure, while the homegrown seeds gave beautiful blooms; several growers reported a total failure of the aster planting from this disease. (Coons)
- +North Dakota - scarcely any of the varieties in the infected area of the state were free from disease; yellows was the limiting factor in aster production instead of wilt, which is usually the disease which causes considerable trouble, Fargo, July 7. (Weniger)
- +South Dakota - from a very high to a total loss; seems to be associated with a similar disease on Erigeron canadensis; the reports were mostly from the eastern half of the state. (Potry)
- +Kansas - general. (White)

+Smelter injury

Washington - Pierce County. (Dept. Pl. Path.)

Recent literature:

Leubert, R. Die welkekrankheit der astern. Gartenw. 28: 463-464. 1924.

AZALEA, INDICA (Azalea indica)

Exobasidium azaleae Pk. (Galls)

- +Florida - West Palm Beach; disease was not of a serious nature. (Weber). P.r.: *S. Car.

AZALEA, JAPANESE (Azalea japonica)

+Exobasidium sp.

Washington - Lewis and Pacific Counties. (Dept. Pl. Path.)

AZALEA, SWAMP (Azalea viscosa)

Exobasidium vaccinii (Pk. (Gall))

- +Florida - collected at several different places near Gainesville; the galls hung like pendants from the leaves or flowers and were bell-shaped except that they were solid. (Weber). P.r.: *Ala., Miss., *N. J.

BABYSBREATH (Gypsophila paniculata)

+Botrytis sp. (Gray mold)

New Jersey - produced ashon, gray spots on bud scales and stems; stems apparently dead for several nodes and internodes at top of the plants; Middlesex, July 15. (Martin)

BALSAM, GARDEN (Impatiens balsamina)

Mosaic

Ocfemia, G. O. Notes on some economic plant diseases new in the Philippine Islands. Philippine Agr. 13: 163-166. Sept. 1924. Collected in a flower garden in Los Baños, Laguna, December 1923. Plants affected did not produce any flowers although unaffected plants of the same age fruited abundantly.

- SNAPWEED, SPOTTED (*Impatiens biflora*)
Puccinia impatientis (Schw.) Arth. (Rust)
 New York - common in Genesee and Orleans Counties. (Chupp)
 P.r.: *Ind., *Miss., *N. Y., *N. D., *Wash.
- SNAPWEED, PALE (*Impatiens pallida*)
 +*Peronospora corydalis* D By. (Downy mildew)
 New York - Tompkins County, May 12. (Chupp)
- SNAPWEED (*Impatiens* sp.)
 +*Cercospora* sp. (Leafspot)
 Florida - caused considerable damage to local flower bed by leafspotting and defoliation. (Weber)
 +*Rhizoctonia* sp. (Damping-off)
 Florida - very prevalent, in many instances affecting 50% of the plantings. (Weber)
- BAMBOO (*Bambusa* sp.)
 +*Helminthosporium* sp. (Leafspot)
 Florida - not important; considerable discoloration and dropping of foliage. (Weber)
- BARBERRY, COMMON (*Berberis vulgaris*)
 Bacterial leafspot (undetermined)
 *+Pennsylvania - Lancaster County, July 8. (Kirby)
 P.r.: N. Y., Iowa, Nebr., Wis.
Puccinia graminis - See Cereal Supplement 40, 1925.
- BEGONIA, PERPETUAL (*Begonia semperflorens*)
 +*Cercospora* sp. (Leafspot)
 Florida - of no consequence; collected on the wild plants. (Weber)
- BEGONIA (*Begonia* sp.)
 +*Aphelenchus ormerodis* Ritzma Bos (Nematode)
 New York - found in a nursery; produced numerous red blisters on the lower side of the leaf followed by the dying of the infected foliage; Long Island, October. (Chupp)
 Leaf blight (non-parasitic)
 +Washington - Thurston County. (Frank). P.r.: Ohio.
 Leaf drop (Physiological)
 Washington - Island County. (Dept. Pl. Path.)
- BEAUTYBERRY, AMERICAN (*Callicarpa americana*)
 +*Cercospora pulvinulata* Sacc. & Wint. (Leafspot)
 Florida - caused defoliation. (Weber)
- BOX (*Buxus sempervirens*)
 +*Laestadia buxi* (Desm.) Sacc. (Leafspot)
 Mississippi - one report; Alcorn County, September. (Neal & Wallace)
Nectria rousselliana Tul. (*Volutella buxi* Cda.) (Canker)
 Pennsylvania - Philadelphia, July; Philadelphia County. (Miles)
 P.r.: Md., N. J., *Pa.

+Phyllosticta suerswaldii Allesch. (Leafspot)
 New Jersey - Essex County, June 9. (Martin)
 Sunscorch
 Connecticut - (Clinton & Stoddard)

CALENDULA (Calendula sp.)

+Mosaic

Minnesota - noted on only a few plants in one garden, Ramsey County; the disease symptoms were very much like those of aster yellows - a bushy growth and mottled leaves; the plants were covered with aphids. (Sect. Pl. Path.)

CALLA (Zantedeschia sp.)

Bacillus carotovorus L. R. Jones (Soft rot)

New York - on variety Geoffreyii, in a greenhouse; rotting near surface of soil; New Rochelle. (Chupp). P.r.: Pa.

Bacillus sp. (Soft rot)

New Jersey - stems decayed above ground finally causing plants to topple over as in damping off; Atlantic, Aug. 18. (Martin)

CAMELLIA, COMMON (Camellia japonica)

+Exobasidium camelliae Shirai (Gall)

Mississippi - important locally; rather prevalent in Jackson and Harrison Counties, April 25. (Neal)

+Gloeosporium sp. (Anthracnose)

Mississippi - Copiah County, September 1. (Neal & Wallace)

Bad dropping (undetermined)

Washington - King County. (Frank)

CANNA (Canna indica)

Bacterium cannae M. K. Bryan (Bacterial bud rot) (Phytomonas cannae (Bryan) Com. S.A.B.)

+Connecticut - new to state; Hartford County, August 19. (Clinton)
 P.r.: *D. C., Ill.

CARNATION (Dianthus caryophyllus)

Botrytis sp. (Bud blight)

+Connecticut - (Clinton) P.r.: Ill., Ohio, *Pa.

Fusarium sp.

Pennsylvania - locally severe; State College, Center County, October 6. (Orton). P.r.: Ala., Calif., Del., *D. C., Fla., Ill., Mass., Minn., Nebr., N. Y., N. Car., *Ohio, *Pa., *Texas.

Uromyces caryophyllinus (Schrank) Wint. (Rust)

+Virginia - severe in a greenhouse on Beacon variety; Oak Ridge, March 22. (Frömmel)

+Colorado - unimportant; just present in a greenhouse; Ft. Collins. (Loarn)

CHRYSANTHEMUM (Chrysanthemum sp.)

Cylindrosporium chrysanthemi Ell. & Deam.

+Georgia - quite destructive in greenhouses; affected 45% of the plants in the gardens; maximum loss in one garden 100%; general

appeared too late in the season to be generally destructive to outdoor planting; Bainbridge, September 23; period of greatest injury October 25 to November 10. (Boyd). P.r.: Conn., *Mass., *Miss., N. Car., Pa.

Heterodera radicolica (Greef) Muell. (Rootknot)

+Mississippi - of slight importance; Tate County, September 24. (Neal & Wallace). P.r.: *Texas, Wash.

Septoria chrysanthemella Cav. (Leafspot)

*Kentucky - Lexington, Fayette County. (Ky. Agr. Exp. Sta.)

Chlorosis (non-parasitic)

+Pennsylvania - very severe; severe on certain varieties; State College, Center County, November 21. (Orton). P.r.: Md.

+Yellows (Undetermined)

Michigan - occurred in the greenhouses for the first time as far as the records at the Agricultural College show. This was attributed to the fact that aster yellows was widespread and destructive out of doors as well as affecting all varieties in the greenhouses; while there was no definite proof that the two diseases are identical there seems little doubt that such is the case. The symptoms are the same in every way and those working on this disease have felt justified in calling the disease on this host "yellows" and classifying this host as one of several that are affected by this disease as well as the aster; the blooms were discolored and failed to open; important in some greenhouses. (Nelson)

Recent literature on chrysanthemum diseases:

Chiffot, Jean. Maladies et parasitismes des boutures de chrysanthèmes. Congr. Path. Veg. Strasbourg 1923: 42-44. 1923.

Maladies et parasitismes des chrysanthèmes. Observations de l'année 1923. Chrysanthème. 27: 504-505. 1924.

Macself, A. J. Deterioration in chrysanthemums. Gard. Chron. 3, 75: 20-21. 1924.

CLEMATIS (*Clematis* sp.)

Puccinia triticina Eriks. (*Dicaeoma clematidis* (DC.) Arth.) (Rust)

Washington - Okanogan and Walla Walla Counties. (Dept. Pl. Path.)

P.r.: *Calif., *Colo., *Ga., Ind., Iowa, *Kans., Minn., *Mo., *Mont.,

*Nebr., N. Y., *Oreg., Texas, *Utah, Vt., Va., *Wash., *Wis.,

*Wyo.

COLEUS, COMMON (*Coleus blumei*)

+*Heterodera radicolica* (Greef) Muell. (Rootknot)

*New York - Flushing, Queens County, April 7. (Chupp)

+*Orobanche ramosa* L. (Branched broom-rape)

*New York - this together with nematodes caused the loss of several hundred plants daily in a greenhouse; Flushing, Queens County, February 4. (Muenscher)

Muenscher, W. C. *Orobanche ramosa* on a *Coleus*. Rhodora. 26: 133-135. 1924.

Coleus parasited by broom-rape. Gard. Chron. Amer.

28: 165. 1924.

COSMOS, COMMON (*Cosmos bipinnatus*)

Phomopsis stewartii Pk. (Stem canker)

+Michigan - caused failure of many plantings. (Nelson). P.r.: Ohio,
*S. D.

Bacterial wilt (Undetermined)

Porto Rico - severe. (Cook.). P.r.: N. Car.

Cook, M. T. A bacterial wilt of cosmos. (Preliminary paper) Jour.
Dept. Agr. Porto Rico 8: 14. 1924.

+Mosaic

Florida - apparently not transmissible since healthy plants grew
beside it several months; was observed during the season on
several plants in Gainesville. (Weber)CRAPEMYRTLE, COMMON (*Lagerstroemia indica*)

Cercospora sp. (Leafspot)

+Florida - Gainesville. (Weber). P.r.: Cercospora lythracearum Heald
& Wolf, *Texas.

+Powdery mildew (Undetermined)

Texas - Harrison and Smith Counties. (Tauberhaus)

+Witches broom (Unknown)

Florida - local; found near Davie. (Weber)

CYCLAMEN (*Cyclamen* sp.)

Heterodera radiculicola (Greef) Muell. (Rootknot)

+Indiana - occurred in a greenhouse; Lawrence County, August 11.
(Gardner). P.r.: Nebr., Ohio, W. Va.

+Phoma cyclamenae Hals. (Leafspot)

Ohio - this disease caused a \$5000 loss to a greenhouse at Cleveland,
80% of the plants being attacked. (Young)

Ramularia cyclaminicola Trel.

**Minnesota - observed in only one greenhouse in Minneapolis, September
17. (Sect. Pl. Path.). P.r.: Ill.DAHLIA, AZTEC (*Dahlia pinnata*)

+Cercospora sp. (Leafspot)

Florida - severe in certain localities. (Weber)

+Choanephora sp. (Blossom blight)

Florida - caused a serious blighting of the flowers, which were at-
tacked often before fully opened; not reported outside of
Gainesville. (Weber)

+Sclerotium rolfsii Sacc. (Stemrot)

Florida - girdled the stalks of plants, also attacked the tubers.
(Weber)DAHLIA (*Dahlia* sp.)

Botrytis sp.? (Budrot)

**Pennsylvania - Lebanon, Lebanon County, August 12. (Kirby).
P.r.: Mich., N. J.

Erysiphe cichoracearum DC. (Powdery mildew)

+Connecticut - Fairfield, August 24. (Clinton)

+Washington - Asotin County. (Dept. Pl. Path.). P.r.: Calif., Iowa,
Md., N. C., Ohio, W. Va.

Erysiphe sp.

*+Pennsylvania - Lebanon, Lebanon County, August 12. (Kirby)

+Michigan - some varieties badly affected in nursery; more than last year. (Nelson)

Heterodera radiculicola (Greef) Muell. (Rootknot)

+Mississippi - Oktibbeha County, March 25. (Barker). P.r.: Calif.

Macrosporium sp.

**+Missouri - Columbia, Boone County, October 19. (Maneval). P.r.: *Ala., Mo., Pa., *S. Car.

Pythium debaryanum Hesse (Damping off)

+Washington - heavy loss suffered by cuttings in greenhouse; Colfax. (Dept. Pl. Path.). P.r.: Conn.

+Smelter injury - SO₂

Washington - Pierce County. (Dept. Pl. Path.)

Rootrot (Undetermined)

+Washington - Pierce County. (Frank). P.r.: Md.

Schenk, P. J. Wortelnobbel aan dahlia. *Floralia* 45: 254-255. 1924.

Anon. Wortelnobbel aan dahlia's. *Floralia* 46: 6. 1925.

DAISY, BUSHY ARCTOTIS (*Arctotis grandis*)

+Cercospora sp. (Leafspot)

Florida - caused a shedding of leaves. (Weber)

DELPHINIUM (*Delphinium* sp.)

Bacterium delphinii (EFS.) Bryan (Blackspot)

Bryan, M. K. Bacterial leafspot of Delphinium. *Jour. Agr. Res.* 28: 261-270. 1924.

P.r.: Conn., Ill., Me., Mass., N. H., N. Y., Oreg., Pa.

Botrytis sp. (Graymold rot)

+Connecticut - (Clinton). P.r.: Pa., Wash.

Corticium vagum Berk. & Curt. (Stemrot)

+Michigan - (Coons). P.r.: N. Y.

Erysiphe polygoni DC. (Powdery mildew)

+Connecticut - apparently a new host to state; Fairfield, August 18. (Clinton). P.r.: Minn., *N. Y., *Pa., Wis.

+Fusarium sp. (Wilt)

Florida - killed a number of plants in flower beds at Ocala. (Weber)

Gloyer, W. O. and H. Glasgow. Cabbage seedbed diseases and Delphinium rootrots: their relation to certain methods of cabbage maggot control. *New York (Geneva) Agr. Exp. Sta. Bul.* 513: 1-31. 1924.

Rea, J. L. Our best blue flower. Larkspur in superlative strains from seed and cuttings. Blight resistant plants through hybridizing. *Gard. Mag.* 39: 407-408. 1924.

Schenk, P. J. Ziekten van Delphinium en Phlox. *Floralia* 45: 110-111. 1924.

DIGITALIS - See Foxglove

EUONYMUS SP.

Marssonina thomasiiana Sacc. (Leafspot)

**+Missouri - Columbia, Boone County, July 4, 1918. (Maneval).

P.r.: Ind., *Wis.

FERN, ASPARAGUS (*Asparagus plumosus*)+*Physarum cinereum* (Batsch.) Pers.

Florida - quite prevalent; not considered serious. (Weber)

FERN, COMMON SWORD or BOSTON (*Nephrolepis exaltata*)+*Cercospora* sp. (Leafspot)

Indiana - in a greenhouse; Terre Haute, April 30. (Gardner)

FOXGLOVE (*Digitalis* sp.)

Fasciation

Anon. Fasciation in *Digitalis*. Australian Nat. 5: 163. 1924. Casual observation over several years showed a case of fasciation to follow approximately the ratio in Mendel's law.

FUNKIA (*Hosta lanceolata*)+*Sclerotium rolfsii* Sacc. (Stemrot)

*Maryland - Takoma Park. (Jenkins)

GAILLARDIA (*Gaillardia* sp.) (Cone Flower)+*Phyllosticta* sp. (Leafspot)

Florida - slight damage to foliage in several gardens; Gainesville. (Weber)

GALE, SWEET - See Sweetgale

GERANIUM (*Pelargonium* sp.)*Bacterium erodii* I. M. Lewis (Bacterial leafspot)

**Illinois - DeKalb. (Matteson)

Pythium compactens Braun (Stemrot)Braun, H. *Geranium* stemrot caused by *Pythium compactens* n. sp.

Host resistance reactions; significance of *Pythium* type of sporangial germination. Jour. Agr. Res. 29: 399-419. 1924.

Reported from D. C., Okla.

+Smelter injury - SO₂

Washington - (Frank)

GLADIOLUS (*Gladiolus* sp.)*Bacterium gummisudans* McC. (Bacterial blight)

**Minnesota - very heavy infections were found on the following varieties:

Pride of Joshen and Red Emperor; moderate on Master Wietze, Pink Perfection, and Herada; plants were from Farmington on exhibit at the State Fair; the same disease was found last year at Hopkins, Hennepin County; September 6. (Sect. Pl. Path.)

+North Dakota - Bismarck, July 16; first report of occurrence. (Weniger)

Also reported from Abercrombie and on varieties Dr. Van Fleet and Golden Butterfly. (McCulloch). P.r.: Mich.

Bacterium marginatum McC. (Stemrot and Scab)

**Mississippi - Long Beach, Harrison County, December. (Neal). P.r.: Mich.

McCulloch, L. A leaf and corm disease of gladioli caused by *Bacterium marginatum*. Jour. Agr. Res. 29: 159-177. 1924.

Corticium vagum Berk. & Curt. (Rootrot)

+North Dakota - reported from Hillsboro and Washburn only; first record of occurrence. (Weniger). P.r.: N. J.

Fusarium sp.

*+Mississippi - Long Beach, Harrison County, December. (Neal)

Penicillium sp.

*+Mississippi - Long Beach, Harrison County, December. (Neal)

Septoria gladioli Pass. (Hardrot) (Leafspot)

*+New Jersey - there was some indication of varietal resistance; severe infection, Eshwaben; slight infection, King and Mrs. F. King; the heaviest infection was in low lying areas in which case every leaf was seriously infected; more than in previous years; Middlesex, April 16. (Martin)

+Ohio - one report. (Young). P.r.: Ind., *Mich., Minn., N. Y.
Rootrot (Undetermined)

Michigan - most serious gladiolus disease of season; general; practically all the plantings were affected; 100% infection for the Prime of Wales variety; general in nursery stock. (Nelson)

GOLDEN GLOW (*Rudbeckia laciniata* hort. variety)*Ramularia rudbeckiae* Pk. (Leafspot)

+Pennsylvania - Charter oak, Huntingdon County, September 12. (Overholts)
P.r.: *Colo., *Iowa., *Mich., *Mont., N. Y.

GOLDEN SEAL (*Hydrastis canadensis*)*Botrytis* sp. (Leaf blight)

Heald, F. D. and B. F. Dana. Notes on plant diseases in Washington. 1. *Botrytis* Diseases. Trans. Amer. Microscop. Soc. 43: 136-144. July 1924. "This disease is apparently identical with the *Botrytis* blight of golden seal reported from Michigan, New York, and Wisconsin." P.r.: *Conn., Ind., Mich., *N. Y., Wash., Wis.

Fusarium sp. (Rootrot) (Wilt)

+Washington - Skagit County. (Dept. Pl. Path.). P.r.: Ill., N. Y., Ohio.

HEPATICA (*Hepatica* sp.)*Urocystis anemones* (Pers.) Wint. (Smut)

*+Wisconsin - Milwaukee, Milwaukee County, June 6; plants were 5 to 10 years old; this is the first occurrence of this disease on them. (Vaughan). P.r.: *Ill., Ind., *Iowa, Minn., *N. Y., *Wis.

HIBISCUS, CHINESE (*Hibiscus rosa-sinensis*)+*Pestalozzia* sp. (Leafspot)

Florida - not important. (Weber)

+*Puccinia malvacearum* C. G. Tertero (Rust)

Florida - local. (Weber)

HOLLY, AMERICAN (*Ilex opaca*)+*Diplodia* sp. (Footrot)

Florida - not frequently found; in case reported the stems were girdled and the plant killed. (Weber)

Phyllosticta opaca Ell. & Ev. (Leafspot)

*+South Carolina - Calhoun, Pickens County, February 11. (Ludwig)
P.r.: *W. Va.

HOLLYHOCK (*Althaea rosea*)

Cercospora althaeina Sacc. (Leafspot)

+Indiana - LaFayette, July 28. (Gardner)

*+South Dakota - Brookings, July 9. (Evans)

Cercospora sp. (Leafspot)

+New Jersey - leaves badly spotted; in some instances causing defoliation; spore measurements much larger than those given by Schwartz, Saccardo and Stevens for *Cercospora althaeina*. (Martin)

Colletotrichum malvarum (Braun & Casp.) E. A. Southworth (Anthracnose)

**Indiana - one seedbed in a nursery completely killed by this disease; Indianapolis, July 11. (Dietz). P.r.: Iowa, N. Y., Ohio.

Puccinia malvacearum C. G. Bertero (Rust)

The usual amount of rust was reported from the following states: N. H.,

*Mass., Del., *Pa., Ind. (in a variety test plot rust was worse on a double white and sulphur yellow), Mich., Minn., Colo.

Blaringham, L. Variations de la sporulation du *Puccinia malvacearum*

Mont. sous l'influence du greffage des hôtes. (Variations in

the sporulation of *Puccinia malvacearum* Mont. as affected by

the grafting of the hosts.) Rev. Path. Veg. et Ent. Agr. 11:

125-131. 1924.

HONEYSUCKLE, BUSH (*Diervilla* sp.)

+*Microsphaera alni lonicerae* (DC.) Salm. (Powdery mildew)

Washington - Whitman County. (Dept. Pl. Path.)

HYACINTH (*Hyacinthus orientalis*)

+*Fusarium pulbigenum* Cke. & Mass. (Bulbrot)

Rhode Island - Kingston. (Weiss)

HYDRANGEA (*Hydrangea* sp.)

+*Ascochyta* sp. (Leafspot)

Pennsylvania - Coburn, Center County, October 5. (Overholts)

HYDRANGEA, SMOOTH (*Hydrangea arborescens*)

Pucciniastrum hydrangeae (Berk. & Curt.) Arth. (Rust)

+Pennsylvania - Center and Mifflin Counties; September 17. (Overholts)

P.r.: D. C., Ill., Ind., N. Car., S. Car., *Va., W. Va.

HYDRANGEA (*Hydrangea hortorum*)

Ascochyta hydrangeae Arnaud & Arnaud

Arnaud, G. and Mme. Arnaud. Trois *Ascochyta* nouveaux ou peu connus.

(Three new or little-known species of *Ascochyta*. Rev. Path. Veg.

et Ent. Agr. 11: 56-59. 1924.)

HYDRANGEA, HOUSE (*Hydrangea opuloides*)

+*Cercospora* sp. (Leafspot)

Florida - found on leaves; gradually killed them. (Weber)

HYDRANGEA (*Hydrangea* sp.)

Oidium sp. (Powdery mildew)

+New Jersey - greenhouse; Middlesex, October 21. (Martin). P.r.: Fla.

Septoria hydrangeae Bizz. (Leafspot)

+Mississippi - numerous reports received but apparently no heavy damage occurred; Holmes County, July 7. (Neal & Wallace)

P.r.: Ohio.

IRIS (*Iris* sp.)

Bacillus carotovorus Jones (Softrot)

+New Jersey - Middlesex County, July 11. (Martin)

+*Cladochytrium tenue* Now. (Leafspot)

*Arkansas - Rich Mountain, Polk County, August 14. (Young)

Didymellina iridis (Desm.) Hoehn. (*Heterosporium gracile* (Wahl.) Sacc.)
(Leafspot)

+Washington - Whitman County. (Dept. Pl. Path.)

+*Pseudomonas iridis* van Hall (Rhizome rot)

South Dakota - many specimens were received from various parts of the state; severe. (Evans)

+*Septoria* sp. (Leafspot)

North Dakota - common. (Weniger)

Shreve, R. W. Iris rootrot and "spent" rhizomes for propagating.

Flwo. Grow. 11: 146. 1924.

IVY, ENGLISH (*Hedera helix*)

Vermicularia trichella Fr. (Leafspot)

**Ohio - Gambier, Knox County, June 15. (Detmers)

JASMINE, CAPE (*Gardenia floridã*)

+*Capnodium* sp. (Sooty mold)

Texas - prevalent; unimportant. (Taubenhaus). P. r.: *La., *Miss.

Chlorosis

Texas - trace. (Taubenhaus)

JERUSALEM CHERRY (*Solanum pseudocapsicum*)

+Oedema (Physiological)

Washington - Pierce County. (Frank)

JESSAMINE (*Rhadbadenia corrallicola* Small)

+*Cephaleuros virescens* Kunze

Florida - Algae attacked the upper surface of the leaves; was very common; caused little damage. (Weber)

+*Cercospora* sp. (Leafspot)

Florida - caused defoliation and considerable spotting of the leaves; very common in the vicinity of Gainesville. (Weber)

LARKSPUR - See *Delphinium*KENTIA (*Kentia* sp.)

+*Colletotrichum* sp. (Anthracnose)

Florida - collected at Miami, where it was apparently killing the young plants; first attacking the petioles and gradually working to the younger leaves and crown of the plant. (Weber)

KUDZU-BEAN (*Pueraria thunbergiana*)

+Bacterial leafspot (Undetermined)

Connecticut - new to state and probably to the United States; produced yellow spots on leaves exactly like wildfire of tobacco, but so far have failed to produce the disease; some spots are like the bacterial spot of bean. (Clinton)

KALMIA, MOUNTAIN LAUREL (*Kalmia latifolia*)

+*Mycosphaerella colorata* (Pk.) Earle (Leafspot)

*Pennsylvania - York Springs, Adams County, May 8. (Kirby)

LABURNUM (*Laburnum* sp.)

Stereum purpureum Sacc. (Silverleaf)

Brooks, F. T. Silverleaf disease of fruit trees. Jour. Min. Agr.

Great Britain 31: 954-957. 1925. "In small gardens laburnum trees often succumb to it, chiefly on account of the drastic pruning to which they are often subjected."

LILAC (*Syringa vulgaris*)

Ascochyta syringae Bres.

Arnaud, G. and Mme. Arnaud. Trois *Ascochyta* nouveaux ou peu connus.

(Three new or little known species of *Ascochyta*.) Rev. Path.

Veg. et Ent. Agr. 11: 56-59. 1924.

+*Botrytis cinerea* Pers. (Leafblight)

Washington - Pierce County. (Dept. Pl. Path.)

Heald, F. D. and B. F. Dana. Notes on plant diseases in Washington.

1. *Botrytis* Diseases. Trans. Amer. Microscop. Soc. 43: 136-144.

July 1924. "Two reports from the same place in Pierce County were received of this disease, which showed lesions extending inward from the margin. The owner stated in communication that the disease appeared early in the growing season and involved both blossoms and foliage. A cultural study of the fungus showed it to be *Botrytis cinerea*. From the study of the literature, it appears that this is a new host for this fungus."

Ceroospora lilacis (Desm.) Sacc. (Leafspot)

*Mississippi - Copiah County, August 30. (Neal & Wallace). P.r.: S.Car.

Sphaeropsis sp.

*Pennsylvania - Media, Delaware County, May 28. (Kirby). P.r.: Of

S. syringae (Fr.) Pk. & Cke. *Mass.

Taphrina sp.

New York - Walton, Delaware County, June 30. No report of a *Taphrina* on this host has been found. (Jenkins)

De Bruyn, Helena L. G. De oorzaak van het epidemisch optreden van de *Phytophthora* ziekte van de Seringen. (The cause of the epidemic occurrence of *Phytophthora* disease of Lilacs.) Tijdschr. over Plantenziekten 30: 113-122. 1924.

Massalongo, C. *Mallattia parassitaria* osservata sopra una pianta di "*Syringa vulgaris* L." Bul. Soc. Bot. Ital. 1924: 162-164. 1924.

LILY, EASTER (*Lilium longiflorum*)

Nematodes (Rootknot)

Florida - caused many plants to die before blooming. (Weber)

LILY, LEOPARD (*Lilium pardalinum*)

+*Botrytis* sp.

*Maryland - Takoma Park, June 30. (Jenkins)

MARGUERITE (*Chrysanthemum frutescens*)

Preti, G. Intorno ad una malattia del '*Chrysanthemum frutescens*' Tumb.

(Concerning a disease of *Chrysanthemum frutescens* Tumb.) Riv. Patol.

Veg. 14: 6-12. 1924.

MATRIMONY VINE, COMMON (*Lycium halimifolium*)

Microsphaera sp.

*+Pennsylvania - State College, Center County, October 21. (Kirby)

Sphaerotheca pannosa (Wallr.) Lev. (Powdery mildew)

*Washington - Whitman County. (Dept. Pl. Path.). P.r.: Ida., Wash.

NARCISSUS (*Narcissus* sp.)

Botrytis sp. (Blight)

Washington - a market grower from near Seattle reported a very serious case of *Botrytis* of jonquils. The loss during the first season when the disease appeared was negligible, but it increased to alarming proportions the second year. Leaves were blighted beginning at the tip, and the bulb also was involved with a rot at the center. Numerous sclerotia, as well as the grey mold characteristic of this fungus, were produced on the diseased portions. Spores of the fungus were produced very sparingly on culture media at laboratory temperature.

Heald, F. D. and B. F. Dana. Notes on plant diseases in Washington. 1. *Botrytis* Diseases. Trans. Amer. Microscop. Soc. 43: 136-144. 1924.

Bulb sterilization

Anon. Sterilization of narcissus bulbs by hot water. Gard. Chron. 3, 75: 193-194. 1924.

Sclerotium sp.

Alecock, N. L. A disease of *Narcissus* bulbs caused by a *Sclerotium*-producing fungus. Trans. Brit. Mycol. Soc. 10: 127-128. 1924.

Dowson, W. J. A sclerotial disease of *Narcissus*. Gard. Chron. 3, 75: 160. 1924. "Similar to disease of tulips caused by *Botrytis parasitica*."

Soil sterilization

P_____, T., and A. W. S_____. A preliminary note on partial soil sterilization for bulb growing. Bul. Bur. Bio. Techn. Murphy & Son 2: 124-126. Dec. 1924. Apparently partial sterilization stimulated and increased growth of roots; and tended to induce earlier flowering. Sterilizers used were Alvesco No. 2 (liquid) and Alvesco Sterilizer Powder. No fertilizers were used.

Tylenchus dipsaci (Kuehn) Bast. (Bulb nematode)

California - Phytopath. 14: 495-502. 1924. P.r.: Ill.

Ramsbottom, James. K. The control of the *Narcissus* eelworm. Gard. Chron. 3, 77: 76-77, 96. 1925.

NASTURTIUM, COMMON (*Tropaeolum majus*)

+*Alternaria* sp. (Blackmold)

New Jersey - associated with *Pleospora tropaeoli* Hals.; Monmouth, July 1. (Martin)

Pleospora tropaeoli Hals. (Leaf spot)

+New Jersey - Monmouth, July 1. (Martin). P.r.: Ohio.

Bacterial wilt (Undetermined)

Washington - Kitsap County. (Frank)

+Smelter injury SO₂

Washington - Pierce County. (Frank)

OREGON HOLLY GRAPE (*Mahonia aquifolium*)

Puccinia koeleriae Arth. (Rust)

+Idaho - very rare; Upper Priest Lake, Bonner County, August 2. (Boyce)

P.r.: *Colo., *Mont., *Oreg.

OSAGE ORANGE (*Maclura pomifera*)

Sporodesmium maclurae Thuem.

*Missouri - Columbia, Boone County, October 11. (Maneval). P.r.: Texas.

PANSY (*Viola tricolor*)

Colletotrichum sp. (Anthracnose)

+Florida - not common; in some cases killing the leaves; Gainesville.

(Weber). P.r.: Of *C. violae tricoloris* Sm., Mass., N. J., N. Y.

Ramularia lactea (Desm.) Sacc.

Van Keulen, K. *Ramularia lactea*, oorzak van een bladvlekkenziekte der Violtjes. (*Ramularia lactea*, the cause of a leafspot disease of Pansies.) Tijdschr. over Plantenziekten 30: 123-124. 1924.

PASSION VINE (*Passiflora edulis*)

Sclerotinia sp. (Rot)

Birmingham, W. A. *Sclerotinia* rot of passion vine. Agr. Gaz. New South Wales 35: 57-58. 1924. "This disease (*Sclerotinia* sp.) attacks the stem of *Passiflora edulis* at about the ground level, resulting in loss of cortex. Initial attacks generally result from wounds made by cultivation implements. It is recommended that diseased plants be removed and burned."

PASSION VINE (*Passiflora* sp.)

+*Colletotrichum* sp. (Seedling wilt)

Porto Rico - one record on the Experiment Station grounds. (Nolla)

PEONY (*Paeonia* spp.)

Botrytis spp. (Blight)

+New Jersey - *Botrytis paeoniae* Oud. severe locally; more prevalent; Burlington, June 21. (Martin)

Indiana - Marion County, May 12. (Dietz)

+Wisconsin - statewide; of major importance; more prevalent. (Vaughan)

Washington - *Botrytis cinerea* Pers. and *Botrytis paeoniae* Oud. "These troublesome diseases, which have been serious in the eastern United States, have occurred in both eastern and western Washington. The bases of leaf and flower stalks are attacked, the rot penetrating some distance below the soil level. The center is first affected and soon a wilting of both leaves and flower stalks takes place, leaving a ring of healthy shoots around the outside. The fruiting stage of *Botrytis* covers affected parts up to within one-half inch of the advancing edge of the rot. Observation has shown that these parasites gain entrance to a garden and gradually spread from the original center of infection, and, when unchecked, have caused considerable loss. Specimens agree with both *B. cinerea* Pers. and *B. paeoniae* Oud. have been received." (Heald & Dana)

Cladosporium paeoniae Pass. (Leafmold)

*+Illinois - southern part of state, August. (Young)

Heterodera radicum (Greef) Muell. (Rootknot)

+South Carolina - Sumter, Sumter County, October 13; unimportant.
(Ludwig)

*+Indiana - Rockport, August 28. (Hansen)

+North Dakota - severe in one large acreage at Abercrombie; first record of occurrence. (Weniger)

+Washington - King and Yakima Counties. (Dept. Pl. Path.)

Phyllosticta sp. (Leafspot)

*Pennsylvania - State College, Center County, November 1. (Kirby)

Phytophthora sp. (Stemrot, leafspot)

+Indiana - rather serious; Lafayette, June 10. (Gardner)

+Mosaic

Connecticut - new to state; Westville, July 3. (Clinton)

PERIWINKLE (*Vinca minor*)

Botrytis sp. (Leafblight)

Heald, F. D. and B. F. Dana. Notes on plant diseases in Washington 1.
Botrytis Diseases. Trans. Amer. Microscop. Soc. 43: 136-144. 1924.

"Leaf lesions only have been observed on this host. These were brown or black in color and in most cases extended inward from the margin of the leaf, and frequently advanced until the whole leaf was involved. The invaded leaf tissue was filled with mycelium of *Botrytis* and the surface showed a copious development of the spore stage of this fungus. This disease appears to be only of local occurrence. No reference to the occurrence of *Botrytis* on this host has come to the attention of the writers."

Bastard blossom (Undetermined)

Texas - a condition similar to that which has been described for the watermelon was also met with on this host; the examination of the root of both the watermelon and the periwinkle plant did not reveal any abnormal condition. (Taubenhaus)

PETUNIA (*Petunia* sp.)

+*Cercospora* sp. (Leafspot)

Florida - partial defoliation; local; Gainesville. (Weber)

PHLOX (*Phlox* sp.)

Erysiphe cichoracearum DC. (Powdery mildew)

*+Pennsylvania - Lebanon, Lebanon County, June 24. (Kirby)

Septoria sp. (Leafspot)

Michigan - (Coons)

Tylenchus dipsaci (Kuehn) Bast. (Eelworm disease)

Wilson, G. F. The eelworm disease of phloxes. Jour. Roy. Hort. Soc. 49: 203-210. 1924. Caused by *Tylenchus devastatrix* Kuehn. Known for many years. Only disease of importance attacking the herbaceous perennial phloxes. Varieties of both *Phlox decussata* and *P. suffruticosus*. Known for many years in European countries, first described in 1898. Weiss (New Jersey State Dept. Agr. Bur. State. and Inspec. Circ. 64. 1923) described it for the first time in America, and suggested that it was introduced

from Holland. Gives list showing comparative susceptibility of varieties, mostly of P. decussata, in the garden at Wisley. Very susceptible: George A. Strohlein, Le Mahdi, Rijnstroom; susceptible: Baron von Dedem, Frau Antonin Buchner, Gen. van Heutsz; fairly resistant: Elizabeth Campbell, Maspero, Rosamundi; resistant: Esclairmonde, Aegir, Boule de Feu, Netty Stuart; very resistant: Antonin Mercie, Widar. All of these are P. decussata except Netty Stuart (P. suffruticosa).

Schenk, P. J. Ziekten van Delphinium en Phlox. *Floralia*. 45: 110-111. 1924.

PITTIOSPORUM TOBIRA (Tobira)

+Diplodia sp. (Footrot)

Florida - (Weber)

+Nematode (Rootknot)

Florida - (Weber)

PITTIOSPORUM (Pittosporum sp.)

Winter injury

Louisiana - southern part of state. (Edgerton)

POINSETTIA (Poinsettia pulcherrima)

+Ozonium omnivorum Shear (Rootrot)

Texas - trace. (Taubenhaus)

PRIMROSE, ENGLISH (Primula acaulis)

Ramularia primulae Thuem. (Leafspot)

+Connecticut - new to state; one report, Norfolk, February 3. (Clinton)

P.r.: *Del., N. Y.

PRIMROSE, TOP (Primula obconica)

+Mosaic

Pennsylvania - loss 5 to 10% in a greenhouse; starts in fall with few plants but increases greatly by springtime; State College, Center County, December 3. (Orton)

Pape, H. Ueber eine Blatterkrankung bei Primula obconica Hance.

Angew. Bot. 6: 255-275. 1924. Not due to animal or plant parasites.

PRIVET (Ligustrum vulgare)

Glomerella cingulata (Ston.) Spauld. & Schrenk.

**Kansas - Manhattan, Riley County, July. (Stokdyk). P.r.: Ala., *Conn.,

Ill., Ind., *Miss., N. J., N. Y., Ohio, Okla., Tex.

RHODODENDRON, COAST (Rhododendron californicum)

+Coryneum rhododendri Sch. (Leafspot)

Oregon - occasional; little injury; Clackamas and Douglas Counties, May 13. (Boyce)

+Melampsoropsis piperiana Arth. (Rust)

Oregon - occasional; Clackamas and Douglas Counties, May 13. (Boyce)

RHODODENDRON, ROSEBAY (Rhododendron maximum)

Pestalozzia gaeppini Desm. (Leafspot)

+Pennsylvania - Stone Valley, Huntingdon County, August 10. (Kirby & Overholts). P.r.: *N. Y.

RHODODENDRON (*Rhododendron* sp.)

Exobasidium vaccinii (Fckl.) Wor.

Pennsylvania - Center and Huntingdon Counties, July 12. (Orton & Overholts)

+Florida - attacked mostly the young buds; Quincy. (Weber). P.r.: Ind., Md., Oreg., Pa.

Phyllosticta maxima Ell. & Ev.

Tengwall, T. A. Ueber einige parasitische Pilze auf kultivierten Rhododendron. (Some parasitic fungi on cultivated Rhododendrons.) Meded. Phytopath. Lab. 'Willie Commelin Scholten', Baarn (Holland) 6: 58-61. 1924.

Stereum purpureum Pers. (Silverleaf)

Cotton, A. D. On the occurrence of the silverleaf fungus in rhododendrons. Gard. Chron. 3, 77: 112. 1925. Course of the disease slower in rhododendrons than in plums; no silvering of the foliage develops; sporophores develop on branches still living. Control same as has been described for other hosts.

Venturia rhododendri Tengwall

See reference under *Phyllosticta maxima* Ell. & Ev.

ROSE (*Rosa* sp.)

Bacterium tumefaciens EFS. & Town. (Crowngall)

+Florida - common on the older bushes, killing some of them. (Weber)

Botryosphaeria ribis Gross. & Dug.

Stevens, Neil E. and Anna E. Jenkins. Occurrence of the currant cane blight fungus on other hosts. Jour. Agr. Res. 27: 839. 1924.

Found at Bell Station, Maryland on *Rosa setipoda* and other varieties.

Botrytis spp. (Bud blight)

**Pennsylvania - Lebanon, Lebanon County, June 24. (Kirby)

**Virginia - *B. cinerea* Pers. on unopened buds; Falls Church, May 31. (Jenkins)

Cercospora roscicola Pass. (Leafspot)

+Pennsylvania - on cultivated roses; fairly abundant; first report from Pennsylvania so far as known; Charteroak, Huntingdon County, July 24. (Overholts)

Coniothyrium wernsdorffiae Laubert.

Ontario - Guelph. Apparently the first report of this disease in America. (Jenkins)

Coryneum microstictum Berk. & Br. (Canker)

+Pennsylvania - apparently causing death of bark and cortex on stems; Phillipsburg, Center County, May 14. (Emigh). P.r.: Ala.

Diaporthe umbrina Jenkins (Canker)

**North Carolina - stem canker, Shelby, June; on petals, Burgaw, Sept. (Jenkins)

Diaporthe sp.

**Louisiana - Phomopsis stage found on petals; perfect stage developed in artificial culture, not *D. umbrina*; Baton Rouge, May. (Jenkins)

Diplocarpon rosae Wolf (*Actinomena rosae* (Lib.) Fr.) (Blackspot)

Florida - general; was the worst of the leaf diseases; caused the leaves to shed early and stunted the blooms. (Weber)

- +New Mexico - somewhat general, June 3. (Crawford)
- Michigan - very important; general; unsprayed plants of susceptible varieties were badly defoliated by September; perfect control obtained by a combination of bordeaux spraying early and sulfur dust in mid-summer. (Nelson)
- Minnesota - noted only in Ramsey County but usually common throughout state; May 24. (Dept. Pl. Path.)
- Holmes, Eber. Roses and blackspot disease. Flor. Exch. 57: 1633-1639. 1924.
- Diplodia* sp. (Twig blight)
- +Florida - caused considerable dying back of old shoots; attacked them at the surface of the soil and girdled them. (Weber). P.r.: Of *Diplodia rosae* Fr. *S. Car.
- +*Discosia artocreas* (Tode) Fr. (Blossom blight)
- *Louisiana - on unopened blossoms; Baton Rouge, May 3. (Jenkins)
- +*Dothiorella* sp. (Blossom blight)
- *Louisiana - on unopened blossoms; Baton Rouge, May 3. (Jenkins)
- Leptosphaeria coniothyrium* (Fckl.) Sacc. (*Coniothyrium fückelii* Sacc.) (Cane blight)
- New Jersey - 30% infection on one-year old Golden Emblem and Premier varieties; Union, May 24. (Martin)
- **South Carolina - unimportant; Ft. Mill, York County, May 12. (Ludwig)
- Texas - traces. (Taubenhaus)
- Macrosporium* sp. (Canker)
- +Pennsylvania - associated with a stem canker; Phillipsburg, Center County, May 30. (Emigh). P.r.: *Okla.
- Phoma* sp. (Thorn disease)
- +Pennsylvania - caused a bleached, pale color of thorns; Phillipsburg, Center County, May 30. (Emigh). P.r.: Md.
- Phomopsis* sp. (Canker) Not identical with *Phomopsis* stage reported under *Diaporthe* sp. from Louisiana.
- **Kentucky - Lexington, June. (Jenkins). P.r.: *Va.
- Mosaic
- Texas - a condition resembling a mosaic disease of rose leaves was found by the writer in two localities in Texas, one in the vicinity of Troup and the other at College Station. The disease exhibited all the earmarks of a mosaic, that is, the mottling and stunting of the foliage. No inoculation experiments have been carried out to determine definitely the mosaic nature of this trouble. (Taubenhaus)
- Phragmidium* spp.
- Connecticut - +*P. speciosum* on wild rose; Canaan, June 10; +*P. subcorticium* on cultivated rose, Middlebury, June 14. (Clinton)
- Pennsylvania - *P. speciosum*. (Overholts)
- Texas - +*P. speciosum*; trace. (Taubenhaus)
- Wisconsin - ***P. rosae-acicularis*, Eau Claire, Eau Claire County, July 21. (Vaughan)
- Iowa - +*P. speciosum* on cultivated rose; June 10. (Melhus)
- Washington - Pierce County. (Dept. Pl. Path.)
- Alaska - ***P. speciosum*, Fairbanks, June 13. (Paxton)
- Phyllosticta rosae* Desm. (Leaf spot)
- +Florida - not common; Homestead. (Weber). P.r.: Ind.

Polyspora (?) sp. (Blight)

A fungus evidently new and more or less of the nature of *Polyspora*, *Protocoronospora*, etc. has been found associated with a disease on *Rosa hugonis*, an introduced yellow Chinese rose. Although the study of the organism is still in progress and on account of its apparent parasitic nature it has seemed best to report its occurrence on this valuable host. It has been observed on specimens of this species of rose from three different states as follows: Maryland - Chevy Chase (1923). The plant from which the specimens were taken was apparently killed by the disease. The leaves and stems were brown and had the appearance of having been severely blighted. Tufts of fertile hyphae were plainly visible on the leaves and petioles; they were also present on stem though less conspicuous.

Virginia - National Rose Test Garden, Arlington Experiment Farm (1923-24). Small amount of infection present.

North Carolina, Raleigh. Specimen from Dr. F. A. Wolf. From diseased specimens of *Rosa* sp. (Van Fleet Hybrid) collected at Norfolk, Virginia, an organism has been isolated similar to that from *Rosa hugonis* just mentioned. The symptoms, however, were very different from those of the disease on *Rosa hugonis*. On the large green stems were irregular purple areas from one-fourth of an inch to more than an inch across. The surface of these areas was mostly of the same character as that of the unaffected parts of the stem and their margins were delimited only by the abrupt change in color. Certain ones, however, showed some longitudinal cracking of the bark and on others there was a ring of lighter color near the center. Hyphae of the fungus were present in the discolored tissue but no fruiting structures were seen on the specimens. (Jenkins)

+*Physalospora malorum* (Pk.) Shear (*Sphaeropsis malorum*) (Canker)

Texas - rose bushes frequently die as a result of various cankers which attack the limbs. Such cankers may be caused by a variety of organisms which will not be considered here. Several times diseased rose twigs were received from the vicinity of Troup and Jacksonville in which the malady appeared to be similar to blackrot canker of apples. A fruiting fungus which greatly resembled *Sphaeropsis malorum* Pk. was constantly found on the dead tissue. Cultures made of spores and of infected tissue readily yielded a growth which produced the pycnidia of a *Sphaeropsis*. Cross inoculations were carried out with this organism on limbs of both apples and rose bushes. Likewise, an authentic culture of *S. malorum* from apple limbs was also used to inoculate both rose and apple limbs. The method of inoculation consisted in inserting bits of pure culture mycelium in slits made in the cambium of healthy limbs or twigs; the inoculations on apple limbs were made at the orchard of the Texas Agricultural Experiment Station at College Station, and the rose inoculations were made in the writer's home garden. The inoculated areas were protected with sterile cloth bands and grafting wax. The results of the inoculation seemed to indicate that the organism from the rose and from the apple were apparently one and the same. Specimens of the rose canker sub-

Physalospora cydoniae Arn. (Sphaeropsis malorum). The strains of Sphaeropsis from the apple and the rose when grown on nutrient media were found to be similar. In no case was the Physalospora stage obtained. (Taubenhaus)

+Sclerotinia sp. (Blight)

Mississippi - of moderate importance; probably general; quite a few specimens received from different sections; Oktibbeha County, August. (Neal & Wallace)

Sphaerotheca pannosa (Wallr.) Lev. (Oidium leucoconium Desm.) (Powdery mildew)

+Vermont - unusually prevalent. (Gilbert)

Georgia - less prevalent than last year; severe on some varieties; Dorothy Perkins and Ramblers most susceptible. (Boyd)

Florida - general; occasionally proved serious. (Weber)

Michigan - second to blackspot in importance; general in unsprayed plantings. (Nelson)

+New Mexico - considerable amount, June 3. (Crawford)

Idaho - important. (Hungerford)

Esmarch, F. Der Rosenmehltau und seine Bekämpfung. (Rose mildew and its control.) Die kranke Pflanze 1: 21-23. 1924.

S _____, N. K. The analysis of ammonium polysulphide solutions. Bul. Bur. Bio-Techn. Murphy & Son 2: 129-130. Used in the control of rose mildew.

Vardabasso, G. La muffa o malbianco delle rose (Sphaerotheca pannosa) Istria Agr. 4: 132-135. 1924.

Stilbum sp. (Canker)

Cuba - Harvard Botanical Garden, Soledad, Cuba on the horticultural varieties Bride, Bridesmaid, Captain Christy and Mme. Marie Guillet. Identified from specimens collected by J. R. Weir and J. F. Paris, November, 1924. It seems very likely that this is the same fungus as that mentioned by J. B. Rorer from Trinidad in two brief reports: Trinidad Agri. Dept. Bull. Agr. Inf. N. S. 63: 91, 1909 and Bull. Dept. Agr. Trinidad and Tobago 18: 31, 1919. In the first report it is mentioned that "when inoculated into healthy plants the disease spreads rapidly killing the tissues." (Jenkins)

Frost injury

Anon. Protecting roses from frost injury. Missouri Bot. Gard. Bul. 12: 129-132. 1924.

Smoke injury

Anon. Smoke injury to roses. Missouri Bot. Gard. Bul. 12: 132-133. 1924.

RUBBERTREE, INDIA (Ficus elastica)

Gloeosporium sp.

**Missouri - in the horticultural greenhouse, University of Missouri, May 17. (Mareval). P.r.: La., Md.

SMILAX (Smilax sp.)

Cercospora sp. (Leafspot)

+Florida - general. (Weber)

SNAPDRAGON (Antirrhinum spp.)

Fusarium sp. (Root and Crownrot)

- +Washington - Franklin County. (Dept. Pl. Path.). P.r.: Fla.
Heterodera radicicola (Greef) Muell. (Rootknot)
 +Mississippi - of slight importance; Copiah County, September 1. (Neal & Wallace). P.r.: D. C., Nebr.
Puccinia antirrhini Diet. & Holw. (Rust)
 New Jersey - Morris, October 1. (Martin)
 +Virginia - severe in greenhouse at Blacksburg. (Fromme)
 Florida - killed leaves from the bottom of plant upward; Oneco. (Weber)
 +Mississippi - unimportant; Hinds County, July 17. (Neal & Wallace)
 +Texas - trace. (Taubenhaus)
 Colorado - unimportant; Ft. Collins, September 1. (Learn)

Recent literature on snapdragon rust:

- Anon. Plant disease investigations of the New Hampshire Station.
 New Hampshire Agr. Exp. Sta. Bul. 212: 32-33. 1924.
 Doran, W. Snapdragon rust and its control. Flor. Exch. 58: 483-484. 1924.
 Maires, E. B. Notes on the life history of the snapdragon rust, *Puccinia antirrhini* Diet. & Holw. Phytopath. 14: 281-287. 1924.
 Seaver, F. J. The snapdragon rust. Jour. New York Bot. Gard. 25: 203-204. 1924.
 The snapdragon rust. Mycologia. 17: 42-44. 1925.
Sclerotinia sclerotiorum (Lib.) Masee (*S. libertiana* Fckl.)
 Dowson, W. J. A flower-spike disease of cultivated *Antirrhinum*s. Gard. Chron. 3, 75: 62. 1924.

Sooty mold

- Anon. Plant disease investigations of the New Hampshire Station.
 New Hampshire Agr. Exp. Sta. Bul. 212: 32, 33. 1924. Both dusting with sulphur and spraying with calcium polysulphid were found beneficial for the control of sooty mold.

Diseases in general.

- Buddim, W. and Elsie M. Wakefield. Notes on some *Antirrhinum* diseases. Gardeners' Chron. 76: 150-152. 1924.

SNOWBALL (*Viburnum opulus*)

Botrytis sp. (Blight)

- Heald, F. D. and B. F. Dana. Notes on plant diseases in Washington. 1. Botrytis Diseases. Trans. Amer. Microscop. Soc. 43: 136-144. July 1924. "The same grower who submitted the periwinkle specimens also sent specimens of a disease on this host which a laboratory study showed to be due to a species of Botrytis. Grayish brown lesions appeared on the leaves, advancing inward from the margin, gradually involving the whole leaf. Affected blossom clusters were entirely blighted. From the leaf and blossom clusters, the disease spread to the twig, killing it as far as it progressed. Dark gray sclerotia were found in the blighted blossom masses and sparingly on diseased leaves. This apparently is a new host for the Botrytis."

SNOWBERRY, COMMON (*Symphoricarpos racemosus*)

+*Gloeosporium* sp. (*Anthracoasa*)

New York - very common. (Chupp)

Microsphaera diffusa Cke. & Pk. (Powdery mildew)

*+Pennsylvania - State College, Center County, October 21. (Kirby)

P.r.: *Ida., N. Y., *Oreg., *Wash.

Puccinia abundans (Pk.) Jack. (Rust)

Washington - occasional; Skamania County, August 14. (Boyce)

P.r.: *Ida.

SNOWBERRY (*Symphoricarpos vulgaris*)

Microsphaera diffusa Cke. & Pk. (Powdery mildew)

*Indiana - Greencastle, Putnam County, July 26; very common. (Yuncker)

P.r.: Conn., Ill., Ind., *Kans., *Mo., N. Y., Texas, *Va.

SPIREA (*Spiraea* sp.)

Podosphaera oxyacanthae DC. (Powdery mildew)

Washington - Whitman County. (Dept. Pl. Path.). P.r.: Mass., Mo.,

N. H., Ohio, Wash., Wyo.

SUNFLOWER, SWAMP (*Helianthus angustifolius*)

**Puccinia helianthi* Schw. (Rust)

Florida - Vero. (Weber)

SUNFLOWER, COMMON (*Helianthus annuus*)

Plasmopara halstedii (Downy mildew)

*Minnesota - St. Paul, June 11. (Dept. Pl. Path.). P.r.: Ind., Iowa,

Kans., N. Dak., *Ohio, *W. Va.

Puccinia helianthi Schw. (Rust)

*New Jersey - Middlesex, September 2. (Martin)

*Pennsylvania - Oley, Berks County, September 2. (Kirby)

*Mississippi - Pontotoc County; September 22. (Wallace)

Illinois - 66% infected plants in state; found in southern tip of state; Washington County, August 26. (Tehon)

Kansas - very common in the vicinity of Manhattan. (Johnston)

Colorado - unimportant; Ft. Collins, July. (Learn)

Septoria helianthi Ell. & Kell. (Leafspot)

*Illinois - first report; 100% infection found in southern tip of state on a 24 acre commercial crop; Washington County, August 26. (Tehon)

Minnesota - general; University Farm, St. Paul, June 17. (Dept. Pl. Path.)

P.r.: Conn., Ind., *Kans., Minn., *Miss., *Nebr., *N. J., *N. Y., *N. D.,

*Ohio, Utah.

Sclerotinia sclerotiorum (Lib.) Masee (*S. libertiana* Fckl.) (Stemrot)

Bisby, G. R. The *Sclerotinia* disease of sunflowers and other plants.

Scient. Agr. 4: 381-384. 1924.

Wakefield, E. M. On the names *Sclerotinia sclerotiorum* (Lib.) Masee, and *S. libertiana* Fckl. *Phytopath.* 14: 126-127. 1924.

SWEETGALE (*Myrica gale*)

Cronartium comptoniae Arth. (Rust)

*Washington - Pacific County. (Dept. Pl. Path.). P.r.: *Me.

British Columbia - found occasionally; Daisy Lake, October 13. (Boyce)

SWEET PEA (*Lathyrus odoratus*)

Cladosporium album Dowson

Dowson, W. J. A new disease of sweet peas. *Jour. Roy. Hort. Soc.*

49: 211-221. 1924. First seen July 1922. Fungus is indistinguishable from *C. herbarum* except from its lack of color, but because

of its marked parasitic nature it is considered desirable to give it specific rank. No infection was obtained on Pisum sativum or on Lathyrus aphaca. High temperature and a moist atmosphere are the important factors concerned in the spread of the disease, particularly under glass. Dusting with fine sulfur recommended to protect plants from infection.

Coarticium vagum B. & C. (Damping-off)

Florida - widespread and serious. (Weber). P.r.: Calif., Colo., Fla., Mass., Mich., Minn., *N. J., N. Y., N. Car., Pa., Utah, Wash.

Fusarium martii pisi F. R. Jones (Rootrot)

New York - general; important each year; Ontario County, July 18. (Chupp). P.r.: Ala., Calif., Colo., Conn., Del., Ga., *Ill., Ind., Kans., La., Me., Md., Mass., Mich., Minn., Miss., Mont., N. H., *N. J., N. Y., Ohio, Pa., S. Car., Utah, Va., Wis.

Thielavia basicola (Berk. & Br.) Zopf (Black rootrot)

Connecticut - Hartford, April. (Clinton). P.r.: Ark., Conn., Md., N. Y., Pa.

Mosaic

*Wisconsin - probably statewide; caused a mottling of leaves, a dwarfing and no flowers; caged test showed this disease carried by aphids the same as cucumber. (Vaughan). P.r.: Calif.

Rootrot (Undetermined)

New York - (Dept. Ent. Pl. Path. News Letter)

Washington - Pierce County. (Dept. Pl. Path.)

Smelter injury SO₂

Washington - Pierce County. (Frank)

Undetermined mildew-like disease.

Dowson, W. J. A new disease of sweet peas. Gard. Chron. 75: 10. Jan. 1924.

SNOWBERRY (*Symphoricarpus* sp.)

Microsphaera diffusa Cke. & Pk.

*Connecticut - Fairfield, August 24. (Clinton & Hunt)

P.r.: *Calif., *Conn., *Ida., *Ill., *Ind., *Kans., *La., Minn., *Mo., *Mont., *Nebr., *N. Y., *N. Dak., Ohio, *Oreg., *Pa., *S. Dak., *Texas, *Va., *Wash.

Puccinia symphoricarpi Hark. (Rust)

In Supplement 23, page 481, line 18, read "telial" instead of "aecial."

TOBIRA - See *Pittosporum tobira*

TULIP (*Tulipa* sp.)

Botrytis tulipae (Lib.) E. F. Hopkins (Botrytis blight)

*+Pennsylvania - Biglerville, Adams County, June 4. (Kirby)

*Minnesota - about 10% of the plants in one of the commercial green-houses were rotted off; local; Ramsey County, March 3. (Sect. Pl. Path.)

Washington - King and Pierce Counties. (Dept. Pl. Path.). P.r.: *Wash.

Heald, F. D. and B. F. Dana. Notes on plant diseases in Washington I.

Botrytis Diseases. Trans. Amer. Microscop. Soc. 43: 136-144.

July 1924.

Botrytis sp.

Hostermann, G. Eine Botrytis-orkrankung an tulpenbluten. Angew. Bot.

6: 39-40. 1924.

UNICORNPLANT (*Martynia* sp.)

Bacterium martyniae C. Elliott (Bacterial leafspot)

Elliott, C. A bacterial leafspot of *Martynia*. Jour. Agr. Res. 29:
490. Nov. 1924.

VIOLET (*Viola* sp.)

Puccinia violae (Schum.) DC. (Rust)

*Pennsylvania - Brooklyn, Susquehanna County, August 14. (Kirby)

Septoria violae Desm. (Leafspot)

+Florida - not important. (Weber). P.r.; *N. J., Wis.

Thielavia basicicola (Berk. & Br.) Zopf (Black rootrot)

New York - (Chupp). P.r.; Conn., *D. C., Mass., Miss., *N. Y., *N. Car.

WALLFLOWER, COMMON (*Cheiranthus cheiri*)

Winter injury (Low temperatures and *Botrytis* invasions)

Washington - King County. (Dept. Pl. Path.)

Wilt (Undetermined)

Washington - King County. (Dept. Pl. Path.)

ZINNIA (*Zinnia elegans*)

+*Alternaria* sp. (Leafmold)

Florida - uncommon; unimportant; Lake Alfred. (Weber)

+*Choanephora* sp. (Blossom blight)

Florida - attacked blossoms, ruining them completely; not widespread.
(Weber)

Erysiphe cichoracearum DC. (Powdery mildew)

+Connecticut - apparently new host for state; Fairfield, August 18.
(Clinton). P.r.; W. Va.

Fusarium sp. (Wilt)

+Washington - first report; 30 to 50% of plants killed; Whitman County.
(Dept. Pl. Path.). P.r.; *Iowa.

Recent literature on bulb diseases:

Slogteren, Egnertus van. Modern methods of combating bulb diseases.
Rep. Int. Conf. Phytopath. & Econ. Entom. Holland 1923: 150-162.
1923.

DISEASES OF MISCELLANEOUS PLANTS

AGRIMONIA MOLLIS (Soft agrimony)

Pucciniastrum agrimoniae (Schw.) Tranz. (Rust)

*+Missouri - (Maneval). P.r.; Ind., Iowa, Mass., Minn., N. Y., W. Va.,
Wis.

AMARANTHUS BLITOIDES (Prostrate amaranth)

Albugo bliti (Biv.) Kze. (White rust)

*+Pennsylvania - (Kirby). P.r.; Iowa, Kans., Minn., *N. D.

AMARANTHUS RETROFLEXUS (Great amaranth, Red root)

Cercospora sp. (Leafspot)

+Florida - (Weber)

AMBROSIA ELATIOR (Ragweed)

Albugo tragopogonis (DC.) S. F. Gray (White rust)

+Florida - (Weber). P.r.: Ala., Conn., Ind., Iowa, Kans., *Me., *Mass.,
*N. J., *N. Y., *N. Car., *S. D., Wis.

Erysiphe cichoracearum DC. (Powdery mildew)

+Florida - (Weber)

+Mosaic

Florida - (Weber)

AMBROSIA TRIFIDA (Great ragweed)

Cercospora racemosa Ell. & Mart. (Leafspot)

*+Missouri - (Maneval). P.r.: *D. C., *Ill., *Kans.

Puccinia xanthii Schw. (Rust)

Kansas - (Johnston). P.r.: Ala., *D. C., *Ill., *Ind., *Iowa, *Kans.,
*Mich., *Minn., *Mo., *Nebr., *S. D., *Texas.

AMORPHA HERBACEA (False indigo)

Uropyxis amorphae (Curt.) Schroet. (Rust)

Florida - (Weber). P.r.: Fla., S. Car.

AMPHICARPA MONOICA (Hog peanut)

Erysiphe polygoni DC. (Powdery mildew)

*+Pennsylvania - (Kirby). P.r.: Ill., Iowa, N. Y.

Synchytrium decipiens Farl. (Rust)

*+Pennsylvania - (Kirby). P.r.: *Miss., *N. Y., *Va.

ANEMONE QUINQUEFOLIA (American wood anemone)

Puccinia fusca (Pers.) Wint. (Polythelis fusca (Pers.) Arth.) (Rust)

New York - (Chupp). P.r.: *Del., *Ind., *Iowa, *Mich., Minn., *N. Y.,
*Ohio, *Wis.

Tranzschellia punctata (Pers.) Arth. (Puccinia pruni spinosae Pers.) (Rust)

+Pennsylvania - (Overholts). P.r.: *Iowa, *Texas, *Wis.

ANEMONE VIRGINIANA (Tall anemone)

Puccinia anemones-virginianae Schw. (Rust)

+Pennsylvania - (Overholts). P.r.: *Del., *D. C., *Ill., *Ind., *Iowa,
*Kans., *Mass., *Mich., Minn., *Miss., *Mo., *N. Y., *N. D., *Ohio,
*Va.

ARALIA RACEMOSA (American spikenard)

+Verticillium sp. (Wilt)

New York - (Chupp)

ARCTIUM MINUS (Burdock)

+Phyllosticta lappae Sacc. (Leafspot)

Pennsylvania - (Kirby)

Puccinia bardanae Cda. (Rust)

+Pennsylvania - (Orton). P.r.: *Conn., *Ill., *Ind., *Ky., *Mich.,
*Mo., *N. Y., *N. D., *Ohio, *Wis.

ARCTOSTAPHYLOS SPP.

Exobasidium vaccinii (Fckl.) Wor. (Leafspot)

Oregon - A. nevadensis, (Boyce); *Colorado - A. uva-ursi. (Jenkins)

- ARISAEMA DRACONTIUM (Dragon root)
 Uromyces arisaemae Cke. (Rust)
 +Florida - (Weber). P.r.: *Md., *N. Y.
- ASCLEPIAS SYRIACA (Common milkweed)
 Cercospora clavata (Ger.) Pk. (Leafspot)
 **Missouri - (Maneval). P.r.: *Colo., *Del., *Ill., *Ind., *Iowa, *Kans.,
 *Mass., *Mich., *Mont., *Nebr., *N. J., *N. Y., *Wis.
- ASCLEPIAS SP. (Milkweed)
 Colletotrichum sp. (Stemblight)
 Pennsylvania - (Orton)
 Leptomonas elmassiana (Migone) Holmes (Flagellate)
 Maryland - Holmes, Francis O. Herpetomonad flagellates in the latex
 of milkweed in Maryland. Phytopath. 14: 146-151. 1924.
 New Jersey - Phytopath. 15: 46. 1925.
 Mosaic
 New York - (N. Y. Dept. Bul. Pl. Path. News Letter, July 14)
- ASIMINA TRILOBA (North american papaw)
 Phleospora asiminae Ell. & Morg. (Leafspot)
 **Missouri - (Maneval). P.r.: *Ill., *Kans.
- ASTER SPP. (Aster)
 Coleosporium solidaginis (Schw.) Thuem. (Rust)
 Kentucky - (Valleau)
 Washington - (A. douglasii). (Boyce). P.r.: *Ala., *Calif., *Colo.,
 *D. C., *Ida., *Ill., *Ind., *Iowa, *Ky., *Me., *Mass., *Mich.,
 *Minn., *Miss., *Mo., *Mont., *Nebr., *N. H., *N. Y., *N. D.,
 *Ohio, *Oreg., *Pa., *S. Car., *S. D., *Vt., *Va., *Wash., *W. Va.,
 *Wis.
- BARBAREA VULGARIS (Winter cress)
 Ramularia barbareae Pk.
 **Pennsylvania - (Kirby)
- BIDENS FRONDOSA (Beggar ticks)
 Sphaerotheca humuli var. fuliginea (Schlect.) Salm. (Powdery mildew)
 **Pennsylvania - (Kirby)
- BIGNONIA RADICANS (Trumpet flower)
 Cercospora sordida Sacc.
 Missouri - (Maneval). P.r.: Ala., *Ark., Conn., *D. C., *Ill., Ind.,
 *Iowa, *Kans., *La., *Miss., *Mo., *N. J., *Ohio, *Okla., *Texas.
- BOEHMERIAE CYLINDRICA (False nettle)
 Cercospora boehmeriae Pk. (Leafspot)
 +Pennsylvania - (Overholts). P.r.: Ala., *Nebr., N. Y., *Wis.
- BOERHAAVIA ERRECTA
 +Albugo candida (Pers.) Kze. (White rust)
 Florida - (Weber).

BURSA BURSA-PASTORIS (Shepherd's purse)

Albugo candida (Pers.) Kze. (White rust)

*+Pennsylvania - (Kirby)

*Virginia - (Pathological Collections)

Peronospora parasitica (Pers.) D By. (Downy mildew)

+New York - (Chupp)

+New Jersey - (Martin)

+Pennsylvania - (Kirby). P.r.: *Colo., Ind., Iowa, Kans., N. H., Wash.

CACTUS

+Perisporium wrightii Berk. & Cke. (Charcoal spot)

Texas - (Taubenhaus)

+Bacillus carotovorus L. R. Jones (Damping-off)

Texas - (Taubenhaus)

CAMPANULA AMERICANA (Tall bellflower)

Septoria campanulae (Lev.) Sacc. (Leafspot)

+Missouri - (Maneval). P.r.: Iowa, Kans., *Miss.

CARTHAMUS TINCTORIUS (Safflower)

Sclerotinia sclerotiorum (Lib.) Mass. (S. libertiana) (Wilt)

Joshi, S. D. The wilt disease of safflower. Mem. Dept. Agr. India
Bot. Ser. 13: 39-46. 1924.

CASTILLEJA MINIATA (Indiana paint brush)

+Cronartium filamentosum (Pk.) Hedgc. & Long (Rust)

Washington - (Boyce)

CEANOTHUS SANGUINEUS (Buckbrush)

+Septoria sp. (Leafspot)

Idaho - (Boyce)

CHAMAEDAPHNE SP. (Leatherleaf)

Exobasidium vaccinii (Fckl.) Wor. (Leafpockets)

+Pennsylvania - (Overholts). P.r.: *N. H., *N. Y.

CHELONE GLABRA (White turtlehead) (Snakehead)

Erysiphe galeopsidis DC. (Powdery mildew)

+Pennsylvania - (Overholts)

+Puccinia andropogi Schw. (Rust)

Pennsylvania - (Orton)

Septoria wilsonii Clint. (Leafspot)

+Pennsylvania - (Overholts). P.r.: *N. Y., *Ohio, *Vt.

CHENOPODIUM ALBUM (White goosefoot)

Peronospora effusa (Grev.) Rabh. (Downy mildew)

*+Pennsylvania - (Kirby)

Phyllosticta chenopodii Sacc. (Leafspot)

*+New York - (Chupp). P.r.: Ind.

CHENOPODIUM AMBROSIOIDES (Mexican tea)

CHENOPODIUM SP. (Pigweed)

Albugo bliti (Biv.) Kze. (White rust)

**New Jersey - (Sect. Pl. Path.). P.r.: On C. album from *Va.

CERATONI SILIQUUM (Carob)

+Pestalozzia sp. (Leafspot)

Florida - (Weber)

CIMICIFUGA RACEMOSA (American bugbane)

+Puccinia triticina Erik. (P. clematidis Lagh.) (Rust)

Pennsylvania - (McCubbin)

Uromyces caecinodes Berk. & Curt. (Smut)

Pennsylvania - (Orton). P.r.: N. Y., N. Car., *Ohio, Pa., Tenn.

COLUTEA ARBORESCENS (Common bladder-senna)

+Diplodia colutae Schnabe (Twig dieback)

Pennsylvania - (Overholts)

COMPTONIA ASPLENIFOLIA (C. peregrina) (Sweetfern)

Gronartium comptoniae Arth. (Rust)

+Pennsylvania - (Orton & Thurston). P.r.: *Conn., *Mass., *N. H.,

*N. J., N. Y., N. Car., Vt., *Wis.

CONVOLVULUS SEPIUM (Hedge bindweed)

Puccinia convolvuli (Pers.) Cast. (Rust)

**Pennsylvania - (Kirby)

Septoria sp. (Leafspot)

**Pennsylvania - (Kirby)

COPTIS TRIFOLIA (Goldthread)

Septoria coptidis Berk. & Curt. (Leafspot)

New York - (Jenkins). P.r.: *N. Y., *Vt.

CYSTOPTERIS FRAGILIS (Brittle fern)

Hyalopsora polypodii (DC.) Magn. (Rust)

Pennsylvania - (McCubbin & Hildebrandt). P.r.: *Colo., *Ill., *Ind.,

Iowa, *Md., *Miss., *Mo., *Nebr., *N. Y., *Utah, *Wis.

CYPERUS ESCULENTUS (Sedge)

Puccinia canaliculata (Schw.) Lag. (Rust)

+Florida - (Weber). P.r.: Ind., *Mo., *Ohio.

DESMODIUM TORTUOSUM (Beggarweed)

Cercospora sp. (Leafspot)

Florida - (Weber)

DIANTHERA AMERICANA (Denseflowered water willow)

Cercospora diantherae Ell. & Kell. (Leafspot)

**Missouri - (Maneval). P.r.: *D. C., *Ill., *Kans., *Texas.

DRYOPTERIS LINNAEANA (Oakfern)

Hyalopsora aquiloides (Pk.) Magn. (Leafspot)

ECHINOCYSTIS LOBATA (Mock-cucumber)

+*Alternaria* sp. (Leafspot)

Florida - (Weber)

Cercospora sp. (Leafspot)+Florida - (Weber). P.r. of *Cercospora echinocystis* Ell. & Mart., Ind., Iowa, Ky., *Nebr., Ohio, *Pa., Wis.+*Colletotrichum* sp. (Anthracnose)

Florida - (Weber)

+*Fusarium* sp. (Wilt)

Florida - (Weber)

ELEPHANTOPUS CAROLINIANUS (Carolina elephant's-foot)

Cercospora elephantopodis Ell. & Ev. (Leafspot)

**Missouri - (Maneval). P.r.: Ala., *Del., Miss.

ERIGERON SP. (Erigeron)

Septoria erigerontea Pk. (Leafspot)

+Pennsylvania - (Kirby). P.r.: *Ill., Ind., Iowa, *Miss., *N. J., *Ohio.

ERYTHRONIUM AMERICANUM (Yellow adders'-tongue)

Ustilago heufleri Fckl. (Smut)

Michigan - Sartoris, Geo. B. Studies in the life history and physiology of certain smuts. Amer. Jour. Bot. 11: 617-648. 1924.

EUPATORIUM URTICIAEFOLIUM (Snow thoroughwort)

Erysiphe cichoracearum DC. (Powdery mildew)

Pennsylvania - (Overholts). P.r.: *D. C., Iowa, *Nebr., *N. Y.

FRAGARIA CHILOENSIS (Chiloe strawberry)

Mycosphaerella fragariae (Tul.) Lind.

**Pennsylvania - (Kirby). P.r.: *Alaska, *Me., Wash., *Wis.

GAURA BIENNIS (Biennial gaura)

+*Uromyces plumbarius* Pk. (Rust)

Pennsylvania - (Orton)

GERANIUM CAROLINIANUM (Geranium)

Plasmopara geranii (Pk.) Berl. & DeToni (Downy mildew)

Florida - (Weber). P.r.: Ala., *D. C., *Fla., *Ill., *Ind., Iowa, Kans., *Md., *Miss., *Mo., *N. J., *N. Car., *Texas, *Va.

GERANIUM SANGUINEUM (Bloodred cranesbill)

+*Bacterium erodii* Lewis (Bacterial spot)

Florida - (Weber)

GERANIUM SIBIRICUM (Siberian cranesbill)

+*Peronospora geranii* Pk. (*Plasmopara geranii* (Pk.) Berl.) (Downy mildew)

*Pennsylvania - (Kirby)

HELIANTHUS PETIOLARIS (Prairie sunflower)

Puccinia helianthi Schw. (Rust)

Kansas - (Johnston). P.r.: *Colo., Ind., *Kans., *Mont., *Nebr.

HEPATICACON SP. (Hepatica)

+Peronospora pygmaea (Ung.) Schroet. (Downy mildew)

Pennsylvania - (Overholts)

HYDROCOTYLE SP. (Pennywort)

Cercospora sp. (Leafspot)

Florida - (Weber). P.r.: Of Cercospora hydrocotyles Ell. & Ev.

Ala., *Fla., *La., Miss., *Texas.

Puccinia hydrocotyles (Mont.) Cke. (Rust)

Florida - (Weber). P.r.: Ala., *Ariz., *Calif., *Del., *Fla., *Hawaii,
*Miss., *Nev., Texas.

HUMULUS LUPULUS (Hop)

+Fumago vagans Pers. (Sooty mold)

*Washington - (Sect. Pl. Path.)

S. _____, N. K. The analysis of ammonium polysulphide solutions.

Bul. Bur. Bio-Techn. Murphy & Son 2: 129-130. 1924. Originally
introduced by Salmon of Wye for controlling mould on hops. Not
advisable to use it on certain varieties.

Peronospora sp. (Downy mildew)

Salmon, E. S. and W. M. Ware. An endemic Peronospora on hop in
England. Gard. Chron. 3, 76: 265. 1924. P. urticae not uncommon
on the nettle "is in its characters closely similar to, if not
identical with the species on the hop." Not yet determined
whether the two are really distinct.

HYPERICUM PROLIFICUM (Shrubby St. Johnswort)

Uromyces hyperici-frondosi (Schw.) Arth. (Rust)

*+Missouri - (Maneval). P.r.: Ind., *Miss., W. Va.

IPOMOEA DISSECTA (Morning-glory)

+Coleosporium ipomoeae (Schw.) Burr. (Rust)

Florida - (Weber)

IPOMOEA TRILOBA

+Mosaic

Florida - (Weber)

+Septoria convolvuli Desm. (Leafspot)

Florida - (Weber)

IPOMOEA SP.

Septoria convolvuli Desm. (Leafspot)

+Pennsylvania - (Kirby)

LACTUCA CANADENSIS (Wild lettuce)

+Rio Grande Valley Disease (Undetermined)

Texas - (Taubenhaus)

- LACTUCA VIROSA** (*L. scariola*) (Prickly or Wild lettuce)
Septoria lactucae Pass. (Leafspot)
 **Pennsylvania - (Kirby). P.r.: Ind., *Kans., *La., *Ohio.
- LEDUM GROENLANDICUM** (True Labrador tea)
Melampsoropsis abietina (Alb. & Schw.) Arth. (*Melampsora abietina* (Alb. Schw.) Arth. (Rust)
 British Columbia - (Boyce). P.r.: N. H., Wis.
- LEPTILON CANADENSE** (Horseweed)
 Fasciation
 **Maryland - (Norton). P.r.: *Ga.
- LESPEDEZA HIRTA** (Hairy bushclover)
Microsphaera diffusa Cke. & Pk. (Powdery mildew)
 **Pennsylvania - (Kirby). P.r.: Ill.
- LUPINUS SP.** (Lupine)
Mastigosporium lupini (Sor.) Cav.
 Cavaea, F. Di una infezione crittogamica del Lupino *Mastigosporium lupini* (Sor.) Cav. (A cryptogamic infection of the Lupin, *Mastigosporium lupini* (Sor.) Cav.) Riv. Patol. Veg. 14: 13-16. 1924.
 Nanism and dying off (fertilizer injury)
 Peyronel, B. Sopra un caso di nanismo e di deperimento del Lupino in seguito a concimazione con calciocianamide. (On a case of nanism and dying off of the Lupin caused by fertilization with calcium cyanamide.) Boll. Mensile R. Staz. Pat. Veg. 5: 20-26. 1924.
- MADIA RACEMOSA** (Tarweed)
 +*Coleosporium madiae* Cke. (Rust)
 Washington - (Boyce)
- MELANTHERA DELTOIDEA**
 +*Puccinia obtecta* Pk. (Rust)
 Florida - (Weber)
- MELIOTUS ALBA** (Sweet clover)
Cercospora davisii Ell. & Ev. (Leafspot)
 +Pennsylvania - (Kirby). P.r.: Ala., Ind., *Iowa, *Kans., Minn., *Wis.
- MENZIESIA FERRUGINEA** (False azalea)
 +*Exobasidium vaccinii* (Fckl.) Wor. (Leaf gall)
 Idaho - (Boyce)
- MENTHA ARVENSIS** (Mint)
Puccinia menthae Pers. (Rust)
 +Florida - (Weber). P.r.: N. Y.
 Ross, H. Weber die Pfefferminzen und deren Befall durch den Rostpilz *Puccinia menthae* Pers. (Peppermints and their infection by the rust fungus *Puccinia menthae* Pers.) Zeitschr. Pflanzenkr. 34: 3-4, 101-107. 1924.

MONARDA SP. (Bee balm)

Puccinia menthae Pers. (Rust)

Connecticut - (Clinton & Hunt). P.r.: Ark., Colo., Conn., Del., Ida.,
Ill., Ind., Iowa, Kans., Mich., Minn., Miss., Mo., Mont., Nebr.,
N. Mex., N. Y., N. D., Ohio, Pa., S. D. Texas, Utah, Va., Wis., Wyo.

NEPETA CATARIA (Catnip)

+Puccinia menthae Pers. (Rust)

Florida - (Weber)

OENOTHERA BIENNIS (Common evening primrose)

Erysiphe polygoni DC. (Powdery mildew)

+Pennsylvania - (Kirby). P.r.: Ala., Ida., Ill., Iowa, Minn., Miss.,
N. Y., N. D., Ohio.

Maranon, J. M. A biochemical study of resistance to mildew in Oenothera.
Philipp. Jour. Sci. 24: 369-441. 1924.

OENOTHERA HUMIFERA (Primrose)

+Septoria oenotherae West (Leafspot)

Florida - (Weber)

ONOCLEA SENSIBILIS (Sensitive fern)

Uredinopsis mirabilis (Pk.) Magn. (Rust)

Pennsylvania - (Overholts & Thurston). P.r.: *Conn., Ill., *Ind.,
*Iowa, Me., *Md., *Mass., *Nebr., *N. H., *N. Y., *Pa., Wis.

OPUNTIA SPP. (Prickly pear)

Bacillus cacticidus Johnston & Hitchcock (Bacteriosis)

Johnston, T. H. and L. Hitchcock. A bacteriosis of prickly pear plants
(Opuntia spp.) Trans. & Proc. Roy. Soc. So. Australia 47: 162-164.
1923.

OSMORRHIZA LONGISTYLIS (Smoother sweet-cicely)

Puccinia osmorrhizae (Pk.) Cke. & Pk. (Rust)

Pennsylvania - (Kirby). P.r.: *Iowa, *Ky., *Md., *Mo., *Nebr., *N. Y.,
*N. D., *Pa., *Va., *Wis.

OXALIS VIOLACEA (Oxalis)

Uredo oxalidis Lev. (Rust)

+Florida - (Weber). P.r.: Texas.

PACHISTIMA MYRSINITES (Myrtle pachistima)

+Mycosphaerella sp. (Leafspot)

Idaho - (Boyce)

PENTSTEMON SP. (Pentstemon)

+Cercospora nivosa Ell. & Ev.? (Leafspot)

Pennsylvania - (Orton)

PERSICARIA PENNSYLVANICA (Pennsylvania persicaria)

Septoria polygonorum Desm. (Leafspot)

Pennsylvania - (Kirby). P.r.: *Ill., Ind., Minn., *Miss., *Mont.,
*Nebr., *N. J., *N. Y., *Ohio, *Pa., *Va., *Wis.

Ustilago utriculosa (Nees) Tul. (Smut)

*+Pennsylvania - (Kirby). P.r.: Ala., Conn., *Del., *Ill., *Ind., *Iowa,
*Kans., *Md., *Mass., Miss., *Mo., Nebr., *N. H., *N. J., *N. Y.,
Ohio, R. I., Vt., *Va., *W. Va.

PERSICARIA PERSICARIA (Smartweed)

+Puccinia polygoni Pers. (Rust)
Kansas - (Johnston)

Septoria polygonorum Desm. (Leafspot)

+Kansas - (Johnston). P.r.: *Ky., *Mo., *Miss., *Nebr., *N. J., *N. Y.,
*N. D.

Ustilago utriculosa (Nees) Tul. (Smut)

Kansas - (Johnston). P.r.: Ind., *Kans., Minn.

PHYSALIS SP.

+Mosaic

Connecticut - (Clinton)

PLANTAGO LANCEOLATA (Ribwort)

+Physarum cinereum (Batsch) Pers.

*Pennsylvania - (Kirby)

PLANTAGO MAJOR (Common plantain)

Erysiphe cichoracearum DC. (Powdery mildew)

British Columbia - (Boyce). P.r.: *Colo., *D. C., Ind., Iowa, Minn.,
Mo., *Mont., *Nebr., *N. Y., *N. D., *Pa., Wash.

Peronospora alata Fckl. (Downy mildew)

+Pennsylvania - (Orton). P.r.: *Ill., *Ind., *Iowa, *Kans., *Me.,
*Mass., *Miss., *Nebr., N. Y., *Wash., *Wis.

+Physarum cinereum (Batsch) Pers.

*Pennsylvania - (Kirby)

Ramularia plantaginis Ell. & Mart. (Leafspot)

+Pennsylvania - (Orton)

POLYGONUM AVICULARE (Knot grass, Door weed)

Erysiphe polygoni DC. (Powdery mildew)

+Pennsylvania - (Kirby)

POLYGONUM ERECTUM (Erect knotweed)

Cercospora avicularis Wint. (Leafspot)

*+South Dakota - (Evans). P.r.: Minn.

Erysiphe polygoni DC. (Powdery mildew)

*+Pennsylvania - (Kirby)

Uromyces polygoni (Pers.) Fckl. (Rust)

Pennsylvania - (Kirby). P.r.: Conn., Del., Ill., Ind., Iowa, Miss.,
Mo., N. J., N. Y., N. Car., N. D., Pa., S. D., W. Va., Wis.

POTENTILLA CANADENSIS (Common cinquefoil)

Frommea obtusa (Strauss) Arth. (Rust)

+Pennsylvania - (Orton). P.r.: Minn., *Miss.

+Synchytrium aureum Schroet.

Pennsylvania - (Orton)

POTENTILLA MONSPELIENSIS (Rough cinquefoil)

Beloniella dehnii (Rab.) Rehm (*Mollisia dehnii* (Rab.) Karst.)

+Pennsylvania - (Thurston). P.r.: Ind., Iowa, N. D.

PTERIDIUM AQUILINUM PUBESCENS (Bracken)

+*Phyllachora pteridis* (Reb.) Fckl. (Black leafspot)

Washington - (Boyce)

Oregon - (Boyce)

Uredinopsis pteridis Dearn. & Holw. (Rust)

+British Columbia - (Boyce)

+Idaho - (Boyce)

+Oregon - (Boyce). P.r.: *Calif., *Wash.

RANUNCULUS ACRIS (Tall or Meadow buttercup)

Erysiphe polygoni DC. (Powdery mildew)

**Pennsylvania - (Kirby)

Peronospora ficariae Tul. (Downy mildew)

**Pennsylvania - (Kirby)

RAPHANUS RAPHANISTRUM (Wild radish)

+*Peronospora parasitica* (Pers.) D By. (Downy mildew)

*New Jersey - (Martin)

RIBES CEREUM (Wild currant)

Coleosporium ribicola (Cke. & Ell.) Arth. (Rust)

**New Mexico - (Crawford). P.r.: *Colo., *Mont., Utah.

RIBES CYNOSBATI (Pasture gooseberry)

Cronartium ribicola Fischer (Blister rust)

+Connecticut - (McDonnell). P.r.: Minn., *N. H.

Puccinia grossulariae (Schum.) Lagh. (Rust)

**Pennsylvania - (Kirby). P.r.: Me., Minn., N. H., N. Y., Vt.

RIBES VISCOSISSIMUM

+*Septoriopsis ribis* Davis (Leafspot)

British Columbia - (Boyce)

RICHARDIA SCABRA (Mexican clover)

+*Peronospora* sp. (Downy mildew)

Florida - (Weber)

RUBUS SPECTABILIS (Salmonberry)

Sphaerotheca humuli (DC.) Burr. (Powdery mildew)

+Washington - (Boyce). P.r.: *Oreg.

RUMEX SPP.

+*Uromyces acetosae* Schroet. (Rust)

*Pennsylvania - *R. acetosella and *R. acetosa. (Kirby)

RUMEX CRISPUS (Curled or Narrow dock)

Ovularia obliqua (Cke.) Oud.

**Pennsylvania - (Kirby). P.r.: *Colo., *Kans., *Md., *Mont., *Nebr.,

*N. J., *N. Y., N. D., *Wash., *Wis.

RUMEX OBTUSOLIUS (Bitterdock)

- +Ramularia macrospora Fres. (Leafspot)
- *New York - (Chupp)
- +Mosaic
- *New York - (Chupp)

RUMEX OCCIDENTALIS (Dock)

- +Mycosphaerella sp. (Leafspot)
- Washington - (Boyce)

SAPONARIA OFFICINALIS (Bouncing bet)

- +Phyllosticta tenerrima Ell. & Ev. (Leafspot)
- New Jersey - (Martin)

SHEPHERDIA CANADENSIS (Russet buffaloberry)

- Puccinia rhamni (Pers.) Wettst. (Rust)
- +Idaho - (Boyce). P.r.: *Mont.
- +Septoria shepherdiae (Sacco.) Dearn. (Leafspot)
- Idaho - (Boyce)

SISYMBRIUM ALTISSIMUM (Norta altissima) (Tall sisymbrium)

- Albugo candida (Pers.) Kuntze (White rust)
- *+New York - (Chupp). P.r.: *Mont.

SMILAX SP. (Smilax)

- Phyllosticta smilacinis Ell. & Mart. (Leafspot)
- +Pennsylvania - (Orton). P.r.: *Ala., *Ark., *Del., *D. C., *Kans., *La., *Nebr., *N. Y., *Tenn., *Texas, *Va., *W. Va.

SOLANUM CAROLINENSE (Horse nettle)

- Erysiphe cichoracearum DC. (Powdery mildew)
- **+Pennsylvania - (Kirby). P.r.: Ala., *Texas.

SOLANUM NIGRUM (Black nightshade)

- +Alternaria solani Ell. & Mart. (Early blight)
- Florida - (Weber)
- Cercospora atro-marginalis Atk. (Leafspot)
- +Florida - (Weber). P.r.: Ala.
- +Mosaic
- Florida - (Weber)

SOLIDAGO SPP. (Goldenrod)

- Coleosporium solidaginis (Schw.) Thuem. (Rust)
- +Oregon-(S. elongata); +Montana - (S. missouriensis); +Washington - (S. rigida). (Boyce)
- Rhizisma solidaginis Schw. (Tarspot)
- **+New Jersey - (Martin). P.r.: Ala., *Del., *D. C., Fla., Iowa, *Md., *Mass., *N. Y., *Ohio, *Pa., *Vt., Wash.

SONCHUS OLERACEUS (Sowthistle)

- +Alternaria sp.
- Florida - (Weber)
- +Bremia lactucae E. Regel (Downy mildew)
- Florida - (Weber)

Oidium sp. (Powdery mildew)
Florida - (Weber)

STEIRONEMA CILIATUM (Fringed loose strife)

Puccinia dayi Clint. (Rust)

Pennsylvania - (Overholts). P.r.: *Ind., *Iowa, *N. Y., *Pa., *Wis.

STROPHOSTYLES HELVOLA (Trailing wild bean)

Bacterium phaseoli EPS. (Bacterial blight)

Indiana - Phytopath. 14: 7, 341. 1924.

Uromyces appendiculatus (Pers.) Link. (Rust)

Kansas - (Johnston). P.r.: Ala., *Ark., *Del., *Ill., *Ind., *Iowa,
*Kans., Md., *Miss., *Nebr., *N. J., *N. Y., N. Car., *Ohio, Okla.,
R. I., S. Car., *Va., *W. Va., Wis.

TARAXACUM OFFICINALE (Dandelion)

+Physarum cinereum (Batsch) Pers.

*Pennsylvania - (Kirby)

Ramularia taraxaci Karst. (Leafspot)

+Pennsylvania - (Kirby)

TEUCRIUM CANADENSE (American germander)

Cercospora racemosa Ell. & Mart. (Leafspot)

*Missouri - (Maneval). P.r.: *Ill., *Ind., *Iowa, *Kans., *Mich., *Nebr.,
*N. Y.

THALICTRUM DIOICUM (Meadow rue)

Polythelis thalictri (Chev.) Arth. (Rust)

Pennsylvania - (McCubbin). P.r.: *Ind., *Iowa, Minn., *N. Y., *N. D.,
Pa., *Wis.

THALICTRUM SP. (Meadowrue)

Erysiphe polygoni DC. (Powdery mildew)

+Pennsylvania - (Overholts). P.r.: Ill., *Ind., *N. H., *N. D., Ohio,
*S. D.

THEOBROMA CACAO (Cacao)

+Diplodia cacaocola Henn.

Florida - (Weber)

TRIFOLIUM INCARNATUM (Crimson clover)

Phyllachora trifolii (Pers.) Fckl. (Polythrincium trifolii Kze.) (Blackspot)

+Pennsylvania - (Orton). P.r.: *Ala., Ga., *Md., *N. Car., *Va.

TRIFOLIUM PRATENSE (Red clover)

Cercospora zebrina Pass. (Leafspot)

+Pennsylvania - (Orton). P.r.: *Ind., Iowa, Mich., N. Y.

TRILLIUM DISCOLOR

*Septoria trillii Pk. (Leafspot)

South Carolina - (Ludwig)

VACCINIUM OVALIFOLIUM (Tall huckleberry)

- +Calyptospora columnaris (Alb. & Schw.) Kuhn (Rust)
Oregon - (Boyce)
- +Pucciniastrum myrtilli (Schum.) Arth. (Rust)
Washington - (Boyce)

VACCINIUM MEMBRANACEUM (Big whortleberry)

- +Exobasidium vaccinii (Fckl.) Wor. (Leafspot)
Idaho - (Boyce)
- +Pucciniastrum myrtilli (Schum.) Arth. (Leaf rust)
Washington, Oregon - (Boyce)

VACCINIUM PARVIFOLIUM (Red whortleberry)

- +Calyptospora columnaris (Alb. & Schum.) Kuhn (Rust)
Washington - (Boyce)

VERATRUM VIRIDE (American false-hellebore)

- Puccinia veratri Niessel (Rust)
+Pennsylvania - (Orton & Thurston). P.r.: *Calif., *N. H., *N. Y.,
*W. Va.

VERNONIA GIGANTEA (Ironweed)

- Puccinia vernoniae Schw. (Rust)
+Florida - (Weber). P.r.: *Texas.

VICIA SP. (Vetch)

- +Colletotrichum viciae Dearn. & Overh. (Anthracnose)
Pennsylvania - (Orton)
- Protocoronospora nigricans (Atk. & Edg.) emend. Wolf
North Carolina - (Jenkins). P.r.: *Ga., La., Miss., *N. Y., *N. Car.,
S. C., Tenn., *Va.

VIOLA PAPILIONACEA (Butterfly violet)

- Puccinia violae (Schum.) DC. (Rust)
New York - (Chupp). P.r.: Ind., Iowa, *N. Y., N. D.

VIOLA SP. (Violet)

- Ascochyta sp. (Leafspot)
Pennsylvania - (Kirby)

XANTHIUM SPP.

- Cuscuta sp. (Dodder)
**Pennsylvania - X. orientale. (Kirby). P.r.: *Texas.
- +Mosaic
*New York - (Chupp)
- Puccinia xanthii Schw. (Rust)
+Kansas - X. commune. (Johnston)
+Kansas - X. pennsylvanicum. (Johnston). P.r.: Ind., *Mo.
**Pennsylvania - X. orientale. (Kirby). P.r.: Ala., Colo., Ind., Iowa,
Miss., N. J., *N. Y., N. D., *Okla., Wash.