

THE PARASITIC FUNGI OF OHIO PLANTS

DISSERTATION

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By

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INTRODUCTION

"If there be in the land famine,
if there be pestilence, blasting, mildew,
locust -----" I Kings 8:37

Fungi have been present upon the earth for a long time, much longer than seed plants. Seward (36) states: "We can safely say that bacteria and many other fungi are entitled to be included among the most ancient members of the plant kingdom."

The number of known species of fungi is reported from 34,000 to as high as 100,000 (5, 28). The number varies depending upon the authors' concept of a species and according to their estimate of the number of synonyms. The number of known species of Spermatophyta is estimated to be from 160,000 to 200,000. There is ample evidence that the total number of species of fungi upon the earth is equal to or greater than the total number of kinds of seed plants (4, 5, 28). Fries, in 1825, is reported to have written (28), "Many botanists, looking at fungi from a distance, deem them a small province of the vegetable kingdom, although it is really the greatest, being analogous to that of insects among animals."

For Ohio, about 2500 native and naturalized vascular plants have been listed¹. The only comprehensive compilation of the fungus flora of Ohio was published in 1893 (26). This included about 1000 species. The first list of fungi from Ohio, published in 1849 included 319 species, of which about 20 would be considered parasitic (27).

¹ Information supplied by Clara G. Weishaupt, Curator of Herbarium of Vascular Plants, The Ohio State University.

Since this first report, many additional parasitic fungi have been reported. Today, the vascular flora of Ohio is considered to be well known, but our knowledge of the fungus flora of the state is far from complete.

The plant pathologist has a need for more exact information regarding the distribution of the parasitic fungi. Such information would enable him to identify plant diseases more readily and to plan research projects and control programs.

Plant science as a whole, is certain to profit from a more precise knowledge of the geographical distribution, ecology, and habitats of the fungi. Students are aided by having in convenient form, a list of the parasitic fungi that might be present in the area.

Aside from the practical value of a consideration of the fungi, they may be studied as a hobby as suggested by Cooke who is quoted by Rolfe (31) as writing:

"Let me assure the student that all times, seasons, and localities will afford him some species for examination; and whether he has felt interested in them before, or now, for the first time, adopts these interesting plants as objects worthy of his special regard, I would commend them to his patient and persevering attention, in the assurance that this pursuit will 'lead from joy to joy.'"

HISTORICAL SKETCH

The first published record of the fungus flora of Ohio appeared in 1849 in a "Catalogue of Plants, Native and Naturalized, Collected in the Vicinity of Cincinnati, Ohio, During the Years 1834-1844." The 1,050 plants in this list were collected by Thomas G. Lea. Included were 319 fungi of which, today, 20 to 30 would be recognized as plant parasites. However, at that time, fungi were not generally recognized as causing plant disease. The fungi in Lea's list were identified by the Reverend M. J. Berkeley, well known British mycologist of the 19th century. In 1878, A. P. Morgan's "Flora of the Miami Valley" was published (29). This included a list of fungi but no parasitic species. Beginning in the late 1880's, several persons became active as collectors of parasitic fungi and in some instances, studied the fungi as incitants of disease. Frederica Detmers was appointed assistant botanist at the Ohio Agricultural Experiment Station in 1889 and between 1891 and 1893, she reported on many diseases of fruit and vegetable crops and prepared two lists of the rust fungi of the state (15, 16). In 1894, A. D. Selby became botanist at the Ohio Agricultural Experiment Station, now at Wooster, and contributed greatly to our knowledge of plant pathology. Even before his appointment to the Station staff, Selby had prepared a list of Ohio Erysipheae (33). One of his more important publications, and one of the first of its kind in the United States, was a handbook of plant diseases prepared in 1900 (34) and revised in 1910 (35).

W. A. Kellerman was elected chairman of the newly organized department of botany at The Ohio State University in 1891. From that time until his death in 1908, he collected extensively, adding many species of parasitic fungi to the herbarium at the University. In 1892, he organized the first course to be offered in plant pathology at The Ohio State University. In 1893, Kellerman and Werner (26) prepared the Botany section of Volume 7 of the "Report of the Geological Survey of Ohio." Included was the most complete list of the fungus flora of Ohio published. The compilation included about 1000 species of which about 250 were parasitic. At intervals, from 1901 to 1905, Kellerman published and issued the "Ohio Fungi Exsiccati." This was issued in ten fascicles and included descriptions of 200 species of fungi, most of which were plant parasites.

Table 1.--Principal Collectors of Parasitic Fungi in Ohio, 1890-1910.

Collector	Location	Approximate Date
W. H. Aiken	Cincinnati	1897-1910
E. E. Bogue	Ashtabula County	1890's
Thomas Bonser	Wyandot County	Early 1900's
Edo Claassen (9,10,11,12,13,14)	Cuyahoga County	1895-1924
Moses Craig	Columbus	1888-1892
Freda Detmers (15,16)	Columbus, Wooster	1890's
W. A. Kellerman (21,22,23,24,25,26)	Columbus	1880-1907
Rev. F. D. Kelsey	Oberlin, Toledo	1890's
L. C. Riddle	Columbus	1895-1905
A. D. Selby (33,34,35)	Columbus, Wooster	1890-1923
F. L. Stevens (37,38,39,40)	Columbus	1895-1898
C. M. Weed	Columbus	1888-1891
W. C. Werner (26)	Columbus, Painesville	1890's
E. M. Wilcox	Columbus	1890's

Many collections of plant disease fungi were added to the herbaria in the state from 1890 to 1910. Some of the contributors identified their collections and published lists while others deposited their specimens, identified or not, in the herbaria at The Ohio State University, the Ohio Experiment Station, Oberlin College, or elsewhere. Some of these are still not identified, but many were checked by Selby or Kellerman and in more recent years, by A. L. Pierstorff, W. G. Stover, B. H. Davis, C. W. Ellett and others. A list of the major contributors of the period is presented in Table 1. The number in parentheses after the collector's name refers to the articles, in the literature cited, where their reports of parasitic fungi are to be found.

METHODS

This list of fungi which are pathogenic on plants in Ohio was prepared from: (1) specimens in herbaria, (2) published records, (3) collections and observations of the writer, and (4) unpublished reports solicited by the writer.

The collections in the herbaria at The Ohio State University, the Ohio Agricultural Experiment Station, and Oberlin College, were studied. These collections date from about 1888. Some unidentified collections were determined. Some determinations were incorrect and these were corrected where possible. The nomenclature of host and parasite was brought up to date.

The writer has collected and identified or observed and identified parasitic fungi from all counties in the state. This has usually involved microscopic examination and, often, isolation and

inoculation techniques.

Unpublished reports were used in only a few instances. Credit is given to the author of these reports.

LIST OF OHIO FUNGI PARASITIC ON PLANTS

The fungi are arranged alphabetically under the order to which they are referred. The systematic arrangement of the orders within the classes of fungi is that of Ainsworth and Bisby (1). With but few exceptions the placement of the genera in the orders follows Ainsworth and Bisby.

The names of both the imperfect and perfect stages of the Ascomycetes are commonly listed, but the hosts are recorded under the name of the stage which is usually associated with the parasitic phase. Usually this is the imperfect stage.

The term fungus has been used by plant scientists in a general way to include all plants which have no stems, roots, leaves or chlorophyll (2, 32). Therefore, as certain species of bacteria are important plant parasites, they are included in this dissertation. The genera of bacteria are those recognized by Elliott (19). The genus Streptomyces which is included here with the bacteria is sometimes classified with the Fungi Imperfecti.

The systematic arrangement of the genera found in Ohio with the number of Ohio species in each genus follows:

SCHIZOMYCETES

Eubacteriales

Agrobacterium (2)
 Bacterium (1)
 Corynebacterium (5)
 Erwinia (6)
 Pseudomonas (24)
 Xanthomonas (11)

Actinomycetales

Streptomyces (1)

PHYCOMYCETES

Chytridiales

Physoderma (1)
 Synchytrium (2)

Plasmodiophorales

Plasmodiophora (1)
 Spongospora (1)

Saprolegniales

Aphanomyces (2)

Peronosporales

Albugo (Cystopus) (5)
 Bremia (1)
 Peronospora (18)
 Phytophthora (7)
 Plasmopara (5)
 Pseudoperonospora (1)
 Pythiogeton (1)
 Pythium (5)
 Sclerospora (1)

Mucorales

Choanephora (1)
 Mucor (1)
 Rhizopus (1)
 Spinellus (1)
 Sporodinia (Syzygites)(1)

ASCOMYCETES

Taphrinales

Taphrina (8)

Myriangiales

Elsinoe (2)

Dothideales

Cymadothea (1)
 Dibotryon (1)
 Endothella (1)
 Phyllachora (5)
 Scorias (1)

Hemisphaeriales

Asterina (1)

Erysiphales

Apiosporina (1)
 Erysiphe (5)
 Microsphaera (5)
 Phyllactinia (2)
 Podosphaera (3)
 Sphaerotheca (4)
 Uncinula (8)

Hypocreales

Balansia (2)
 Claviceps (2)
 Cordyceps (2)
 Epichloe (1)
 Gibberella (2)
 Hypocrea (1)
 Hypocreopsis (1)
 Hypomyces (3)
 Nectria (2)
 Pseudonectria (1)
 Thyronectria (1)

Sphaeriales

Botryosphaeria (1)
 Ceratostomella (1)
 Cochliobolus (1)

Cryptodiaportha (1)
 Cryptosporella (2)
 Diaportha (7)
 Didymella (1)
 Didymellina (1)
 Endoconidiophora (2)
 Endothia (1)
 Glomerella (2)
 Gnomonia (5)
 Gnomoniella (1)
 Guignardia (3)
 Leptosphaeria (2)
 Linospora (1)
 Mycosphaerella (17)
 Nummularia (1)
 Ophiobolus (1)
 Physalospora (1)
 Pleospora (1)
 Pyrenophora (3)
 Rosellinia (1)
 Sphaerulina (1)
 Ustilina (1)
 Valsa (2)
 Venturia (3)
 Xylaria (1)

Phacidiales

Coccoomyces (3)
 Elytroderma (1)
 Hypoderma (2)
 Hypodermella (1)
 Lophodermium (1)
 Rhytisma (5)

Helotiales

Atropellis (1)
 Cenangium (1)
 Dasyscypha (1)
 Diplocarpon (2)
 Fabraea (2)
 Monilinia (1)
 Pezizella (Allophylaria) (1)
 Pseudopeziza (3)
 Pyrenopeziza (1)
 Roesleria (1)
 Sclerotinia (4)
 Seaverinia (1)
 Septotinia (1)
 Stammaria (1)

Stromatinia (1)
 Tympanis (1)

BASIDIOMYCETES

Ustilaginales

Cintractia (1)
 Doassansia (1)
 Entyloma (7)
 Graphiola (1)
 Melanopsichium (1)
 Schizonella (1)
 Sorosporium (3)
 Sphacelotheca (5)
 Tilletia (5)
 Urocystis (6)
 Ustilago (16)

Uredinales

Aecidium (1)
 Cerotelium (1)
 Chrysomyxa (1)
 Coleosporium (9)
 Cronartium (4)
 Frommea (1)
 Gymnoconia (1)
 Gymnosporangium (6)
 Hyalopsora (1)
 Kuehneola (1)
 Kunkelia (1)
 Melampsora (4)
 Phragmidium (5)
 Pileolaria (1)
 Puccinia (83)
 Pucciniastrum (7)
 Ravenelia (2)
 Tranzschelia (3)
 Uredinopsis (1)
 Uromyces (31)

Tremellales

Eocronartium (1)
 Herpobasidium (1)

Agaricales

Armillaria (1)

Boletus (1)
 Collybia (1)
 Cyphella (1)
 Exobasidium (1)
 Fomes (7)
 Ganoderma (1)
 Hericium (1)
 Pellicularia (1)
 Pholiota (1)
 Pleurotus (1)
 Polyporus (11)
 Steccherinum (1)
 Stereum (3)
 Thelephora (1)

FUNGI IMPERFECTI

Sphaeropsidales

Actinopelte (1)
 Amerosporium (1)
 Ascochyta (13)
 Botryodiplodia (1)
 Cicinnobolus (1)
 Coniothyrium (6)
 Cytospora (3)
 Darluca (1)
 Dendrophoma (1)
 Diplodia (4)
 Dothichiza (1)
 Dothiorella (2)
 Dothistroma (1)
 Fusicoccum (1)
 Gloeodes (1)
 Leptothyrium (1)
 Macrophoma (2)
 Macrophomina (1)
 Phleospora (5)
 Phoma (9)
 Phomopsis (9)
 Phyllosticta (48)
 Piggotia (1)
 Plenodomus (1)
 Pyrenochaeta (1)
 Septoria (95)
 Sphaeropsis (5)
 Sporonema (2)
 Stagonospora (5)

Melanconiales

Actinonema (1)
 Colletotrichum (13)
 Coryneum (2)
 Cyindrosporium (8)
 Entomosporium (1)
 Gloeosporium (18)
 Marssonina (10)
 Melanconium (1)
 Monochaetia (1)
 Myxosporium (1)
 Pestalotia (5)
 Septogloeum (1)
 Septomyxa (1)
 Sphaeloma (4)

Moniliales

Alternaria (12)
 Aspergillus (1)
 Botrytis (7)
 Cephalosporium (2)
 Cercospora (82)
 Cercosporella (4)
 Chalara (1)
 Cladosporium (5)
 Curvularia (1)
 Cyndrocladium (1)
 Didymaria (1)
 Epicoccum (1)
 Fusarium (29)
 Fusicladium (5)
 Graphium (2)
 Helminthosporium (13)
 Heterosporium (2)
 Kabatiella (2)
 Microstroma (1)
 Monilochaetes (1)
 Myceliophthora (1)
 Myrothecium (1)
 Nigrospora (1)
 Oidium (1)
 Ovularia (1)
 Penicillium (2)
 Piricularia (1)
 Polythrincium (1)
 Pseudocercospora (1)
 Ramularia (23)
 Rhynchosporium (1)
 Scolecotrichum (1)

Sepedonium (1)	Mycelia Sterilia
Septocylindrium (1)	
Spondylocadium (1)	Papulospora (1)
Stemphylium (3)	Rhizoctonia (3)
Stigmia (1)	Sclerotium (2)
Thielaviopsis (1)	
Trichoderma (1)	
Trichothecium (1)	
Tuberculina (1)	
Verticillium (1)	
Volutella (1)	

The host plants are arranged alphabetically under each fungus species. In the Uredinales, the stage or stages of the rust fungus found on the host is recorded in the conventional way. The basis for including the report of the parasite in Ohio on each host is recorded, in abbreviated form, following the host name. The purport of these abbreviations, where not evident, follows:

- SU - specimen in herbarium at The Ohio State University.
- ES - specimen in herbarium at the Ohio Agricultural Experiment Station.
- OB - specimen in herbarium at Oberlin College.
- PDS Index - refers to the "Index of Plant Diseases in the United States" issued in five parts from 1950 to 1953 by The Plant Disease Survey, Division of Mycology and Disease Survey, United States Department of Agriculture.
- PDR - "The Plant Disease Reporter."
- PDR Su - United States Department of Agriculture, nt."
- Arthur - "J. C. Arthur's "Manual of the Rusts in the United States and Canada" (1934).
- Chupp - Charles Chupp's "A monograph of the Fungus Genus Cercospora" (1953).
- Fischer - G. W. Fischer's "Manual of the North American Smut Fungi" (1953).
- Alexander - Report of Paul Alexander, Ohio Florists' Association Fellow, Department of Botany and Plant Pathology, The Ohio State University.
- Ellett - Observations and/or collections of the writer but specimens not in the herbarium.
- Sprague - Roderick Sprague's "Diseases of Cereals and Grasses in North America" (1950).

An asterisk before a fungus or host name denotes the first report of the parasite or of the parasite on that host in Ohio.

The nomenclature for the host plants is from "Gray's Manual of Botany," 8th edition, 1950 or from Bailey's, "Manual of Cultivated Plants," revised edition, 1949. With the exception noted below, the nomenclature of the parasites follows that in the "Index of Plant Diseases in the United States," issued in five parts from 1950 to 1953 by the United States Department of Agriculture. The nomenclature of the smut fungi is from Fischer's, "North American Smut Fungi" (20), and that of the rust fungi, Arthur's "Manual of Rusts in the United States and Canada" (3).

EUBACTERIALES

Agrobacterium rhizogenes (Riker et al.) Conn

Pyrus malus L. SU

Agrobacterium tumefaciens (E. F. Sm. & Towns.) Conn

Beta vulgaris L. PDR Sup. 26

Chrysanthemum frutescens L. SU

**C. morifolium* (Ramat.) Hemsl. Ellett

Euonymus kiautschovicus Loes. SU

**E. fortunei* (Turcz.) Hand.-Mazz. SU

Pelargonium sp. PDR Sup. 50

Prunus sp. (cherry) SU

P. americana Marsh. PDR Sup. 1

P. persica (L.) Batsch SU

Pyrus communis L. PDR Sup. 1

P. malus L. SU

Rosa sp. (cult.) SU

Rubus sp. (blackberry) PDR Sup. 1

Rubus sp. (dewberry) PDS Index

R. idaeus L. SU

R. occidentalis L. SU

R. ursinus Cham. & Schlecht. SU

Salix sp. SU
 Vitis sp. (cult.) SU
 Wistaria sp. SU

Bacterium stewartii E. F. Sm.

Zea mays L. SU

Corynebacterium fascians (Tilford) Dowson

Chrysanthemum morifolium (Ramat.) Hemsl. Jour. Agr. Res. 53:383
Dianthus caryophyllus L. Ellett
Gypsophila paniculata L. PDS Index
Lathyrus odoratus L. SU
Nicotiana tabacum L. PDS Index
Pelargonium sp. Jour. Agr. Res. 53:383
Petunia hybrida Vilm. SU

Corynebacterium flaccumfaciens (Hedges) Dowson

Phaseolus vulgaris L. USDA Tech. Bull. 868

Corynebacterium insidiosum (McCull.) H. L. Jens.

Medicago sativa L. PDS Index

Corynebacterium michiganense (E. F. Sm.) H. L. Jens.

Lycopersicon esculentum Mill. Ellett

Corynebacterium sepedonicum (Spieck. & Kotth.) Skapt. & Burkh.

Solanum tuberosum L. Ohio Agr. Exp. Sta. Bull. 615

Erwinia amylovora (Burr.) Winslow et al.

**Amelanchier canadensis* (L.) Medic. SU
Cotoneaster divaricata Rehd. & Wils. PDR Sup. 86
C. foveolata Rehd. & Wils. PDR Sup. 86
Cydonia oblonga Mill. SU
Prunus sp. (cherry) PDR Sup. 14
Prunus sp. (plum) PDR Sup. 39
P. serrulata Lindl. PDS Index

Pyracantha coccinea Roem. Ellett
Pyrus baccata L. USDA Dept. Bull. 1366
P. communis L. SU
P. malus L. SU

Erwinia atroseptica (Van Hall) Jennison

Solanum tuberosum L. SU

Erwinia carotovora (L. R. Jones) Holland

Allium cepa L. Month. Bull. Ohio Agr. Exp. Sta. 4:75
Apium graveolens L. PDR Sup. 3
Brassica oleracea L. PDR Sup. 3
B. rapa L. PDS Index
Cyclamen persicum Mill. PDS Index
Daucus carota L. PDS Index
Hyacinthus orientalis L. PDS Index
Iris germanica L. PDR Sup. 37
Lactuca sativa L. PDR Sup. 3
Lycopersicon esculentum Mill. Ohio Agr. Ext. Ser. SB-10
Rheum raphaniticum L. USDA Dept. Bull. 1366
Solanum tuberosum L. PDR Sup. 3
Zantedeschia sp. PDS Index

Erwinia chrysanthemi Burkholder et al.

Chrysanthemum morifolium (Ramat.) Hemsl. Phytopath. 43:522

Erwinia dissolvens (Rosen) Burkh.

Zea mays L. Plant Disease and Insect Notes 3:(1). Ohio Agr.
 Ext. Ser. 1932

Erwinia tracheiphila (E. F. Sm.) Holland

Cucumis melo L. PDR Sup. 3
C. sativus L. PDR Sup. 3
Cucurbita maxima Duchesne PDR Sup. 3
C. pepo L. PDR Sup. 3

Pseudomonas alliicola Starr & Burkh.

Allium cepa L. PDS Index

Pseudomonas angulata (Fromme & Murray) Holland

Nicotiana tabacum L. PDR 15:155

Pseudomonas apii Jagger

Apium graveolens L. SU

Pseudomonas atrofaciens (McCull.) F. L. Stev.

Triticum aestivum L. SU

Pseudomonas berberidis (Thornberry & H. W. Anders.) Stapp

Berberis thunbergii DC. Jour. Agr. Res. 43:30

Pseudomonas cannae (Bryan) Stapp

Canna generalis Bailey PDS Index

Pseudomonas caryophylli Burkh.

Dianthus caryophyllus L. Ohio Agr. Exp. Sta. Bull. 674

Pseudomonas coronafaciens (Elliott) F. L. Stev.

Avena sativa L. SU

**Pseudomonas coronafaciens atropurpurea* (Reddy & Godkin) Stapp

**Bromus inermis* Leyss. SU

Pseudomonas delphinii (E. F. Sm.) Stapp

Delphinium sp. SU

Pseudomonas erodii Lewis

Pelargonium sp. SU

Pseudomonas glycinea Coerper

Glycine max (L.) Merr. SU

Pseudomonas lachrymans (E. F. Sm. & Bryan) Carsner

Cucumis sativus L. SU

Pseudomonas marginata (McCull.) Stapp

Gladiolus sp. Ohio Agr. Exp. Sta. Bull. 470

Pseudomonas medicaginis Sackett

Medicago sativa L. PDR Sup. 48

Pseudomonas mori (Boyer & Lambert) Stevens

Morus rubra L. SU

Pseudomonas phaseolicola (Burkh.) Dowson

Phaseolus vulgaris L. USDA Tech. Bull. 868

Pseudomonas pisi Sackett

Pisum sativum L. PDR Sup. 67

Pseudomonas rhizoctonia (R. C. Thomas) Burkh.

Lactuca sativa L. Ohio Agr. Exp. Sta. Bull. 359

Pseudomonas striafaciens (Elliott) Starr & Burkh.

Avena sativa L. SU

Pseudomonas syringae Van Hall

Phaseolus lunatus L. USDA Tech. Bull. 868

**Trifolium repens* L. SU

Pseudomonas tabaci (Wolf & Foster) Stevens

Glycine max (L.) Merr. Phytopath. 35:858
Nicotiana tabacum L. SU

Pseudomonas tomato (Okabe) Alstatt

Lycopersicon esculentum Mill. SU

Pseudomonas woodsii (E. F. Sm.) Stevens

Dianthus caryophyllus L. PDR Sup. 65

Xanthomonas campestris (Pam.) Dowson

Brassica oleracea L. SU
B. juncea (L.) Coss. PDS Index
B. rapa L. USDA Yearbook 1906
Raphanus sativus L. PDR Sup. 3

Xanthomonas gummisudans (McCull.) Starr & Burkh.

Gladiolus sp. SU

Xanthomonas hederae (Arn.) Dowson

Hedera helix L. SU

Xanthomonas papavericola (Bryan & McWhorter) Dowson

Papaver rhoeas L. PDS Index
P. somniferum L. PDS Index

Xanthomonas pelargonii (N. A. Brown) Starr & Burkh.

Pelargonium hortorum Bailey SU
P. peltatum Ait. PDS Index

Xanthomonas phaseoli (E. F. Sm.) Dowson

Phaseolus lunatus L. SU
P. vulgaris L. USDA Tech. Bull. 868

Xanthomonas phaseoli *sojense* (Hedges) Starr & Burk.

Glycine max (L.) Merr. SU

Xanthomonas pruni (E. F. Sm.) Dowson

Prunus americana Marsh. PDR Sup. 28

Prunus persica (L.) Batsch SU

Xanthomonas solanacearum (E. F. Sm.) Dowson

Lycopersicon esculentum Mill. SU

Nicotiana tabacum L. PDR Sup. 80

Solanum tuberosum L. USDA Yearbook 1906

Xanthomonas translucens (L. R. Jones, A. G. Johns. & Reddy) Dowson

Hordeum vulgare L. SU

Triticum aestivum L. PDR Sup. 119

Xanthomonas vesicatoria (Doidge) Dowson

Lycopersicon esculentum Mill. SU

ACTINOMYCETALES

Streptomyces scabies (Thaxt.) Waksman & Henrici

Beta vulgaris L. Ohio Agr. Exp. Sta. Bull. 121

Raphanus sativus L. PDS Index

Solanum tuberosum L. SU

CHYTRIDIALES

Physoderma maydis Miyabe

Zea mays L. SU

Synchytrium aecidioides (Pk.) Lagh.

Amphicarpa bracteata (L.) Fern. SU

Synchytrium asari Arth. & Holw.

Asarum canadense L. PDR 25:190

PLASMODIOPHORALES

Plasmodiophora brassicae Wor.

Brassica juncea (L.) Coss. PDS Index

B. oleracea L. SU

B. pekinensis (Lour.) Rupr. PDR Sup. 68

B. rapa L. USDA Yearbook 1906

**Spongospora subterranea* (Wallr.) Lagh.

**Solanum tuberosum* L. SU

SAPROLEGNIALES

Aphanomyces cochlioides Drechs.

Beta vulgaris L. Warren, M.S. Thesis OSU

Aphanomyces euteiches Drechs.

Pisum sativum L. PDR Sup. 61

PERONOSPORALES

Albugo bliti (Biv.-Bern.) Kuntze

Amaranthus hybridus L. Rpt. Geol. Sur. Ohio v.7(1893)

A. retroflexus L. SU

Beta vulgaris L. PDS Index

Albugo candida (Pers. ex Chev.) Kuntze

Arabis sp. SU

Armoracia lapathifolia Gilib. SU

Brassica kaber (DC.) L. C. Wheeler SU
B. nigra (L.) Koch SU
B. oleracea L. PDS Index
Camelina microcarpa Andrzej. PDS Index
C. sativa (L.) Crantz SU
Capsella bursa-pastoris (L.) Medic. SU
Dentaria diphylla Michx. SU
D. laciniata Muhl. SU
Descurainia pinnata (Walt.) Britt. Ohio Nat. 13:27
Iodanthus pinnatifidus (Michx.) Steud. SU
Lepidium campestre (L.) R. Br. Ohio Nat. 13:27
L. virginicum L. SU
Raphanus sativus L. SU
Rorippa islandica (Oeder) Borbas Ohio Nat. 13:27
Sisymbrium officinale (L.) Scop. SU

Albugo ipomoeae-panduratae (Schw.) Swing.

Convolvulus sepium L. SU
Ipomoea hederacea (L.) Jacq. SU
I. pandurata (L.) G.F.W. Mey. SU

Albugo portulacae (DC.) Kuntze

Portulaca oleracea L. SU

Albugo tragopogonis Pers. ex S. F. Gray

Ambrosia artemisiifolia L. Rpt. Geol. Sur. Ohio v.7(1893)
Antennaria plantaginifolia (L.) Hook. SU
Cirsium muticum Michx. PDR Sup. 37
Tragopogon porrifolius L. SU

Bremia lactucae Regel

**Lactuca canadensis* L. Ellett
Lactuca sativa L. SU

Peronospora alta Fckl.

Plantago major L. SU
P. rugelii Dcne. ES

Peronospora arthuri Farl.

Oenothera biennis L. SU

Peronospora corydalis DBy.

Corydalis sempervirens (L.) Pers. 6th Ann. Rpt. Ohio Acad. Sci.

Peronospora destructor (Berk.) Casp.

Allium cepa L. Month. Bull. Ohio Agr. Exp. Sta. 4:76

**Peronospora dicentra* Syd. ex Gaum.

**Dicentra canadensis* (Goldie) Walp. ES

Peronospora effusa (Grev. ex Des.) Ces.

Chenopodium album L. SU

Spinacia oleracea L. PDR Sup. 85

Peronospora ficariae Tul.

Ranunculus sp. 6th Ann. Rpt. Ohio Acad. Sci.

Peronospora floerkeae Kell.

Floerkea proserpinacoides Willd. SU

Peronospora hydrophylli Waite

Hydrophyllum macrophyllum Nutt. 6th Ann. Rpt. Ohio Acad. Sci.

H. virginianum L. 6th Ann. Rpt. Ohio Acad. Sci.

Peronospora manshurica (Naum.) Syd. ex Gaum.

Glycine max (L.) Merr. SU

Peronospora parasitica (Pers.) ex Fr.

**Barbarea vulgaris* R. Br. ES

**Brassica nigra* (L.) Koch Ellett

B. oleracea L. ES

Capsella bursa-pastoris (L.) Medic. SU

**Cardamine hirsuta* L. SU

C. pennsylvanica Muhl. PDR 27:25

Dentaria laciniata Muhl. SU

Iodanthus pinnatifidus (Michx.) Steud. 4th Ann. Rpt. Ohio Acad.
Sci.

Lepidium virginicum L. Ohio Nat. 13:27

Raphanus sativus L. Ohio Exp. Sta. Bull. 214

Peronospora polygoni A. Fisch.

Polygonum convolvulus L. SU

P. cristatum Engelm. & Gray PDS Index

P. scandens L. SU

Peronospora potentillae DBy.

Potentilla sp. 5th Ann. Rpt. Ohio Acad. Sci.

Peronospora sordida Berk. & Br.

Scrophularia marilandica L. SU

Peronospora sparsa Berk.

Rosa sp. (cult.) PDR 37:341

Peronospora tabacina Adam

Nicotiana tabacum L. SU

Peronospora trifoliorum DBy.

Medicago sativa L. SU

Peronospora viciae (Berk.) Casp.

Pisum sativum L. PDR Sup. 67

Phytophthora sp.

Avena sativa L. Snyder, M.S. Thesis OSU

Glycine max (L.) Merr. Suhovecky, Ph.D. Dissertation OSU

Rheum rhaponticum L. PDR Sup. 90

Rhododendron sp. PDR Sup. 110

Phytophthora cactorum (Leb. & Cohn) Schroet.

Lilium sp. PDS Index
Melilotus alba Desr. PDS Index
Paeonia lactiflora Pall. PDS Index
Panax quinquefolius L. USDA Yearbook 1906
Pyrus malus L. SU
Rhododendron maximum L. PDS Index

Phytophthora capsici Leonian

Capsicum frutescens L. PDR Sup. 86

Phytophthora cryptogea Pethyb. & Laff.

Zantedeschia aethiopica Spreng. Bimonth. Bull. Ohio Agr. Exp.
 Sta. 17:138

Phytophthora fragariae Hickman

Fragaria chiloensis (L.) Duchesne SU

Phytophthora infestans (Mont.) DBy.

Solanum tuberosum L. SU
Lycopersicon esculentum Mill. SU

Phytophthora parasitica Dast.

Lycopersicon esculentum Mill. SU

Phytophthora phaseoli Thaxt.

Phaseolus lunatus L. SU

Plasmopara australis (Speg.) Swing.

Enchinocystis lobata (Michx.) T. & G. Rpt. Geol. Sur. Ohio
 v. 7(1893)
Sicyos angulatus L. SU

Plasmopara geranii (Farl.) Berl. & DeT.

Geranium maculatum L. ES

Plasmopara halstedii (Farl.) Berl. & DeT.

Bidens sp. SU
Bidens frondosa L. ES
Erechtites hieracifolia (L.) Raf. Rpt. Geol. Sur. Ohio v.7(1893)
Helianthus annuus L. SU
Rudbeckia laciniata L. SU

Plasmopara pygmaea (Ung.) Schroet.

Anemone canadensis L. Rpt. Geol. Sur. Ohio v.7(1893)

Plasmopara viticola (Berk. & Curt.) Berl. & DeT.

Parthenocissus quinquefolia (L.) Planch. SU
Vitis aestivalis Michx. SU
V. labrusca L. SU
V. labruscana Bailey SU
V. vulpina L. ES

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.

Bryonopsis laciniosa Naud. ES
Citrullus vulgaris Schrad. ES
Coccinia cordifolia Cogn. ES
Cucumis anguria L. ES
C. melo L. ES
C. melo dudaim Naud. ES
C. sativus L. SU
Cucurbita pepo melopepo (L.) Alef. Bot. Gaz. 27:67
C. pepo ovifera (L.) Alef. ES
Echinocystis lobata (Michx.) T. & G. ES
Lagenaria siceraria Standl. ES
Luffa acutangula Roxb. PDS Index
Melothria acabra Naud. PDS Index
Momordica balsamina L. Bot. Gaz. 27:67
M. charantia L. Bot. Gaz. 27:67
Sicyos angulatus L. Bot. Gaz. 27:67
Trichosanthes anguina L. ES

Pythiogeton autossytum Drechs.

Typha latifolia L. PDS Index

Pythium sp.

Melilotus alba Desr. PDS Index
Pelargonium sp. PDR Sup. 73

Pythium aphanidermatum (Edson) Fitz.

Raphanus sativus L. PDS Index

Pythium arrhenomanes Drechs.

Zea mays L. PDS Index

Pythium debaryanum Hesse

Beta vulgaris L. PDR Sup. 26

Brassica oleracea L. PDR Sup. 3

Cucumis sativus L. USDA Dept. Bull. 1366

Lactuca sativa L. USDA Dept. Bull. 1366

Lycopersicon esculentum Mill. USDA Dept. Bull. 1366

Nicotiana tabacum L. PDS Index

Phaseolus vulgaris L. USDA Tech. Bull. 868

Pinus resinosa Ait. BiMonth. Bull. Ohio Agr. Exp. Sta. 12:46

Salvia splendens Sello PDS Index

Spinacia oleracea L. PDR Sup. 86

Pythium helicoides Drechs.

Typha latifolia L. PDS Index

Pythium ultimum Trow

Lycopersicon esculentum Mill. Ohio Agr. Exp. Sta. Bull. 496

Nicotiana tabacum L. Ohio Agr. Exp. Sta. Bull. 496

Apium graveolens L. Ohio Agr. Exp. Sta. Bull. 496

Beta vulgaris L. Ohio Agr. Exp. Sta. Bull. 496

Lactuca sativa L. Ohio Agr. Exp. Sta. Bull. 496

Sclerospora graminicola (Sacc.) Schroet.

Setaria viridis (L.) Beauv. SU

MUCORALES

Choanephora cucurbitarum (Beck. & Rav.) Thaxt.

Cucurbita sp. (squash) Jour. Agr. Res. 8:319

Mucor sp.

Ipomoea batatas (L.) Lam. Althaus, M.S. Thesis OSU

Rhizopus nigricans Ehr. ex Fr.

Fragaria chiloensis (L.) Duchesne PDR Sup. 9
Iopomoea batatas (L.) Lam. Ohio Agr. Exp. Sta. Bull. 214
Prunus persica (L.) Batsch Ellett
Solanum tuberosum L. PDR Sup. 22

Spinellus sp.

Mycena sp. Ellett

Sporodinia grandis Lk.

Boletus sp. SU
Lactarius sp. SU
Strobilomyces strobilaceus Berk. OB

TAPHRINALES

Taphrina caerulescens (Mont. & Desm.) Tul.

Quercus coccinea Muench. SU
Q. velutina Lam. ES

Taphrina communis (Sadeb.) Gies.

Prunus americana Marsh. SU
 This has been reported as *Taphrina pruni* but Mix (Univ. of Kans. Sci. Bull. 33(1949) believes most, if not all, such specimens are *T. communis*.

Taphrina deformans (Berk.) Tul.

Prunus persica (L.) Batsch SU

Taphrina polystichii Mix

Polystichum acrostichoides (Michx.) Schott PDR 25:191

Taphrina potentillae (Farl.) Johans.

Potentilla canadensis L. 6th Ann. Rpt. Ohio Acad. Sci.

Taphrina purpurascens (Ell. & Ev.) Robinson

Rhus copallina L. PDR 25:191

Taphrina sacchari Jenkins

Acer nigrum Michx. PDR Sup. 37

A. saccharum Marsh. PDR Sup. 37

Taphrina virginica Sadeb.

Ostrya virginiana (Mill.) K. Koch PDR 25:191

MYRIANGIALES

Elsinoe ampelina (DBy.) Shear

See *Sphaceloma* a.

Elsinoe veneta (Burk.) Jenkins

See *Sphaceloma necator*

DOTHIDEALES

Cymadothea trifolii (Pers. ex Fr.) Wolf

See *Polythrincium* t.

Dibotryon morbosum (Schw.) Th. & Syd.

Prunus cerasus L. SU

P. domestica L. SU

P. serotina Ehrh. SU

P. virginiana L. Ohio Nat. 13:29

Endothella junci (Fr.) Theiss. & Syd.

Juncus effusus L. PDS Index

Phyllachora graminis (Pers.) Fekl.

- **Bromus ciliatus* L. SU
- Elymus canadensis* L. SU
- E. villosus* Muhl. OB
- E. virginicus* L. ES
- Hystrix patula* Moench. OB

Phyllachora lespedezae (Schw.) Sacc.

- Lespedeza capitata* Michx. SU

Phyllachora luteo-maculata (Schw.) Orton

- Andropogon gerardi* Vitman PDR 25:191

Phyllachora punctum (Schw.) Orton

- Panicum clandestinum* L. SU
- P. latifolium* L. PDR 25:191

Phyllachora vulgata Theiss. & Syd.

- Muhlenbergia mexicana* (L.) Trin. OB

Scorias spongiosa (Schw.) Fr.

- Fagus grandifolia* Ehrh. SU

HEMISPHAERIALES

Asterina gaultheriae Curt.

- Gaultheria procumbens* L. ES

ERYSIPHALES

Apiosporina collinsii (Schw.) Hoehn.

- Amelanchier canadensis* (L.) Medic. SU

Erysiphe aggregata (Pk.) Farl.

Alnus rugosa (Du Roi) Spreng. PDS Index

Erysiphe cichoracearum DC. ex Merat.

Actinomeris alternifolia (L.) DC. SU
Ambrosia artemisiifolia L. SU
A. trifida L. SU
Asclepias syriaca L. SU
Aster cordifolius L. ES
A. ericoides L. ES
A. laevis L. SU
A. macrophyllus L. OB
A. novi-belgii L. SU
A. prenanthoides Muhl. OB
A. puniceus L. SU
A. sagittifolius Wedemeyer ES
A. shortii Lindl. ES
A. simplex Willd. SU
Chrysanthemum morifolium (Ramat.) Hemsl. PDR Sup. 5
Cirsium altissimum (L.) Spreng. SU
Cosmos sp. SU
Cucumis sativus L. ES
Cucurbita maxima Dcne. PDS Index
C. pepo L. PDS Index
Dahlia pinnata Cav. SU
Erechtites hieracifolia (L.) Raf. OB
Eupatorium perfoliatum L. SU
E. purpureum L. SU
Hackelia virginiana (L.) I. M. Johnston ES
Helianthus annuus L. SU
H. strumosus L. OB
H. tuberosus L. SU
Hydrophyllum appendiculatum Michx. SU
H. macrophyllum Nutt. SU
H. virginianum L. ES
Parietaria pennsylvanica Muhl. Ohio Nat. 10:166
Parthenium integrifolium L. SU
Phlox divaricata L. SU
P. paniculata L. SU
**P. stolonifera* Sims Ellett
Pilea pumila (L.) Gray PDR 27:26
Plantago rugelii Dcne. SU
Rudbeckia laciniata L. PDR Sup. 50
Solidago canadensis L. SU
S. flexicaulis L. PDR 27:191
Taraxacum officinale Weber Ohio Nat. 13:28
Valeriana pauciflora Michx. PDR 27:191
Verberna hastata L. SU
V. hybrida Voss PDS Index

V. urticifolia L. SU
Verbesina sp. SU
Vernonia altissima Nutt. Ohio Nat. 13:28
V. fasciculata Michx. SU
Xanthium pennsylvanicum Wallr. OB
Zinnia elegans Jacq. SU

Erysiphe galeopsidis DC.

Chelone glabra L. 7th Ann. Rpt. Ohio Acad. Sci.
Scutellaria lateriflora L. SU
Stachys sp. SU
Stachys palustris L. Ohio Nat. 10:169
S. tenuifolia Willd. OB

Erysiphe graminis DC.

Avena sativa L. PDR Sup. 8
Agropyron repens (L.) Beauv. Sprague
Calamagrostis canadensis (Michx.) Nutt. Sprague
Dactylis glomerata L. Sprague
Hordeum vulgare L. SU
Poa pratensis L. SU
Secale cereale L. SU
Triticum aestivum L. SU

Erysiphe polygoni DC.

**Anemone virginiana* L. ES
Aquilegia canadensis L. SU
Caltha palustris L. SU
Clematis sp. SU
C. virginiana L. ES
Desmodium canescens (L.) DC. Ohio Nat. 10:168
Geranium maculatum L. Ohio Nat. 13:28
Hydrangea macrophylla Ser. PDS Index
H. paniculata Sieb. PDS Index
Liriodendron tulipifera L. ES
Lupinus perennis L. SU
Oenothera biennis L. SU
Phaseolus vulgaris L. PDR Sup. 128
Pisum sativum L. ES
Polygonum aviculare L. SU
P. erectum L. SU
Ranunculus abortivus L. SU
R. acris L. ES
R. recurvatus Poir. 7th Ann. Rpt. Ohio Acad. Sci.
Thalictrum dasycarpum Fisch. & Lall. SU
Trifolium hybridum L. Ellett
T. pratense L. SU

Microsphaera alni DC. ex Wint.

Alnus sp. ES
Apios americana Medic. PDS Index
Betula lenta L. 5th Ann. Rpt. Ohio Acad. Sci.
Campsis radicans (L.) Seem. SU
Carpinus caroliniana Walt. ES
Castanea dentata (Marsh.) Borkh. SU
C. sativa Mill. ES
Cornus alternifolia L. SU
C. racemosa Lam. Ohio Nat. 10:172
Corylus americana Walt. ES
Euonymus atropurpureus Jacq. ES
Gleditsia triacanthos L. SU
Juglans nigra L. SU
Lathyrus palustris L. SU
Ligustrum sp. PDS Index
Lonicera canadensis Bartr. SU
L. dioica L. ES
L. oblongifolia (Goldie) Hook. PDS Index
L. sempervirens L. PDS Index
L. tatarica L. PDS Index
Menispermum canadense L. 5th Ann. Rpt. Ohio Acad. Sci.
**Nemopanthus mucronata* (L.) Trel. OB
Ostrya virginiana (Mill.) K. Koch OB
Platanus occidentalis L. SU
Quercus alba L. SU
Q. coccinea Muench. ES
Q. macrocarpa Michx. ES
Q. muehlenbergii Engelm. ES
Q. robur L. SU
Q. velutina Lam. ES
Sambucus canadensis L. SU
Syringa vulgaris L. SU
Ulmus americana L. SU
Viburnum acerifolium L. SU
V. cassinoides L. SU
V. lentago L. SU
V. prunifolium L. PDS Index

Microsphaera alni *extensa* (Cke. & Pk.) Salm.

Quercus coccinea Muench. Ohio Nat. 10:172
Q. macrocarpa Michx. Ohio Nat. 10:172
Q. rubra L. Ohio Nat. 10:172
Q. velutina Lam. SU

Microsphaeraalni vaccinii (Schw.) Salm.

Catalpa bignonioides Walt. SU
 **Epigaea repens* L. Ellett
Gaylussacia baccata (Wang.) K. Koch ES
Vaccinium corymbosum L. SU
V. macrocarpon Ait. PDS Index
V. oxycoccos L. PDS Index
V. vacillans Torr. SU

Microsphaera diffusa Cke. & Pk.

Desmodium canescens (L.) DC. SU
D. nudiflorum (L.) DC. ES
Lycium halimifolium Mill. PDS Index
Symphoricarpos albus (L.) Blake SU
S. occidentalis Hook. SU
S. orbiculatus Moench. SU

Microsphaera euphorbiae (Pk.) Berk. & Curt.

Euphorbia corollata L. SU

Microsphaera grossulariae (Wallr.) Lev.

Sambucus canadensis L. SU

Microsphaera russellii G. W. Clint.

Oxalis europaea Jord. SU
O. stricta L. SU

Phyllactinia corylea Pers. ex Karst.

Alnus rugosa (Du Roi) Spreng. SU
Carpinus caroliniana Walt. SU
Castanea dentata (Marsh.) Borkh. SU
C. sativa Mill. Ohio Nat. 10:176
Catalpa bignonioides Walt. SU
Celastrus scandens L. SU
Fagus grandifolia Ehrh. SU
Fraxinus americana L. SU
Juglans nigra L. SU
Magnolia acuminate L. SU
Morus rubra L. Ohio Jour. Sci. 21:216
Quercus marilandica Muenchh. ES

Quercus nigra L. PDS Index
Q. rubra L. ES

Phyllactinia guttata (Fr.) Lev.

Crataegus sp. SU

Podosphaera biuncinata Cke. & Pk.

Hamamelis virginiana L. SU

Podosphaera leucotricha (Ell. & Ev.) Salm.

Pyrus malus L. ES

Podosphaera oxycanthae (DC.) DBy.

Crataegus sp. ES
C. crus-galli L. 5th Ann. Rpt. Ohio Acad. Sci.
C. oxycantha L. ES
Prunus sp. (Cult. plum) SU
P. americana Marsh. ES
P. cerasus L. SU
P. persica (L.) Batsch Ellett
P. virginiana L. SU
Pyrus malus L. OB
Spiraea tomentosa L. Ohio Nat. 10:171

Sphaerotheca humuli (DC.) Burr.

Agrimonia eupatoria L. OB
A. striata Michx. 5th Ann. Rpt. Ohio Acad. Sci.
Bidens frondosa L. SU
Erechtites hieracifolia (L.) Raf. SU
**Erigeron annuus* (L.) Pers. OB
Fragaria chiloensis (L.) Duchesne PDR Sup. 1
**Geranium maculatum* L. SU
Gerardia flava L. OB
Geum canadense Jacq. SU
G. verum (Raf.) T. & G. ES
**G. virginianum* L. OB
Hydrophyllum canadense L. PDS Index
Pedicularis lanceolata Michx. 5th Ann. Rpt. Ohio Acad. Sci.
Phlox paniculata L. PDS Index
Prenanthes alba L. SU
P. altissima L. SU

*Prunella vulgaris L. OB
 Rhus glabra L. 5th Ann. Rpt. Ohio Acad. Sci.
 R. typhina L. ES
 Rosa sp. (cult.) SU
 Rubus sp. (blackberry) SU
 Rubus sp. (dewberry) PDS Index
 R. idaeus L. SU
 R. occidentalis L. PDS Index
 R. odoratus L. SU
 Sonchus sp. ES
 Taraxacum officinale Weber SU

Sphaerotheca mors-uvae (Schw.) Berk. & Curt.

Ribes cynosbati L. ES
 R. grossularia L. ES
 R. sativum (Reichb.) Syme ES

Sphaerotheca pannosa Wallr. ex Lev.

Prunus persica (L.) Batsch ES
 Rosa sp. (cult.) ES

Sphaerotheca phytophila Kell. & Sw.

Celtis occidentalis L. SU

Uncinula aceris (DC.) Sacc.

Although reported on Acer in Ohio (PDR 24:191) this report is probably of U. circinata. Uncinula aceris is not found in the United States.

Uncinula circinata Cke. & Pk.

Acer rubrum L. SU
 A. saccharinum L. SU
 A. saccharum Marsh. SU

Uncinula clintonii Pk.

Tilia americana L. SU

Uncinula flexuosa Pk.

- Aesculus glabra* Willd. SU
A. hippocastanum L. SU
 **A. octandra* Marsh. SU

Uncinula geniculata Gerard

- Morus rubra* L. SU

Uncinula macrospora Pk.

- Ulmus americana* L. SU
U. rubra Muhl. SU

Uncinula necator (Schw.) Burr.

- Pathenocissus quinquefolia* (L.) Planch. SU
Vitis sp. (cult.) SU
V. vulpina L. SU

Uncinula parvula Cke. & Pk.

- Celtis occidentalis* L. SU

Uncinula salicis DC. ex Wint.

- Populus deltoides* Marsh. SU
P. tremuloides Michx. SU
Salix cordata Michx. SU
S. discolor Muhl. OB
S. glaucophylloides Fern. SU
S. gracilis Anderss. SU
S. humilis Marsh. Ohio Nat. 10:170
S. nigra Marsh. ES

HYPOCREALES

Balansia hypoxylon (Pk.) Atk.

- Danthonia compressa* Austin Sprague
D. spicata (L.) Beauv. Sprague

**Balansia strangulans* (Mont.) Diehl

**Panicum clandestinum* L. SU

Claviceps microcephala (Wallr.) Tul.

Agrostis alba L. PDS Index

Claviceps purpurea (Fr.) Tul.

Agropyron repens (L.) Beauv. SU

Ammophila breviligulata Fern. SU

Arrhenatherum elatius (L.) Mert. & Koch Sprague

**Avena sativa* L. SU

Bromus sp. SU

Elymus canadensis L. SU

E. villosus Muhl. SU

E. virginicus L. ES

Glyceria sp. Rpt. Geol. Sur. Ohio v.7(1893)

Hordeum vulgare L. SU

Phalaris arundinacea L. SU

Poa pratensis L. 12th Ann. Rpt. Ohio Bd. Agr., p.401 (1857)

Secale cereale L. SU

Triticum aestivum L. SU

Cordyceps capitata (Fr.) Lk.

Elaphomyces anthracinus Vitt. SU

Cordyceps ophioglossoides (Fr.) Lk.

Elaphomyces variegatus Vitt. SU

Epichloe typhina (Fr.) Tul.

Glyceria elongata SU

**G. striata* (Lam.) Hitchc. SU

Sphenopholis pallens (Biehler) Scribn. SU

Gibberella fujikuroi (Saw.) Wr.

See *Fusarium moniliforme*

Gibberella zeae (Schw.) Petch

See *Fusarium graminearum*

Hypocrea latizonata Pk.

Cyathus striatus Hoff. *Mycologia* 3:56

Hypocreopsis tremellicola (Ell. & Ev.) Seaver

Tremella sp. *North Amer. Flora* 3:46

Hypomyces chrysospermus Tul.

See *Sepedonium* c.

Hypomyces ipomoeae (Halst.) Wr.

Ipomoea batatas (L.) Lam. *USDA Yearbook* 1906

Hypomyces lactifluorum (Schw.) Tul.

Lactarius piperatus Fr. OB

Nectria cinnabarina Tode ex. Fr.

Acer negundo L. *BiMonth. Bull. Ohio Agr. Exp. Sta.* 1:294

A. platanoides L. PDS Index

A. pseudoplatanus L. PDS Index

Morus sp. PDS Index

Ribes sativum (Reichb.) Syme *USDA Yearbook* 1906

Nectria galligena Bres.

Juglans sp. PDS Index

Pyrus malus L. PDR Sup. 1

Pseudonectria pachysandricola B.O. Dodge

See *Volutella pachysandrae*

Thyronectria berolinensis (Sacc.) Seaver

Ribes sp. (cult. currant) SU
Ribes sp. (native) PDS Index

SPHAERIALES

Botryosphaeria ribis Gross. & Dug.

Castanea dentata (Marsh.) Borkh. PDS Index
 **Cornus stolonifera* Michx. Ellett
 **Pyrus malus* L. SU
Ribes sp. (cult. currant) ES
 **Salix alba* L. Ellett
 **Salix discolor* Muhl. Ellett

Ceratostomella ulmi Buis.

See *Graphium* u.

Cochliobolus heterostrophus Drechs.

See *Helminthosporium maydis*

Cryptodiaporthe castanea (Tul.) Wehm.

See *Fusicoccum* c.

Cryptosporella umbrina (Jenkins) Jenkins & Wehmeyer

Rosa sp. (cult.) PDR Sup. 90

Cryptosporella viticola Shear

Vitis sp. (cult.) PDR Sup. 1

Diaporthe arctii (Lasch) Nits.

Delphinium ajacis L. SU

Diaporthe batatatis Harter & Field

Ipomoea batatas (L.) Lam. Althaus, M.S. Thesis OSU

Diaporthe oncostoma (Duby) Fckl.

See *Phomopsis* o.

Diaporthe phaseolorum (Cke. & Ell.) Sacc.

See *Phoma subcircinata*

Diaporthe phaseolorum batatatis (Harter & Field) Wehm.

Glycine max (L.) Merr. Ellett

Diaporthe phaseolorum sojæ (Lehman) Wehm.

See *Phomopsis sojæ*

Diaporthe stewartii Harrison

See *Phomopsis* s.

Didymella applanata (Niessl) Sacc.

Rubus idæus L. SU

Didymella macrospora Kleb.

See *Heterosporium iridis*

Endoconidiophora fagacearum Bretz

See *Chalara quercina*

Endoconidiophora fimbriata (Ell. & Halst.) Davidson

Ipomoea batatas (L.) Lam. ES

Endoconidiophora fimbriata platani Walter

Platanus acerifolia (Ait.) Willd. PDS Index

Endothia parasitica (Murr.) P. J. and H. W. Anders.

Castanea dentata (Marsh.) Borkh. SU
C. sativa Mill. PDS Index

Glomerella cingulata (Ston.) Spauld. & Schrenk

Camellia japonica L. New Jer. Nurs. Dis. Notes 14:32
Capsicum frutescens L. PDR 25:192
Cyclamen persicum Mill. PDS Index
Cydonia oblonga Mill. Ohio Agr. Exp. Sta. Bull. 214
Lathyrus odoratus L. PDS Index
Ligustrum sp. ES
Prunus persica (L.) Batsch PDR 35:465
Pyrus malus L. SU
Rubus idaeus L. Phytopath. 17:769
R. occidentalis L. PDR Sup. 60
Symphoricarpos albus (L.) Blake Mycologia 23:159

Glomerella nephrolepis Faris

Nephrolepis exaltata (L.) Schott PDS Index

Gnomonia caryae Wolf

See *Gloeosporium* c.

Gnomonia quercina Kleb.

See *Gloeosporium* q.

Gnomonia leptostyla (Fr.) Ces. & DeN.

See *Marssonina juglandis*

Gnomonia ulmea (Schw. ex Fr.) Thuem.

See *Gloeosporium* u.

Gnomonia veneta (Sacc. & Speg.) Kleb.

See *Gloeosporium nervisequum*

Gnomoniella coryli (Batsch ex Fr.) Sacc.

Corylus americana Walt. SU

Guignardia aesculi (Pk.) V.B. Stewart

See *Phyllosticta paviae*

Guignardia bidwellii (Ell.) Viala & Ravaz

See *Phyllosticta viticola*

Guignardia rhodora (Cke.) B.H. Davis

See *Phyllosticta maxima*

Leptosphaeria avenaria Weber

See *Septoria avenae*

Leptosphaeria coniothyrium (Fckl.) Sacc.

See *Coniothyrium fuckelii*

Linospora gleditsiae J. H. Miller & Wolf

Gleditsia triacanthos L. SU

Mycosphaerella colorata (Pk.) Earle

See *Phyllosticta kalmicola*

Mycosphaerella columbi Rehm

Plantago rugelii Dcne. SU

Mycosphaerella effigurata (Schw.) House

See *Piggotia fraxini*

See *Cylindrosporium fraxini*

Mycosphaerella fragariae (Tul.) Lindau

See *Ramularia tulasnei*

Mycosphaerella fraxinicola (Schw.) House

Fraxinus americana L. SU

Mycosphaerella gaultheriae (Cke. & Ell.)

Gaultheria procumbens L. SU

Mycosphaerella ligulicola Baker, Dimock and Davis

See *Ascochyta chrysanthemi*

Mycosphaerella linorum (Wr.) Garcia Rada

See *Septoria linicola*

Mycosphaerella liriodendri (Cke.) Woron.

See *Phyllosticta liriodendrica*

Mycosphaerella pomi (Pass.) Lindau

See *Phoma p.*

Mycosphaerella ribis (Fckl.) Feltg.

See *Septoria r.*

Mycosphaerella rosicola B. H. Davis

See *Cercospora r.*

Mycosphaerella rosigena (Ell. & Ev.) Lindau

Rosa sp. (cult.) SU

Mycosphaerella rubi Roark

See *Septoria r.*

Mycosphaerella sentina (Fckl.) Schroet.

See *Septoria piricola*

Mycosphaerella solani (Ell. & Ev.) Wr.

Solanum dulcamara L. PDS Index

Mycosphaerella stigmina-platani Wolf

See *Stigmina p.*

Mycosphaerella ulmi Kleb.

See *Phleospora ulmi* (Fr.) Wallr.

Nummularia discreta (Schw.) Tul.

Amelanchier canadensis (L.) Medic. PDS Index
Pyrus malus L. ES

Ophiobolus graminis Sacc.

Triticum aestivum L. SU

Physalospora obtusa (Schw.) Cke.

See *Sphaeropsis malorum*

Pleospora sp.

Tropaeolum majus L. PDS Index

Pyrenophora avenae Ito & Kurib.

See *Helminthosporium a.*

Pyrenophora bromi Drechs.

See *Helminthosporium b.*

Pyrenophora teres Drechs.

See *Helminthosporium t.*

Rosellinia necatrix (Prill.) Berl.

Vitis sp. (cult.) PDR Sup. 1

Sphaerulina rubi Demaree & M. S. Wilcox

See *Cylindrosporium r.*

Ustulina deusta (Hoffm. ex Fr.) Petr.

Fagus grandifolia Ehrh. PDR 25:193

Quercus sp. PDR 25:193

Valsa leucostoma Pers. ex Fr.

See *Cytospora l.*

Valsa nivea Hoffm. ex Fr.

Populus grandidentata Michx. SU

Venturia inaequalis (Cke.) Wint.

See *Fusicladium dendriticum*

Venturia orbicula (Schw.) Cke. & Pk.

Quercus muehlenbergii Engelm. SU

Q. prinus L. SU

Venturia pyrina Aderh.

See *Fusicladium p.*

Xylaria sp.

Pyrus malus L. ES

Xylaria hypoxylon L. ex Grev.

Crataegus sp. PDS Index

PHACIDIALES

Coccomyces hiemalis Higgins

See *Cylindrosporium padi*

Coccomyces lutescens Higgins

See *Cylindrosporium* l.

Coccomyces prunophorae Higgins

See *Cylindrosporium* p.

Elytroderma deformans (Weir) Darker

Pinus ponderosa Dougl. PDR 16:29

Hypoderma lethale Dearn.

Pinus rigida Mill. PDR 16:30

Hypoderma hedgcockii Dearn.

Pinus virginiana Mill. PDR 16:29

Hypodermella sp.

Pinus virginiana Mill. PDS Index

Lophodermium pinastri (Schrad. ex Fr.) Chev.

Pinus albicaulis Engelm. PDS Index
P. contorta latifolia Engelm. PDR Sup. 73
P. monticola Dougl. PDS Index
P. strobus L. PDS Index

Rhytisma acerinum (Pers.) ex Fr.

Acer platanoides L. SU
A. rubrum L. SU
A. saccharinum L. SU
A. saccharum Marsh. PDS Index

Rhytisma concavum Ell. & Kell.

Ilex verticillata (L.) Gray SU

Rhytisma punctatum (Pers.) ex Fr.

Acer saccharum Marsh. SU

**Rhytisma salicinum* Pers. ex Fr.

**Salix lucida* Muhl. OB

Rhytisma vaccinii Schw. ex Fr.

Vaccinium stramineum L. SU

HELOTIALES

Atropellis tingens Lohman & Cash

Pinus banksiana Lamb. Jour. Forest. 41:42
P. contorta Loud. Jour. Forest. 41:42
P. densiflora Sieb. & Zucc. Jour. Forest. 41:42
P. ponderosa Dougl. Jour. Forest. 41:42
P. rigida Mill. Jour. Forest. 41:42
P. sylvestris L. Jour. Forest. 41:42
P. virginiana Mill. Jour. Forest. 41:42

Cenangium ferruginosum Fr.

Pinus griffithii McClelland Ohio Agr. Exp. Sta. Bull. 470
P. strobus L. ES

Dasyscypha ellisiana (Rehm) Sacc.

Pinus nigra Arnold PDS Index

Diplocarpon earliana (Ell. & Ev.) Wolf

See *Marssonina fragariae*

Diplocarpon rosae Wolf

See *Actinonema r.*

Fabraea dehni (Rab.) Nannf.

Potentilla canadensis L. ES

The Plant Disease Index does not record this as a host of
F. dehni. Possibly this is *P. norvegica*.

Potentilla norvegica L. SU

Fabraea maculata Atk.

See *Entomosporium m.*

Monilinia fructicola (Wint.) Honey

Amelanchier sp. PDR Sup. 11

Prunus americana Marsh. PDS Index

P. armeniaca L. PDR Sup. 1

P. avium L. SU

P. cerasus L. SU

P. serotina Ehrh. SU

P. triloba Lindl. SU

Pyrus communis L. PDR Sup. 1

P. malus L. PDR Sup. 1

Pezizella oenotherae (Cke. & Ell.) Sacc.

Fragaria chiloensis (L.) Duchesne PDS Index

Rubus sp. PDS Index

Rubus occidentalis L. PDS Index

Pseudopeziza medicaginis (Lib.) Sacc.

Medicago sativa L. SU

Pseudopeziza ribis Kleb.

See *Gloeosporium* r.

Pseudopeziza trifolii (Biv.-Bern.) Fckl.

Trifolium pratense L. SU

Pyrenopeziza medicaginis Fckl.

See *Sporonema phacidioides*

Roesleria hypogaea Thuem. & Pass.

Vitis sp. (cult.) USDA Dept. Bull. 1366

Sclerotinia sp.

Apium graveolens L. PDR Sup. 3

**Erigeron annuus* (L.) Pers. Ellett

**E. canadensis* L. Ellett

Probably *S. trifoliorum* on the above two hosts.

Tulipa sp. PDR Sup. 11

Sclerotinia homeocarpa F. T. Bennett

Agrostis alba palustris (Huds.) Pers. Ohio Agr. Exp. Sta.
Bull. 725

Sclerotinia sclerotiorum (Lib.) DBy.

Allium cepa L. PDR 17:22

**Antirrhinum majus* L. Ellett

Apium graveolens L. PDR Sup. 26

Aquilegia sp. PDR Sup. 86

A. vulgaris L. PDS Index

Brassica oleracea L. PDS Index

Calendula officinalis L. PDS Index

Coreopsis grandiflora Hogg PDR 17:22

C. tinctoria Nutt. PDR 17:22

Daucus carota L. PDR Sup. 16
 Delphinium elatum L. PDS Index
 D. grandiflorum L. PDS Index
 D. hybridum Hort. PDS Index
 *Forsythia intermedia Zabel SU
 Fragaria chiloensis (L.) Duchesne PDS Index
 Lactuca sativa L. SU
 Lycopersicon esculentum Mill. SU
 Paeonia lactiflora Pall. PDS Index
 Panax quinquefolius L. Jour. Agr. Res. 5:291
 Phaseolus vulgaris L. PDR Sup. 10

Sclerotinia trifoliorum Eriks.

Medicago sativa L. SU
 Plantago lanceolata L. PDS Index
 Trifolium pratense L. Month. Bull. Ohio Agr. Exp. Sta. 3:241

Sclerotinia smilacina Durand

Panax quinquefolius L. ES

Seaverinia geranii (Seaver & Horne) Whet.

Geranium maculatum L. PDR 37:374

Septotinia podophyllum Whet.

See *Septogloeum* p.

Stannaria americana Mass. & Morg.

Equisetum hyemale L. SU

Stromatinia gladioli (Drayton) Whet.

Gladiolus sp. BiMonth. Bull. Ohio Agr. Exp. Sta. 16:71

Tympanis sp.

Pinus resinosa Ait. PDS Index

USTILAGINALES

Cintractia junci (Schw.) Trel.

Juncus tenuis Willd. SU

Doassansia sagittariae (Westend.) Fisch.

Sagittaria latifolia Willd. OB

S. sagittifolia L. Fischer

Entyloma australe Speg.

Physalis lanceolata Michx. SU

Entyloma compositarum Farl.

Ambrosia trifida L. SU

Rudbeckia laciniata L. SU

**Entyloma eryngii* (Cda.) DBy.

**Sanicula canadensis* L. Ellett

Entyloma floerkeae Holw.

Floerkea proserpinacoides Willd. SU

Entyloma lobeliae Farl.

Lobelia inflata L. SU

Entyloma menispermii Farl. & Trel.

Menispermum canadense L. SU

Entyloma nymphaeae (Cunn.) Setch.

Nymphaea odorata Ait. 4th Ann. Rpt. Ohio Acad. Sci.

Graphiola phoenicis (Moug.) Poit.

Phoenix dactylifera L. SU

Melanopsichium pennsylvanicum Hirschh.

Polygonum hydropiperoides Michx. SU

P. lapathifolium L. PDS Index

Schizonella melanogramma (DC.) Schroet.

Carex pennsylvanica Lam. Fischer

Sorosporium cenchri Henn.

Panicum dichotomiflorum Michx. SU

Sorosporium confusum Jacks.

Aristida dichotoma Michx. SU

Sorosporium ellisii Wint.

**Andropogon scoparius* Michx. SU

A. virginicus L. PDR 25:196

Sphacelotheca hydropiperis (Schum.) DBy.

Polygonum sagittatum L. SU

**Sphacelotheca occidentalis* (Seym.) Clint.

**Andropogon scoparius* Michx. SU

Sphacelotheca reiliana (Kuhn) Clint.

Sorghum vulgare Pers. SU

Zea mays L. SU

**Sphacelotheca seymouriana* Clint.

**Andropogon gerardi* Vitm. SU

**A. virginicus* L. SU

Sphacelotheca sorghi (Ik.) Clint.

Sorghum vulgare Pers. SU

Tilletia caries (DC.) Tul.

Triticum aestivum L. Fischer

Tilletia corona Scribn.

Leersia virginica Willd. SU

Tilletia foetida (Wallr.) Liro

Triticum aestivum L. SU

**Tilletia maclagani* (Berk.) Clint.

**Panicum virgatum* L. SU

Tilletia pallida G. W. Fisch.

Agrostis canina L. Fischer

**Urocystis agropyri* (Preuss) Schroet.

**Elymus riparius* Wieg. Ellett

Urocystis anemones (Pers.) Wint.

**Anemone quinquefolia* L. SU

Hepatica acutiloba DC. SU

H. americana (DC.) Ker Fischer

Urocystis carcinodes (Berk. & Curt.) Fisch. v. Waldh.

Cimicifuga racemosa (L.) Nutt. SU

Urocystis colchici (Schlecht.) Rabenh.

Allium cepa L. SU

Colchicum autumnale L. PDS Index

Urocystis erythronii Clint.

Erythronium americanum Ker Fischer

Urocystis occulta (Wallr.) Rabenh.

Secale cereale L. SU

**Ustilago anomala* Kze.

**Polygonum scandens* L. Collected by Tom Campbell

Ustilago avenae (Pers.) Rostr.

Arrhenatherum elatius (L.) Mert. & Koch SU

Avena sativa L. SU

Hordeum vulgare L. SU

Ustilago crameri Korn.

Setaria italica (L.) Beauv. SU

Ustilago heufleri Fckl.

Erythronium sp. SU

E. americanum Ker SU

Ustilago hordei (Pers.) Lagerh.

Avena sativa L. SU

Hordeum vulgare L. SU

Ustilago maydis (DC.) Cda.

**Euchlaena mexicana* Schrad. SU

Zea mays L. SU

Ustilago neglecta Niessl

Setaria glauca (L.) Beauv. SU

**S. viridis* (L.) Beauv. OB

Ustilago nuda (Jens.) Rostr.

Hordeum vulgare L. SU
Triticum aestivum L. SU
T. spelta L. SU

Ustilago oxalidis Ell. & Tracy

Oxalis sp. PDS Index

**Ustilago parlatorei* Fisch. v. Waldh.

**Rumex altissimus* Wood SU

Ustilago residua Clint.

Danthonia spicata (L.) Beauv. Fischer

Ustilago sphaerogena Burr.

Echinochloa crusgalli (L.) Beauv. Fischer

Ustilago striiformis (Westend.) Niessl

Andropogon virginicus L. PDR 25:196
Calamagrostis canadensis (Michx.) Beauv. Fischer
 **Dactylis glomerata* L. SU
Phleum pratense L. SU
Poa pratensis L. SU

Ustilago syntherismae (Schw.) Pk.

Digitaria sanguinalis (L.) Scop. SU

Ustilago utriculosa (Nees) Ung.

Polygonum pennsylvanicum L. SU
P. punctatum Ell. PDR 25:196

**Ustilago violacea* (Pers.) Fekl.

**Silene* sp. Ellett

UREDINALES

**Aecidium tithymali* Arth.

**Euphorbia commutatus* Engelm. O,I SU

Cerotelium dicentrae (Trel.) Mains & Anders.

Dicentra cucullaria (L.) Bernh. O,I SU

Chrysomyxa pyrolae (DC.) Rostr.

Pyrola elliptica Nutt. II,III SU

P. rotundifolia L. II,III SU

Coleosporium campanulae (Pers.) Lev.

Pinus rigida Mill. O,I SU

Campanula americana L. II,III SU

**Lysimachia quadrifolia* L. II,III SU

Coleosporium delicatulum (A. & K.) Hedgc. & Long.

Solidago graminifolia (L.) Salisb. II,III SU

Coleosporium elephantopodis (Schw.) Thum.

Elephantopus carolinianus Willd. II,III SU

Coleosporium helianthi (Schw.) Arth.

Pinus echinata Mill. O,I PDS Index

P. virginiana Mill. O,I PDR 17:22

Helianthus doronicoides Lam. II,III PDR 17:22

H. microcephalus T. & G. II,III PDR 17:23

H. tuberosus L. II,III SU

Coleosporium inconspicuum (Long) Hedgc. & Long.

Pinus echinata Mill. O,I PDS Index

P. palustris Mill. O,I PDS Index

P. virginiana Mill. O,I PDS Index

Coreopsis major Walt. II,III PDR 17:23

C. tinctoria Nutt. II,III PDS Index

Coleosporium ipomoeae (Schw.) Burr.*Ipomoea pandurata* (L.) G. F. W. Mey. II,III ES*Coleosporium solidaginis* (Schw.) Thum.

Pinus resinosa Ait. O,I SU
P. rigida Mill. O,I SU
Aster ciliolatus Lindl. II,III PDR 17:25
A. cordifolius L. II,III SU
A. ericoides L. II,III SU
A. lateriflorus (L.) Britt. II,III OB
A. lowrieanus Porter II,III SU
A. macrophyllus L. II,III SU
A. novae-angliae L. II,III SU
A. praealtus Poir. II,III PDR 17:25
A. prenanthoides Muhl. II,III SU
A. puniceus L. II,III SU
A. simplex Willd. II,III PDR 17:25
A. undulatus L. II,III PDR 17:26
Callistephus chinensis Nees II,III SU
Solidago bicolor L. II,III PDR 17:26
S. caesia L. II,III SU
S. canadensis L. II,III SU
S. curtisii T. & G. II,III PDR 17:26
S. flexicaulis L. II,III SU
S. gigantea Ait. II,III SU
S. juncea Ait. II,III PDR 17:26
S. nemoralis Ait. II,III PDR 17:26
S. patula Muhl. II,III SU
S. riddellii Frank II,III SU
S. roanensis Porter II,III PDR 17:26
S. rugosa Ait. II,III ES
S. speciosa Nutt. II,III PDR 17:26
S. ulmifolia Muhl. II,III SU

Coleosporium vernoniae Berk. & Curt.

Pinus echinata Mill. O,I PDR 17:21
P. mugo Turra O,I PDR 17:21
P. nigra Arnold O,I PDR 17:21
P. ponderosa Dougl. O,I OB
P. rigida Mill. O,I SU
P. scopulorum (Engelm.) Lemm. O,I OB
P. sylvestris L. O,I PDR 17:21
Vernonia altissima Nutt. II,III SU
V. fasciculata Michx. II,III SU
V. glauca (L.) Willd. II,III PDR 17:21
V. noveboracensis (L.) Michx. II,III ES

Coleosporium viburni Arth.

Viburnum dentatum L. II,III PDR 17:27

Cronartium comandrae Pk.

Comandra umbellata (L.) Nutt. II,III Arthur

Cronartium comptoniae Arth.

Pinus mugo Turra O,I PDS Index
P. nigra Arnold O,I Arthur
P. ponderosa Dougl. O,I Arthur
P. sylvestris L. O,I SU
Comptonia peregrina (L.) Coult. II,III PDS Index

Cronartium cerebrum Hedge. & Long

Pinus echinata Mill. USDA Tech. Bull. 978
P. rigida Mill. O,I ES
P. virginiana Mill. O,I SU
Quercus coccinea Muenchh. II,III ES
Q. imbricaria Michx. II,III ES
Q. rubra L. II,III SU

Cronartium ribicola Fischer

Pinus strobus L. O,I SU
Ribes cynosbati L. II,III PDR 26:79
R. nigrum L. II,III SU

Frommea obtusa (Str.) Arth.

Potentilla canadensis L. O,I,II,III SU

Gymnoconia peckiana (Howe) Trotter

Rubus spp. O,I,III SU
R. allegheniensis Porter O,I,III SU
R. occidentalis L. O,I,III SU

Gymnosporangium bisepatum Ellis

Amelanchier canadensis (L.) Medic. O,I SU

Gymnosporangium clavipes Cke. & Pk.

Crataegus crus-galli L. O,I SU
Pyrus communis L. O,I PDR Sup. 1
 Probably *G. globosum* on this host.
P. malus L. O,I SU
Juniperus virginiana L. III SU

Gymnosporangium corniculans Kern

Amelanchier canadensis (L.) Medic. O,I SU

Gymnosporangium globosum Farl.

Crataegus calpodendron (Ehrh.) Medic. O,I Arthur
C. crus-galli L. O,I Arthur
C. mollis (T. & G.) Scheele O,I SU
C. pruinosa (Wendl.) K. Koch O,I North Amer. Flora 7:206
C. punctata Jacq. O,I SU
Pyrus communis L. O,I USDA Dept. Bull. 1366
Juniperus virginiana L. III SU

Gymnosporangium juniperi-virginianae Schw.

Pyrus coronaria L. O,I SU
P. ioensis (Wood) Bailey O,I SU
P. malus L. O,I SU
Juniperus virginiana L. III SU

Gymnosporangium nidus-avis Thaxt.

Amelanchier canadensis (L.) Medic. O,I SU
Juniperus virginiana L. III Ohio Nat. 13:29

Hyalopsora polypodii (Pers.) Magn.

Cystopteris fragilis (L.) Bernh. II,III Arthur

Kuehneola uredinis (Lk.) Arth.

Rubus sp. (cult. blackberry) O,I,II,III ES
R. allegheniensis Porter O,I,II,III SU

Kunkelia nitens (Schw.) Arth.

Rubus allegheniensis Porter I SU
R. canadensis L. I SU
R. flagellaris Willd. I SU
R. occidentalis L. I SU

Melampsora abietis-canadensis (Farl.) C.A. Ludwig

**Tsuga canadensis* (L.) Carr. O,I SU
Populus grandidentata Michx. II,III SU
P. tremuloides Michx. II,III SU

Melampsora abietis-capraearum Tubeuf.

Salix amygdaloides Anderss. II,III SU
S. cordata Muhl. II,III SU
S. fragilis L. II,III ES
S. interior Rowlee II,III North Amer. Flora 7:669
S. nigra Marsh. II,III SU

Melampsora bigelowii Thum.

Salix amygdaloides Anderss. II,III SU
S. nigra Marsh. II,III PDR 25:194

Melampsora medusae Thum.

**Populus balsamifera* L. II,III SU
P. deltoides Marsh. II,III SU
P. tremuloides Michx. II,III SU

Phragmidium americanum (Pk.) Diet.

Rosa sp. O,I,II,III SU
R. setigera Michx. O,I,II,III SU

Phragmidium disciflorum (Tode) James

Rosa sp. O,I,II,III ES

Phragmidium potentillae (Pers.) Karst.

Potentilla canadensis L. O,I,II,III SU
 **P. simplex* Michx. O,I,II,III SU

Phragmidium speciosum (Fr.) Cke.

Rosa sp. O,I,II,III PDR Sup. 63

Phragmidium subcorticinum (Schr.) Wint.

Rosa sp. (cult.) O,I,II,III SU

Pileolaria toxicodendri (Berk. & Rav.) Arth.

Rhus radicans L. O,I,II,III SU

Puccinia andropogonis Schw.

**Amphicarpa bracteata* (L.) Fern. O,I SU

Comandra umbellata (L.) Nutt. O,I SU

**Polygala senega* L. O,I ES

Andropogon scoparius Michx. II,III SU

Puccinia anemones-virginianae Schw.

Anemone virginiana L. III Arthur

Puccinia angustata Pk.

Lycopus sp. O,I PDR 25:195

Eriophorum sp. II,III ES

**E. virginicum* L. II,III OB

Scirpus atrovirens Muhl. II,III SU

S. cyperinus (L.) Kunth II,III SU

S. fluviatilis (Torr.) Gray II,III SU

Puccinia anomala Rostr.

Hordeum vulgare L. II,III SU

Puccinia antirrhini D. & H.

Antirrhinum majus L. II,III SU

Puccinia argentata (Schultz) Wint.

Impatiens capensis Meerb. II,III SU

Puccinia asparagi DC.

- **Allium cepa* L. O,I,II,III SU
Asparagus officinalis L. O,I,II,III SU

Puccinia asteris Duby

- Aster cordifolius* L. III SU
A. ericoides L. III SU
A. macrophyllus L. III SU
A. novae-angliae L. III SU
A. prenanthoides Muhl. III SU
A. simplex Willd. III SU
A. tradescanti L. III SU

Puccinia bardanae (Wallr.) Cda.

- Arctium minus* (Hill) Bernh. O,I,II,III Arthur
A. lappa L. O,I,II,III SU

Puccinia bolleyana Sacc.

- Sambucus canadensis* L. O,I SU
Carex comosa Boott II,III SU
C. frankii Kunth II,III SU
 **C. lupulina* Muhl. II,III SU
C. lurida Wahl. II,III SU
C. trichocarpa Muhl. II,III Arthur

Puccinia canaliculata (Schw.) Lagerh.

- Cyperus esculentus* L. II,III Arthur
C. strigosus L. II,III Arthur

Puccinia cannae (Wint.) Henn.

- Canna generalis* Bailey II,III PDS Index

Puccinia caricis grossulariata Arth.

- Ribes americanum* Mill. O,I SU
R. cynosbati L. O,I SU
 **R. hirtellum* Michx. O,I SU
R. oxycanthoides L. O,I SU
Carex squarrosa L. II,III SU
 **C. torta* Boott II,III SU

Puccinia caricis uniporula (Orton) Arth.

Carex hirtifolia Mackenz. II,III SU
C. virescens Muhl. II,III Arthur

Puccinia caricis urticata (Kern) Arth.

Urtica gracilis Ait. O,I SU
Carex emoryi Dewey II,III SU
C. lacustris Willd. II,III SU

Puccinia chrysanthemi Roze

Chrysanthemum morifolium (Ramat.) Hemsl. II,III ES

Puccinia circaeae Pers.

Circaea quadrisulcata (Maxim.) Franch. & Sav. O,III SU

Puccinia cnici Mart.

Cirsium vulgare (Savi) Tenore O,I,II,III SU

Puccinia convolvuli (Pers.) Cast.

Convolvulus sepium L. O,I,II,III SU

Puccinia coronata Cda.

Rhamnus alnifolia L'Her. O,I SU
R. lanceolata Pursh. O,I SU
Avena sativa L. II,III SU

Puccinia cyperi Arth.

Erigeron annuus (L.) Pers. O,I SU
 **E. strigosus* Muhl. O,I Ellett
Cyperus strigosus L. II,III ES

Puccinia difformis Kunze

Galium aparine L. O,I,III Arth.

Puccinia eatoniae Arth.

Ranunculus abortivus L. O,I SU
Sphenopholis pallens (Biehler) Scribn. II,III SU

Puccinia eleocharidis Arth.

Eupatorium perfoliatum L. O,I SU

Puccinia emaculata Schw.

Panicum capillare L. II,III SU

Puccinia erigeniae (Orton) Arth.

Erigenia bulbosa (Michx.) Nutt. O,I,III SU

Puccinia extensicola asteris (Thum.) Arth.

Aster cordifolius L. O,I PDR 27:26
A. macrophyllus L. O,I SU
A. sagittifolius Wedemeyer O,I SU
A. shortii Lindl. O,I SU
A. simplex Willd. O,I SU
A. tradescanti L. O,I SU

Puccinia extensicola euthamii Arth.

Solidago graminifolia (L.) Salisb. O,I SU
Carex scoparia Schk. II,III SU

Puccinia extensicola erigerontis Arth.

Erigeron annuus (L.) Pers. O,I SU
E. canadensis L. O,I OB
E. philadelphicus L. O,I SU
E. pulchellus Michx. O,I ES

Puccinia extensicola hydnoidea (Berk. & Curt.) Arth.

Dirca palustris L. O,I SU

Puccinia extensicola oenotherae (Mont.) Arth.

Oenothera biennis L. O,I SU
Carex lanuginosa Michx. II,III Arthur
C. trichocarpa Muhl. II,III SU

Puccinia extensicola solidaginis (Schw.) Arth.

Solidago caesia L. O,I SU
S. canadensis L. O,I SU
S. flexicaulis L. O,I SU
S. rigida L. O,I SU
Carex stipata Muhl. II,III SU
C. vulpinoidea Michx. II,III Arthur
Dulichium arundinaceum (L.) Britt. II,III Arthur

**Puccinia flaveriae* Jacks.

Calendula officinalis L. III SU

**Puccinia fraseri* Arth.

Hieracium venosum L. III SU

**Puccinia gentianae* (Strauss) Lk.

Gentiana andrewsii Griseb. O,I,II,III SU

Puccinia graminis Pers.

Berberis vulgaris L. O,I SU
Agropyron repens (L.) Beauv. II,III SU
Agrostis alba L. II,III SU
Avena sativa L. II,III SU
Bromus secalinus L. II,III SU
Calamagrostis canadensis (Michx.) Beauv. II,III ES
Cinna arundinacea L. II,III SU
Dactylis glomerata L. II,III SU
Hordeum jubatum L. II,III ES
H. vulgare L. II,III SU
Elymus virginicus L. II,III ES
Phleum pratense L. II,III SU
Poa compressa L. II,III PDR 25:195
P. pratensis L. II,III PDR 25:195
Secale cereale L. II,III SU
Triticum aestivum L. II,III SU

Puccinia helianthi Schw.

Helianthus annuus L. O,II,III SU
H. decapetalus L. O,I,II,III SU
H. divaricatus L. O,I,II,III SU
H. giganteus L. O,I,II,III SU
H. grosseserratus Martens O,I,II,III SU
H. hirsutus Raf. O,I,II,III SU
H. mollis Lam. O,I,II,III SU
H. strumosus L. O,I,II,III SU
**H. trachelifolius* Mill. O,I,II,III SU
H. tuberosus L. O,I,II,III SU

Puccinia heterospora Berk. & Curt.

Sida spinosa L. III SU

Puccinia heucherae (Schw.) Diet.

Heuchera americana L. III SU
Mitella diphylla L. III SU
Saxifraga virginensis Michx. III ES

Puccinia hieracii (Schum.) Mart.

Taraxacum erythrospermum Andr. O,I,II,III SU
T. officinale Weber O,I,II,III SU

Puccinia hyssopi Schw.

Agastache nepetoides (L.) Ktze. III SU

**Puccinia investita* Schw.

Gnaphalium obtusifolium L. O,I,III SU

Puccinia iridis (DC.) Wallr.

**Iris dichotoma* Pall. II,III SU
I. fulva Ker II,III PDS Index

Puccinia jussiaeae Speg.

Ludwigia palustris (L.) Ell. O,I,III Arthur

Puccinia kuhniae Schw.

Kuhnia eupatorioides L. O,I,II,III SU

Puccinia limosae Magn.

Carex limosa L. II,III Arthur

Puccinia lobeliae Pk.

Lobelia siphilitica L. III ES

Puccinia malvacearum Bert.

Althaea rosea Cav. III SU

Malva rotundifolia L. III SU

Puccinia mariae-wilsoni G.W. Clint.

Claytonia virginica L. O,I,III SU

Puccinia marylandica Lindr.

Sanicula sp. O,I,II,III SU

Puccinia menthae Pers.

Blephilia ciliata (L.) Benth. O,I,II,III SU

B. hirsuta (Pursh) Benth. O,I,II,III SU

Cunila origanoides (L.) Britt. O,I,II,III SU

Mentha arvensis L. O,I,II,III SU

M. spicata L. O,I,II,III SU

Monarda clinopodia L. O,I,II,III SU

M. fistulosa L. O,I,II,III SU

Pycnanthemum flexuosum (Walt.) BSP. O,I,II,III SU

P. incanum (L.) Michx. O,I,II,III SU

P. virginianum (L.) Durand & Jackson O,I,II,III SU

Satureja sp. O,I,II,III SU

Puccinia minutissima Arth.

Decodon verticellatus (L.) Ell. O,I SU

Puccinia obscura Schroet.

Luzula campestris (L.) DC. II,III PDR Sup. 37

Puccinia obtegens (Lk.) Tul.

Cirsium arvense (L.) Scop. O,I,II,III SU

Puccinia orbicula Pk. & Clint.

Prenanthes altissima L. O,I,II,III Arthur

Puccinia panici Diet.

Euphorbia corollata L. O,I SU

Panicum virgatum L. II,III Arthur

Puccinia peridermiospora (Ell. & Tr.) Arth.

Fraxinus americana L. O,I Ohio Nat. 13:31

F. pennsylvanica Marsh. O,I SU

Spartina pectinata Lk. II,III SU

Puccinia phragmitis (Schum.) Korn.

Phragmites communis Trin. II,III SU

Puccinia pimpinellae (Str.) Mart.

Chaerophyllum procumbens (L.) Crantz O,I,II,III SU

Osmorrhiza claytoni (Michx.) Clarke O,I,II,III SU

O. longistylis (Torr.) DC. O,I,II,III SU

Puccinia poae-sudeticae (Westend.) Jorstad

Poa pratensis L. II,III SU

Puccinia podophylli Schw.

Podophyllum peltatum L. O,I,III SU

Puccinia polygoni-amphibii convolvuli (A. & S.) Arth.

Polygonum convolvulus L. II,III SU
P. scandens L. II,III SU

Puccinia polygoni-amphibii persicariae (Str.) Arth.

Geranium maculatum L. O,I SU
Polygonum amphibium L. II,III ES
P. coccineum Muhl. II,III SU
P. lapathifolium L. II,III SU
P. punctatum Ell. II,III SU

Puccinia polygoni-amphibii tovariae Arth.

Tovara virginiana (L.) Raf. II,III SU

Puccinia punctata Lk.

Galium aparine L. O,I,II,III SU
G. concinnum T. & G. O,I,II,III SU
G. mollugo L. O,I,II,III SU

Puccinia ribis DC.

Ribes sp. (cult.) III PDR Sup. 1

Puccinia rubigo-vera agropyrina (Erikss.) Arth.

Actaea pachypoda Ell. O,I SU
Cimicifuga racemosa (L.) Nutt. O,I SU
Clematis virginiana L. O,I SU
Agropyron repens (L.) Beauv. II,III SU

Puccinia rubigo-vera impatientis (Arth.) Mains

Impatiens capensis Meerb. O,I SU
I. pallida Nutt. O,I ES
Agrostis perennans (Walt.) Tuckerm. II,III Arthur
Elymus canadensis L. II,III Arthur

Puccinia rubigo-vera secalis (Erikss.) Carl.

Secale cereale L. II,III SU

Puccinia rubigo-vera tritici (Erikss. & Henn.) Carl.

Triticum aestivum L. II,III SU

Puccinia ruelliae (Berk. & Br.) Lagerh.

Ruellia strepens L. O,I,II,III SU

Puccinia schedonnardi Kell. & Sw.

Hibiscus moscheutos L. O,I SU

Muhlenbergia mexicana (L.) Trin. II,III SU

M. schreberi Gmel. II,III SU

Puccinia sessilis Schneid.

Polygonatum biflorum (Walt.) Ell. O,I PDS Index

Puccinia seymeriae Burr.

Seymeria macrophylla Nutt. III SU

Puccinia silphii Schw.

Silphium integrifolium Michx. III SU

S. perfoliatum L. III SU

Puccinia smilacis Schw.

Apocynum cannabinum L. O,I SU

Smilax bona-nox L. II,III PDR 25:195

S. glauca Walt. II,III SU

S. rotundifolia L. II,III SU

S. tamnoides L. II,III SU

Puccinia sorghi Schw.

Oxalis sp. O,I SU

Zea mays L. II,III SU

Puccinia tenuis (Schw.) Burr.

Eupatorium rugosum Houtt. O,I,III SU

Puccinia tumidipes Pk.

Lycium halimifolium Mill. O,I,II,III SU

Puccinia vernoniae Schw.

Vernonia fasciculata Michx. ^{O,I,II,III}
/PDR 25:195

Puccinia violae (Schum.) DC.

Viola canadensis L. O,I,II,III SU
V. cucullata Ait. O,I,II,III ES
V. hastata Michx. O,I,II,III Arthur
V. incognita Brain. O,I,II,III SU
V. palmata L. O,I,II,III ES
V. papilionacea Pursh O,I,II,III OB
V. pennsylvanica Michx. O,I,II,III SU
V. pubescens Ait. O,I,II,III SU
V. rostrata Pursh O,I,II,III SU
V. striata Ait. O,I,II,III SU
V. tricolor L. O,I,II,III SU

Puccinia windsoriae Schw.

Ptelea trifoliata L. O,I SU
Triodia flava (L.) Smyth II,III SU

Puccinia xanthii Schw.

**Ambrosia trifida* L. III SU
Xanthium chinense Mill. III Arthur
X. pennsylvanicum Wallr. III SU

Pucciniastrum agrimoniae (Schw.) Tranz.

Agrimonia gryposepala Wallr. II,III Ohio Nat. 13:28
A. parviflora Ait. II,III SU
A. pubescens Wallr. II,III SU

Pucciniastrum americanum (Farl.) Arth.

Rubus idaeus L. II,III SU

Pucciniastrum fuchsiae Hirats.

Fuchsia sp. II PDS Index

Pucciniastrum hydrangae (Berk. & Curt.) Arth.

Tsuga canadensis (L.) Carr. O,I SU

Hydrangea arborescens L. II,III SU

Pucciniastrum myrtilli (Schum.) Arth.

Gaylussacia baccata (Wang.) K. Koch II,III 5th Ann. Rpt. Ohio
Acad. Sci.

**Pucciniastrum pustulatum* (Pers.) Diet.

**Epilobium glandulosum adenocaulon* (Haussk.) Fern. II,III SU

Pucciniastrum pyrolae (Pers.) Schroet.

Chimaphila maculata (L.) Pursh II,III SU

Ravenelia cassiaeicola Atk.

Cassia fasciculata Michx. II,III Arthur

Ravenelia epiphylla (Schw.) Diet.

Tephrosia virginiana (L.) Pers. O,I,II,III SU

Tranzschelia fusca (Pers.) Diet.

Anemone quinquefolia L. O,III SU

A. nemorosa L. O,III PDR Sup. 37

Tranzschelia pruni-spinosae (Pers.) Diet.

Hepatica acutiloba DC. O,I SU

H. americana (DC.) Ker O,I SU

Thalictrum dasycarpum Fisch. & Lall. O,I SU

T. dioicum L. O,I SU

T. polygamum Muhl. O,I SU

Prunus persica (L.) Batsch II,III USDA Yearbook 1906

Tranzschelia thalictri (Chev.) Diet.

Thalictrum dioicum L. O,III SU

**Uredinopsis mirabilis* (Pk.) Magn.

**Onoclea sensibilis* L. II,III SU

Uromyces amphidymus Syd.

Glyceria sp. II,III SU

G. septentrionalis Hitchc. II,III SU

Uromyces andropogonis Tracy

Andropogon virginicus L. II,III SU

Uromyces asclepiadis (Schw.) Cke.

Asclepias incarnata L. II,III SU

A. quadrifolia Jacq. II,III Arthur

A. syriaca L. II,III SU

**Uromyces bicolor* Ell.

**Allium canadense* L. O,I,II,III SU

**A. tricoccum* Ait. O,I,II,III Ellett

Uromyces caladii (Schw.) Farl.

Arisaema dracontium (L.) Schott O,I,II,III SU

A. triphyllum (L.) Schott O,I,II,III SU

Uromyces caryophyllinus (Schr.) Wint.

Dianthus caryophyllus L. II,III SU

Uromyces fabae (Pers.) DBy.

Vicia americana Muhl. O,I,II,III SU

Uromyces halstedii De T.

Trillium erectum L. O,I 5th Ann. Rpt. Ohio Acad. Sci.
Leersia oryzoides (L.) Sw. II,III PDS Index

Uromyces hedysari-paniculati (Schw.) Farl.

Desmodium canadense (L.) DC. O,I,II,III SU
D. canescens (L.) DC. O,I,II,III SU
D. illinoense Gray O,I,II,III SU
D. laevigata (Nutt.) DC. O,I,II,III SU
D. paniculatum (L.) DC. O,I,II,III SU
D. pauciflorum (Nutt.) DC. O,I,II,III SU
D. viridiflorum (L.) DC. O,I,II,III SU

**Uromyces holwayi* Lagerh.

**Lilium superbum* L. O,I,II,III ES

Uromyces houstoniatus (Schw.) Sheldon

Houstonia caerulea L. O,I ES

Uromyces hyperici (Spreng.) Curt.

Hypericum sp. O,I,II,III SU
H. matilum L. O,I,II,III SU

Uromyces junci-effusi Syd.

Juncus effusus L. II,III SU

Uromyces lespedezae-procumbentis (Schw.) Curt.

Lespedeza hirta (L.) Hornem. O,I,II,III SU
L. intermedia (S. Wats.) Britt. O,I,II,III SU
L. repens (L.) Bart. O,I,II,III SU
L. violacea (L.) Pers. O,I,II,III SU
L. virginica (L.) Britt. O,I,II,III SU

Uromyces perigynius Halst.

Carex cristatella Britt. II,III ES

Uromyces phaseoli strophostylis Arth.

Strophostyles helvola (L.) Ell. O,I,II,III SU

Uromyces phaseoli typica Arth.

Phaseolus lunatus L. O,I,II,III PDR Sup. 3

P. vulgaris L. O,I,II,III SU

Uromyces plumbarius Pk.

Gaura biennis L. O,I,II,III SU

Oenothera biennis L. O,I,II,III Arthur

Uromyces polygoni (Pers.) Fckl.

Polygonum aviculare L. O,I,II,III SU

P. erectum L. O,I,II,III SU

P. punctatum Ell. O,I,II,III PDR 25:196

Uromyces proeminens euphorbiicola (Tranz.) Arth.

Euphorbia humistrata Engelm. O,I,II,III SU

E. maculata L. O,I,II,III SU

Uromyces proeminens poinsettiae (Tranz.) Arth.

Euphorbia dentata Michx. O,I,II,III SU

Uromyces proeminens typica Arth.

Euphorbia maculata L. O,I,II,III SU

Uromyces pyriformis Cke.

Acorus calamus L. II,III 7th Ann. Rpt. Ohio Acad. Sci.

Uromyces rhynchosporae Ell.

**Rhynchospora alba* (L.) Vahl II,III ES

R. glomerata (L.) Vahl II,III Arthur

Uromyces rudbeckiae Arth. & Holw.

Rudbeckia laciniata L. III SU

Uromyces scirpi (Cast.) Burr.

Scirpus fluviatilis (Torr.) Gray II,III SU

Uromyces silphii (Burr.) Arth.

Silphium terebinthinaceum Jacq. O,I SU

Juncus tenuis Willd. II,III SU

Uromyces sparganii Cke. & Pk.

Sparganium eurycarpum Engelm. II,III SU

Uromyces striatus medicaginis (Pass.) Arth.

Medicago lupulina L. II,III SU

M. sativa L. II,III SU

Uromyces trifolii fallens (Desm.) Arth.

Trifolium pratense L. O,I,II,III SU

Uromyces trifolii hybridi (W. H. Davis) Arth.

Trifolium hybridum L. O,I,II,III SU

TREMELLALES

Ecronartium muscicola Fitz. (Fr.)

Climacium americanum Bridel SU

**Herpobasidium deformans* Gould

**Lonicera tatarica* L. SU

AGARICALES

Armillaria mellea Vahl ex Fr.

Acer saccharum Marsh. PDS Index
Carya sp. ES
Fagus grandifolia Ehrh. SU
F. sylvatica L. PDS Index
Prunus cerasus L. PDR Sup. 1
P. persica (L.) Batsch Ohio Agr. Exp. Sta. Bull. 214
Pyrus malus L. Ohio Agr. Exp. Sta. Bull. 214

Boletus parasiticus Bull.

Scleroderma aurantium Pers. SU

Collybia velutipes Fr.

Ulmus americana L. SU

Cyphella galeata Schw. ex Fr.

Polytrichum sp. PDR 27:29
Thuidium sp. PDR 27:29

Exobasidium vaccinii Wor.

Andromeda polifolia L. ES
Gaylussacia baccata (Wang.) Koch SU
Rhododendron maximum L. SU
Vaccinium sp. ES
V. angustifolium Ait. SU

Fomes connatus (Weinm.) Gill.

Acer saccharum Marsh. SU
Fagus grandifolia Ehrh. PDR 25:197
Quercus alba L. PDR 25:197

Fomes everhartii (Ell. & Gall.) von Schrenk & Spaulding

Castanea dentata (Marsh.) Borkh. SU
Quercus sp. SU
Quercus prinus L. PDS Index

Fomes fraxinophilus (Pk.) Sacc.

Fraxinus americana L. SU

Fomes ignarius (L. ex Fr.) Kickx

Acer sp. PDS Index

Carya sp. BiMonth. Bull. Ohio Agr. Exp. Sta. 1:335

Juglans nigra L. PDS Index

Quercus alba L. PDS Index

Fomes pini (Thore ex Fr.) Karst.

Pinus sp. SU

P. virginiana Mill. PDR 25:197

Fomes pomaceus (Pers.) Lloyd

Prunus americana Marsh. USDA Dept. Bull. 1366

Pyrus malus L. PDS Index

Fomes rimosus (Berk.) Cke.

Robinia pseudo-acacia L. SU

Ganoderma curtisii (Berk.) Murr.

Ulmus americana L. PDR Sup. 29

Hericius erinaceus (Bull. ex Fr.) Pers.

Quercus sp. PDR 27:30

Pellicularia filamentosa (Pat.) Rogers

See *Rhizoctonia solani*

Pholiota adiposa Fr.

Acer sp. SU

Pleurotus ulmarius Bull. ex Fr.

Ulmus americana L. SU

Polyporus berkeleyi Fr.

Quercus sp. SU

Polyporus croceus Pers. ex Fr.

Quercus sp. USDA Dept. Bull. 1366

Polyporus dryadeus Pers. ex Fr.

Quercus rubra L. SU

Polyporus dryophilus Berk.

Fagus grandifolia Ehrh. PDS Index

Quercus rubra L. Jour. Cin. Soc. Nat. Hist. 5:197

Polyporus frondosus (Dicks.) ex Fr.

Quercus sp. SU

Polyporus glomeratus Pk.

Acer rubrum L. PDS Index

A. saccharum Marsh. PDS Index

Polyporus graveolens (Schw.) Fr.

Fagus grandifolia Ehrh. PDR 25:198

Quercus coccinea Muench. PDS Index

Q. rubra L. PDS Index

Q. velutina Lam. PDS Index

Polyporus robiniophilus (Murr.) Lloyd

Robinia pseudo-acacia L. Ohio Agr. Exp. Sta. Bull. 214

Polyporus spumeus Sow. ex Fr.

Ulmus americana L. PDS Index

Polyporus sulfureus Bull. ex Fr.

Juglans nigra L. BiMonth. Bull. Ohio Agr. Exp. Sta. 1:339
Quercus alba L. SU
Q. rubra L. PDR Sup. 29
Robinia pseudo-acacia L. Ellett

Polyporus versicolor L. ex Fr.

Catalpa sp. BiMonth. Bull. Ohio Agr. Exp. Sta. 1:296

Steccherinum septentrionale (Fr.) Banker

Fagus grandifolia Ehrh. SU

Stereum frustulosum (Pers.) Fr.

Quercus alba L. PDS Index

Stereum gausapatum Fr.

Quercus sp. SU

Stereum subpileatum Berk. & Curt.

Quercus alba L. PDS Index

Thelephora terrestris Ehr. ex Fr.

Picea abies (L.) Karst. 49th Ann. Rpt. Ohio Agr. Exp. Sta.
Pinus strobus L. Karst. 49th Ann. Rpt. Ohio Agr. Exp. Sta.

SPHAEROPSIDALES

Actinopelte dryina (Sacc.) Hohn.

Quercus muehlenbergii Engelm. SU
Q. rubra L. ES

Amerosporium trichellum (Fr.) Lind

Hedera helix L. ES

Ascochyta sp.

Caragana arborescens Lam. PDS Index

Ascochyta althaeina Sacc. & Bizz.

Althaea rosea Cav. SU

Ascochyta asteris (Bres.) Gloyer

Callistephus chinensis (L.) Nees PDS Index

Ascochyta caulicola Laub.

Melilotus alba Desr. PDR Sup. 119

Ascochyta chrysanthemi F. L. Stev.

(*Mycosphaerella ligulicola* K. F. Baker, Dimock & L. H. Davis)

Chrysanthemum morifolium (Ramat.) Hemsl. PDS Index

Ascochyta clematidina Thuem. emend. Gloyer

Clematis sp. PDS Index

Ascochyta cornicola Sacc.

Cornus sp. PDS Index

Ascochyta imperfecta Pk.

Medicago sativa L. SU

Ascochyta lycopersici Brun.

Solanum dulcamara L. SU

Ascochyta meliloti (Trel.) J. J. Davis

(*Mycosphaerella lethalis* Stone)

Melilotus alba Desr. OB

Ascochyta pinodella L. K. Jones

Pisum sativum L. PDR Sup. 67

Ascochyta pisi Lib.

Pisum sativum L. Ohio Agr. Exp. Sta. Bull. 173

Vicia faba L. PDS Index

V. villosa Roth ES

Ascochyta rhei Ell. & Ev.

Rheum rhaponticum L. SU

Ascochyta sorghi Sacc.

Poa pratensis L. Sprague

Botryodiplodia ravenelii Sacc.

Quercus coccinea Muench. ES

Cicinnobolus cesatii DBy.

Erysiphe cichoracearum DC. Ohio Nat. 13:34

E. polygoni DC. SU

Sphaerotheca humuli (DC.) Burr. ES

Coniothyrium sp.

Ulmus rubra Muhl. SU

Coniothyrium concentricum (Desm.) Sacc.

Yucca sp. SU

Yucca filamentosa L. SU

Coniothyrium diplodiella (Speg.) Sacc.

Vitis sp. (cult.) PDR Sup. 1

Coniothyrium fuckelii Sacc.
(*Leptosphaeria coniothyrium* (Fckl.) Sacc.)

Pyrus malus L. PDR Sup. 28
Rosa sp. (cult.) SU
R. dilecta Rehd. SU
Rubus sp. (blackberry) PDR Sup. 1
R. idaeus L. SU
R. occidentalis L. PDR Sup. 9
R. phoenicolasius Maxim. ES

Coniothyrium hellebori Cke. & Mass.

Helleborus niger L. PDR 35:277

Coniothyrium pirinum (Sacc.) Sheldon

Pyrus communis L. PDR Sup. 1

Coniothyrium wernsdorffiae Laub.

Rosa sp. SU

Cytospora sp.

Acer palmatum Thunb. PDR Sup. 55
Picea abies (L.) Karst. PDR Sup. 96
P. pungens Engelm. PDR Sup. 85
Probably *C. kunzei* on the *Picea* spp.

Cytospora annularis Ell. & Ev.

Fraxinus sp. SU

Cytospora chrysosperma Pers. ex Fr.
(*Valsa sordida* Nits.)

Populus alba L. SU
Populus canadensis Moench PDR Sup. 37
Salix discolor Muhl. PDR Sup. 90

Cytospora leucostoma Sacc.
(*Valsa leucostoma* Pers. ex Fr.)

Prunus domestica L. ES
P. persica (L.) Batsch PDR Sup. 1

Darluca filum (Biv.) Cast.

- Kuehneola uredinis* (Lk.) Arth. SU
- Melampsora abieti-capraearum* Tubeuf. SU
- M. medusae* Thuem. SU
- Puccinia graminis* Pers. ES
- P. helianthi* Schw. SU
- P. violae* (Schum.) DC. SU
- Uromyces caryophyllinus* (Schrank) Wint. ES
- U. lespedezae-procumbentis* (Schw.) Curt. ES

Dendrophoma obscurans (Ell. & Ev.) H. W. Anderson

- Fragaria chiloensis* (L.) Duchesne SU

Diplodia sp.

- Citrullus vulgaris* Schrad. PDR Sup. 3

Diplodia longispora Cke. & Ell.

- Quercus rubra* L. PDR Sup. 73

Diplodia pinea (Desm.) Kickx.

- See *Sphaeropsis ellisii*

Diplodia sophorae Speg. & Sacc.

- Sophora japonica* L. PDS Index

Diplodia zeae (Schw.) Lev.

- Zea mays* L. SU

Dothichiza populea Sacc. & Briard

- Populus canadensis* Moench ES
- P. nigra* L. Mycologia 8:300
- P. sinensis* ES

Dothiorella quercina (Cke. & Ell.) Sacc.
(Physalospora glandicola (Schw.) N. E. Stev.)

Quercus alba L. OB

Dothiorella ulmi Verrall & May

Ulmus americana L. Ohio Agr. Exp. Sta. Bull. 497

Dothistroma pini Hulbary

Pinus monticola Dougl. PDS Index
P. nigra Arnold PDS Index
P. resinosa Ait. PDS Index

Fusicoccum castaneum Sacc.
(Cryptodiaporthe castanea (Tul.) Wehm.)

Castanea dentata (Marsh.) Borkh. PDS Index
C. mollissima Blume SU

Gloeodes pomigena (Schw.) Colby

Pyrus communis L. Ellett
P. malus L. SU

Leptothyrium pomi (Mont. & Fr.) Sacc.

Pyrus malus L. SU

Macrophoma candollei (Berk. & Br.) Berl. & Vogl.

Buxus sempervirens L. SU

Macrophoma straminella (Bres.) Died.

Rheum rhaponticum L. PDS Index

Macrophomina phaseoli (Maub.) Ashby

Glycine max (L.) Merr. SU
 **Zea mays* L. SU

Phleospora aceris (Lib.) Sacc.

Acer saccharum Marsh. Ellett

Phleospora asiminae Ell. & Morg.

Asimina triloba (L.) Dun. PDS Index

Phleospora osmorrhizae (Pk.) House

Osmorhiza longistylis (Torr.) DC. SU

Phleospora robiniae (Lib.) Hoehn.

Robinia pseudo-acacia L. PDR Sup. 11

Phleospora ulmi (Fr.) Wallr.
(*Mycosphaerella ulmi* Kleb.)

Ulmus rubra Muhl. Rpt. Geol. Sur. Ohio v.7(1893)

Phoma sp.

Antirrhinum majus L. PDS Index

Phoma apiicola Kleb.

Apium graveolens L. PDR Sup. 1

Phoma betae Frank

Beta vulgaris L. Ohio Agr. Exp. Sta. Bull. 659

Phoma destructiva Plowr.

Lycopersicon esculentum Mill. ES

Phoma lingam (Tode ex Fr.) Desm.

Brassica oleracea L. SU

Phoma persicae Sacc.

Prunus persica (L.) Batsch ES

Phoma piceina Pk.

Picea abies (L.) Karst. Ohio Agr. Exp. Sta. Bull. 214

Phoma pomi Pass.

(*Mycosphaerella pomi* (Pass.) Lindau)

Cydonia oblonga Mill. PDS Index

Pyrus malus L. SU

Phoma smilacina (Pk.) Sacc.

Smilax ecirrhata (Engelm.) S. Wats. PDR 27:26

Phoma subcircinata Ell. & Ev.

(*Diaporthe phaseolorum* (Cke. & Ell.) Sacc.)

Phaseolus lunatus L. PDS Index

Phomopsis sp.

Catalpa bignonioides Walt. PDS Index

Phomopsis gardeniae Hansen & Barrett

Gardenia jasminoides Ell. SU

Phomopsis japonica (Sacc.) Trav.

Kerria japonica (L.) DC. PDR Sup. 90

Phomopsis juniperovora Hahn

Juniperus chinensis L. PDR 14:152

J. horizontalis Moench SU

J. sabina L. PDR Sup. 55

J. virginiana L. PDR 14:152

Thuja occidentalis L. PDS Index

Phomopsis kalmiae Enlows

Kalmia latifolia L. SU

Phomopsis lirella (Desm.) Grove

Vinca minor L. PDS Index

Phomopsis oncostoma (Thuem.) Hoehn.
(*Diaporthe oncostoma* (Duby) Fckl.)

Robinia pseudo-acacia L. ES

Phomopsis sojae Lehman

(*Diaporthe phaseolorum sojae* (Lehman) Wehm.)

Glycine max (L.) Merr. SU

Phomopsis stewartii Pk.

(*Diaporthe stewartii* Harrison)

Cosmos bipinnatus Cav. PDR Sup. 42

Phomopsis vexans (Sacc. & Syd.) Harter

Solanum melongena L. ES

Phyllosticta sp.

Acer platanoides PDR Sup. 50

Cucumis melo L. PDS Index

**Dracaena fragrans* Ker Ellett

Syringa vulgaris L. SU

Phyllosticta alcides Sacc.

Populus alba L. North Amer. Flora 6:46

Phyllosticta althaeina Sacc.

Althaea rosea Cav. SU

Phyllosticta angelicae Sacc.

Angelica atropurpurea L. SU

Phyllosticta antirrhini Syd.

Antirrhinum majus L. SU

Phyllosticta antennariae Ell. & Ev.

Antennaria plantaginifolia (L.) Hook. SU

Phyllosticta asiminae Ell. & Kell.

Asimina triloba (L.) Dunal SU

Phyllosticta batatas (Thuem.) Cke.

Ipomoea batatas (L.) Lam. PDR Sup. 3

Phyllosticta caryae Pk.

Carya sp. North Amer. Flora 6:52

C. ovata (Mill.) Koch ES

C. tomentosa Nutt. OB

Phyllosticta catalpae Ell. & Martin

Catalpa sp. SU

C. bignonioides Walt. SU

Phyllosticta congesta Heald & Wolf

Prunus hortulana Bailey SU

Phyllosticta cornicola (DC. ex Fr.) Rabh.

Cornus florida L. ES

Phyllosticta cucurbitacearum Sacc.

Cucumis melo L. PDS Index

Cucumis sativus L. Ohio Agr. Exp. Sta. Bull. 214
 This may be a conidial stage of *Mycosphaerella citrullina*.

Phyllosticta cyclaminicola Trel.

Cyclamen persicum Mill. PDS Index

Phyllosticta decidua Ell. & Kell.

Leonurus cardiaca L. North Amer. Flora 6:60
Mentha spicata L. SU
Nepeta cataria L. North Amer. Flora 6:60
Scutellaria epilobiifolia A. Hamilton North Amer. Flora 6:60

Phyllosticta deutziae Ell. & Ev.

Deutzia gracilis Sieb. & Zucc. SU
D. scabra Thunb. Rpt. Geol. Sur. Ohio v.7(1893)

Phyllosticta dracaenae P. Henn.

Cordyline sp. PDS Index

Phyllosticta faginea Pk.

Fagus grandifolia Ehrh. North Amer. Flora 6:23

Phyllosticta ginkgo Brun.

Ginkgo biloba L. PDS Index

Phyllosticta hamamelidis (Cke.) Martin

Hamamelis virginiana L. ES

Phyllosticta ipomoeae Ell. & Kell.

Ipomoea sp. North Amer. Flora 6:37

Phyllosticta iridis (DC.) Walr.

Iris versicolor L. SU

Phyllosticta kalmicola (Schw.) Cke.
(*Mycosphaerella colorata* (Pk.) Earle)

Kalmia latifolia L. SU

Phyllosticta lappae Sacc.

Arctium lappa L. North Amer. Flora 6:32

Phyllosticta liriodendrica Sacc.
(*Mycosphaerella liriodendri* (Cke.) Woron.)

Liriodendron tulipifera L. SU

Phyllosticta lychnidis (Fr.) Ell. & Ev.

Lychnis chalcedonica L. SU

Phyllosticta lycii Ell. & Kell.

Lycium barbarum L. OB
L. halimifolium Mill. OB

Phyllosticta magnoliae Sacc.

Magnolia soulangeana Soul. PDS Index

Phyllosticta maxima Ell. & Ev.
(*Guignardia rhodora* (Cke.) B. H. Davis)

**Rhododendron* sp. SU

Phyllosticta minima (Berk. & Curt.) Ell. & Ev.

Acer rubrum L. SU
A. saccharinum L. SU
A. saccharum Marsh.

**Phyllosticta negundinis* Sacc. & Speg.

**Acer negundo* L. Ellett

Phyllosticta nesaeae Pk.*Decodon verticillatus* (L.) Ell. OB*Phyllosticta palustris* Ell. & Dearn.*Stachys palustris* L. Ohio Nat. 13:34**Phyllosticta paulowniae* Sacc.**Paulownia tomentosa* (Thunb.) Steud. SU*Phyllosticta paviae* Desm.

(Guignardia aesculi (Pk.) V. B. Stewart)

Aesculus glabra Willd. SU*A. hippocastanum* L. SU*A. octandra* Marsh. SU*Phyllosticta persicae* Sacc.*Prunus persica* (L.) Batsch North Amer. Flora 6:46*Phyllosticta phaseolina* Sacc.*Strophostyles helvola* (L.) Ell. SU*Phyllosticta podophylli* (Curt.) Wint.*Podophyllum peltatum* L. SU*Phyllosticta prunicola* Sacc.*Pyrus malus* L. Ohio Agr. Exp. Sta. Bull. 214*Phyllosticta roberti* Boyer & Jacz.*Ficus elastica* Roxb. SU*Phyllosticta rosicola* Massal.*Rosa* sp. SU

Phyllosticta sassafras Cke.

Sassafras albidum (Nutt.) Nees SU

**Phyllosticta sojaecola* Massal.

**Glycine max* (L.) Merr. SU

Phyllosticta solani Ell. & G. Martin

Solanum carolinense L. PDS Index

Phyllosticta solitaria Ell. & Ev.

Pyrus baccata L. PDS Index

P. malus L. SU

Phyllosticta straminella Bres.

Rheum rhaponticum L. PDR Sup. 90

Phyllosticta verbascicola Ell. & Kell.

Verbascum thapsus L. ES

Phyllosticta violae Desm.

Viola sp. Ellett

Phyllosticta viticola (Berk. & Curt.) Thuem.
(*Guignardia bidwelli* (Ell.) Viala & Ravaz)

Parthenocissus quinquefolia (L.) Planch. SU

P. tricuspidata (Sieb. & Zucc.) Planch. SU

Vitis aestivalis Michx. SU

V. labrusca L. SU

V. labruscana Bailey SU

V. riparia Michx. SU

V. vulpina L. SU

Piggotia fraxini Berk. & Curt.

(*Mycosphaerella effigurata* (Schw.) House)

Fraxinus americana L. SU

F. pennsylvanica Marsh. SU

Plenodomus destruens Harter

Ipomoea batatas (L.) Lam. *Phytopath.* 5:124

Pyrenochaeta terrestris (Hansen) Gorenz, J. C. Walker & Larson

Allium cepa L. SU

Septoria sp.

Phlox maculata L. SU

Septoria aegopodii Desm.

Osmorhiza claytoni (Michx.) C. B. Clarke SU

O. longistylis (Torr.) DC. SU

Septoria agrimoniae Roum.

Agrinonia eupatoria L. SU

Septoria apii (Briosi & Cav.) Chester

Apium graveolens L. SU

Septoria apii-graveolentis Dorogin

Apium graveolens L. SU

Septoria aquilegiae Penz. & Sacc.

Aquilegia canadensis L. *Ohio Nat.* 13:34

A. vulgaris L. PDS Index

Septoria asclepiadicola Ell. & Ev.

Asclepias incarnata L. SU

Septoria astericola Ell. & Ev.

Aster cordifolius L. SU

Septoria atropurpurea Pk.

Aster cordifolius L. 4th Ann. Rpt. Ohio Acad. Sci.
A. macrophyllus L. OB

Septoria avenae Frank
 (*Leptosphaeria avenaria* Weber)

Avena sativa L. SU

Septoria bacilligera Wint.

Ambrosia trifida L. SU

Septoria bataticola Taub.

Ipomoea batatas (L.) Lam. ES

Septoria betae West.

Beta vulgaris L. PDR Sup. 45

Septoria bromi Sacc.

Bromus ciliatus L. ES
B. secalinus L. SU

Septoria brunellae Ell. & Holw.

Prunella vulgaris L. SU

Septoria cacaliae Ell. & Kell.

Cacalia atriplicifolia L. SU

Septoria callistephi Gloyer

Callistephus chinensis (L.) Nees ES

Septoria cannabis (Lasch) Sacc.

Cannabis sativa L. SU

Septoria caryae Ell. & Ev.

Carya tomentosa Nutt. PDR 27:26

Septoria chrysanthemi Allesch.

Chrysanthemum morifolium (Ramat.) Hemsl. SU

Septoria cirsii Niessl

Cirsium arvense (L.) Scop. ES

Septoria conspicua Ell. & G. Martin

Lysimachia ciliata L. SU

Septoria convolvuli Desm.

Convolvulus sepium L. SU

Septoria coreopsidis J. J. Davis

Coreopsis tripteris L. SU

Septoria cornicola Desm.

Cornus amomum Mill. SU

C. florida L. SU

Septoria crataegi Kickx.

Crataegus sp. SU

Septoria cryptotaeniae Ell. & Rau.

Cryptotaenia canadensis (L.) DC. ES

Septoria dianthi Desm.

**Dianthus armeria* L. SU

D. caryophyllus L. Ohio Agr. Exp. Sta. Bull. 214

Septoria dioscoreae Ell. & Martin

Dioscorea villosa L. PDR 27:26

Septoria divaricata Ell. & Ev.

Phlox divaricata L. SU

Septoria elymi Ell. & Ev.

Agropyron repens (L.) Beauv. SU

**Septoria erectititis* Ell. & Ev.

**Erechtites hieracifolia* (L.) Raf. ES

Septoria erigerontis Pk.

Erigeron annuus (L.) Pers. SU

E. pulchellus Michx. Ohio Nat. 13:34

E. strigosus Muhl. SU

Septoria gei Rob. & Desm.

Geum canadense Jacq. PDS Index

Septoria glabra Ell. & Ev.

Aesculus glabra Willd. SU

Septoria gladioli Pass.

Gladiolus sp. BiMonth. Bull. Ohio Agr. Exp. Sta. 16:70

Septoria glycines Hemmi

Glycine max (L.) Merr. SU

Septoria helianthi Ell. & Kell.

Helianthus annuus L. SU

H. divaricatus L. SU

H. laetiflorus Pers. PDS Index

**Septoria heucherae* Pass.

**Heuchera americana* L. SU

Septoria humuli West.

Humulus lupulus L. SU

Septoria hydrangeae Bizz.

Hydrangea paniculata Sieb. PDR Sup. 5

Septoria inconspicua Berk. & Br.

Plantago lanceolata L. SU

Septoria kalmicola (Schw.) Berk. & Curt.

Kalmia latifolia L. SU

Septoria lactucae Pass.

Lactuca sativa L. Ellett

L. scariola L. SU

Septoria lactucicola Ell. & Martin

Lactuca sp. SU

L. scariola L. Ohio Nat. 13:34

Septoria lapparum Sacc.

Arctium lappa L. SU

Septoria lavandulae Desm.

Lavandula officinalis L. PDS Index

Septoria lepidiicola Ell. & Martin

Lepidium virginicum L. SU

Septoria leptostachyae Ell. & Ev.

Phyrma leptostachya L. Bull. Torr. Bot. Club 11:115

**Septoria linicola* (Speg.) Garassini
(*Mycosphaerella linorum* (Wr.) Garcia Rada)

**Linum usitatissimum* L. SU

Septoria littorea Sacc.

Apocynum cannabinum L. SU
A. sibiricum Jacq. PDS Index

Septoria lobeliae Pk.

Lobelia siphilitica L. SU
L. spicata Lam. SU

Septoria lophanthi Wint.

Agastache nepetoides (L.) Ktze. Ohio Nat. 13:34

Septoria lycopersici Speg.

Lycopersicon esculentum Mill. SU
L. glandulosum C. H. Mul. PDR Sup. 136
L. hirsutum Humb. & Bonpl. ex Dun. PDR Sup. 136
L. peruvianum (L.) Mill. PDR Sup. 136
L. pimpinellifolium (Jusl.) Mill. PDR Sup. 136

Septoria macropoda septulata (Gonz. Frag.) Sprague

Poa pratensis L. Sprague

Septoria malvicola Ell. & G. Martin

Althaea rosea Cav. ES
Malva rotundifolia L. SU

Septoria mariae-wilsonii G. W. Clint.

Chelone glabra L. PDR Sup. 42

Septoria menyanthis Desm.

Menyanthes trifoliata L. SU

Septoria mimuli Ell. & Kell.

Mimulus ringens L. Amer. Nat. 17:1165

**Septoria mitellae* Ell. & Ev.

**Mitella diphylla* L. ES

Septoria musiva Pk.

(*Mycosphaerella populorum* G. E. Thompson)

Populus tremuloides Michx. Ohio Nat. 13:34

Septoria nabali Berk. & Curt.

Prenanthes sp. PDS Index

Septoria nodorum (Berk.) Berk.

Poa pratensis L. PDS Index

Secale cereale L. Sprague

Triticum aestivum L. SU

T. dicoccum Schrank ES

Septoria noli-tangeris Gerard

Impatiens sp. SU

I. balsamina L. PDS Index

I. capensis Meerb. PDS Index

Septoria oenotherae West.

Gaura biennis L. PDR 27:26

Oenothera biennis L. SU

Septoria passerinii Sacc.

Hordeum vulgare L. Sprague

**Septoria pentstemonis* Ell. & Ev.

**Penstemon digitalis* Nutt. Ellett

Septoria phlyctaenoides Berk. & Curt.

Phytolacca americana L. Rpt. Geol. Sur. Ohio v.7(1893)

Septoria pileae Thuem.

Pilea pumila (L.) A. Gray SU

Septoria piricola Desm.

(*Mycosphaerella sentina* (Fckl.) Schroet.)

Pyrus communis L. SU

Septoria pisi West.

Pisum sativum L. PDR Sup. 3

Septoria podophyllina Fk.

Podophyllum peltatum L. SU

Septoria polygonorum Desm.

Polygonum convolvulus L. SU

P. hydropiperoides Michx. SU

P. lapathifolium L. Ohio Nat. 13:35

P. orientale L. SU

P. pennsylvanicum L. SU

P. persicaria L. SU

Septoria polymniae Ell. & Ev.

Polymnia sp. SU

Septoria ribis Desm.

(*Mycosphaerella ribis* (Fckl.) Feltg.)

Ribes grossularia L. SU

R. sativum (Reichb.) Syme USDA Yearbook 1906

Septoria rubi West.*Rubus allegheniensis* Porter SU*R. canadensis* L. SU*R. flagellaris* Willd. SU*Septoria sambucina* Pk.*Sambucus canadensis* L. SU*Septoria scrophulariae* Pk.*Scrophularia marilandica* L. SU*Septoria scutellariae* Thuem.*Scutellaria ovata* Hill. ES**Septoria sisymbrii* Ell.**Sisymbrium officinale* (L.) Scop. Ellett*Septoria smilacinae* Ell. & G. Martin*Smilacina racemosa* (L.) Desf. SU*Septoria solidaginicola* Pk.*Solidago* sp. SU*Septoria speculariae* Berk. & Curt.*Specularia perfoliata* (L.) A. DC. SU*Septoria sphaerelloides* Ell. & Kell.*Hypericum punctatum* Lam. Rpt. Geol. Sur. Ohio v.7(1893)*Septoria stachydis* Rob. ex Desm.*Stachys tenuifolia* Willd. SU

Septoria trillii Pk.

Trillium grandiflorum (Michx.) Salisb. SU
T. sessile L. SU

Septoria tritici Rob. ex Desm.

Triticum aestivum L. SU

Septoria urticae Rob. ex Desm.

Urtica sp. 5th Ann. Rpt. Ohio Acad. Sci.

Septoria verbascicola Berk. & Curt.

Verbascum blattaria L. SU
V. thapsus L. SU

Septoria verbenae Rob. ex Desm.

Verbena sp. Rpt. Geol. Sur. Ohio v.7(1893)

Septoria veronicae Schroet.

Veronica arvensis L. SU

Septoria vestita Berk. & Curt.

Cucurbita sp. (squash) SU

Septoria violae West.

Viola hastata Michx. Rpt. Geol. Sur. Ohio v.7(1893)
V. pubescens Ait. SU

Septoria virgaureae Desm.

Solidago sp. SU

Septoria waldsteiniae Pk. & G. S. Clint.

Waldsteinia fragarioides (Michx.) Tratt. SU

Septoria xanthifolia Ell. & Kell.

Iva xanthifolia Nutt. Amer. Nat. 17:1165

Sphaeropsis sp.

Liquidambar styraciflua L. SU

Pinus mugo Turra SU

Quercus robur L. PDR 14:153

Sphaeropsis biformis Pk.

Fraxinus americana L. OB

Sphaeropsis cruenta (Fr.) Gilman & Archer

Polygonatum biflorum (Walt.) Ell. SU

P. canaliculatum (Muhl.) Pursh SU

Smilacina racemosa (L.) Desf. SU

S. stellata (L.) Desf. SU

Smilax rotundifolia L. SU

Sphaeropsis ellisii Sacc.

Pinus nigra Arnold PDR 23:86

P. resinosa Ait. PDR 21:36

P. sylvestris L. PDR 23:93

Sphaeropsis malorum Pk.

(*Physalospora obtusa* (Schw.) Cke.)

Castanea dentata (Marsh.) Borkh. PDS Index

Cotoneaster sp. PDS Index

Crataegus sp. SU

Cydonia oblonga Mill. USDA Yearbook 1904

Pyrus aucuparia (L.) Gaertn. PDS Index

P. baccata L. USDA Dept. Bull. 1366

P. communis L. SU

P. malus L. SU

Sphaeropsis ulmicola Ell. & Ev.

Ulmus sp. PDR Sup. 37

Sporonema phacidioides Desm.
(*Pyrenopeziza medicaginis* Fckl.)

Medicago sativa L. SU

Sporonema trifolii (Pk.) Greene

Trifolium pratense L. PDS Index

Stagonospora arenaria Sacc.

Dactylis glomerata L. Sprague

Stagonospora atriplicis (West.) Lind

Chenopodium album L. SU

Stagonospora curtisii (Berk.) Sacc.

Amaryllis sp. PDR Sup. 90

Stagonospora meliloti (Lasch) Petr.
(*Leptosphaeria pratensis* Sacc. & Briard)

Medicago sativa L. SU

Melilotus alba Desr. SU

Trifolium repens L. SU

Stagonospora recedens (Massal.) F. R. Jones & Weimer

Trifolium pratense L. SU

MELANCONIALES

Actinonema rosae (Lib.) Fr.
(*Diplocarpon rosae* Wolf)

Rosa spp. (cult.) SU

Colletotrichum sp.

Cucurbita maxima Dcne. Althaus, M.S. Thesis OSU
C. pepo L. Althaus, M.S. Thesis OSU
 **Dracaena godseffiana* Sander Ellett

Colletotrichum antirrhini F. C. Stewart

Antirrhinum majus L. SU

Colletotrichum circinans (Berk.) Vogl.

Allium cepa L. SU

Colletotrichum destructivum O'Gara

Medicago sativa L. Mycologia 46:73

Colletotrichum glycines Hori
 (*Glomerella glycines* (Hori) Lehman & Wolf)

Glycine max (L.) Merr. PDR Sup. 147

Colletotrichum graminicolum (Ces.) Wils.

Agrostis alba L. SU
Arrhenatherum elatius (L.) Beauv. SU
Avena sativa L. SU
Bromus inermis Leyss. Bell, Ph.D. Diss. OSU
B. mollis L. Bell, Ph.D. Diss. OSU
B. racemosus L. Bell, Ph.D. Diss. OSU
B. secalinus L. SU
B. tectorum L. Bell, Ph.D. Diss. OSU
Calamagrostis canadensis (Michx.) Beauv. Sprague
Dactylis glomerata L. SU
Echinochloa crusgalli (L.) Beauv. SU
Elymus virginicus L. ES
Festuca elatior L. ES
F. obtusa Biehler Bell, Ph.D. Diss. OSU
F. octoflora Walt. Bell, Ph.D. Diss. OSU
F. ovina L. Bell, Ph.D. Diss. OSU
Hordeum vulgare L. Bell, Ph.D. Diss. OSU
Lolium multiflorum Lam. Bell, Ph.D. Diss. OSU
Medicago sativa L. PDR Sup. 128
Melica nitens Nutt. Bell, Ph.D. Diss. OSU
Phleum pratense L. SU

Poa pratensis L. SU
Secale cereale L. SU
Sorgum vulgare sudanense (Piper) Hitchc. BiMonth. Bull. Ohio Agr.
 Exp. Sta. 33:136

S. vulgare Pers. SU
Trifolium pratense L. Ohio Agr. Exp. Sta. Bull. 214
Triticum aestivum L. SU
T. dicoccum Schrank Ohio Agr. Exp. Sta. Bull. 214
T. spelta L. Ohio Agr. Exp. Sta. Bull. 214
Zea mays L. Sprague

Colletotrichum lagenarium (Pass.) Ell. & Halst.

Citrullus vulgaris Schrad. SU
Cucumis melo L. SU
C. sativus L. SU
Cucurbita maxima Dene. PDR Sup. 22

Colletotrichum lindemuthianum (Sacc. & Magn.) Briosi & Cav.

Phaseolus lunatus L. USDA Tech. Bull. 868
P. vulgaris L. SU

Colletotrichum malvarum (Braun & Casp.) Southworth

Althaea rosea (L.) Cav. PDR Sup. 37

**Colletotrichum peckii* (Sacc.) J. J. Davis

**Trillium sessile* L. Ellett

Colletotrichum phomoides (Sacc.) Chester

Lycopersicon esculentum Mill. SU

Colletotrichum trifolii Bain & Essary

Medicago sativa L. SU
Trifolium pratense L. SU

**Colletotrichum vermicularioides* Halst.

**Linaria vulgaris* Hill SU

**Colletotrichum violae-rotundifoliae* (Sacc.) House

**Viola* sp. Ellett

Coryneum carpophilum (Lev.) Jauch

Prunus persica (L.) Batsch SU

Coryneum foliicolum Fekl.

Pyrus malus L. Ohio Agr. Exp. Sta. Bull. 214

Cylindrosporium capsellae Ell. & Ev.

Capsella bursa-pastoris (L.) Medic. SU

Cylindrosporium fraxini (Ell. & Kell.) Ell. & Ev.
(*Mycosphaerella effigurata* (Schw.) House)

Fraxinus nigra Marsh. PDS Index

Cylindrosporium hiemalis Higgins
(*Coccomyces hiemalis* Higgins)

Prunus avium L. SU

P. cerasus L. SU

P. pennsylvanica L. SU

Cylindrosporium irregulare (Pk.) Dearn.

Rhus radicans L. SU

Cylindrosporium kerriae V. B. Stewart
(*Coccomyces kerriae* V. B. Stewart)

Kerria japonica (L.) DC. SU

Cylindrosporium lutescens Higgins
(*Coccomyces lutescens* Higgins)

Prunus virginiana L. SU

Cylindrosporium prunophorae Higgins
(*Coccomyces prunophorae* Higgins)

Prunus domestica L. SU

Cylindrosporium rubi Ell. & Morg.
(*Sphaerulina rubi* Demaree & M. S. Wilcox)

Rubus idaeus L. SU
R. occidentalis L. SU

Entomosporium maculatum Lev.
(*Fabraea maculata* Atk.)

Crataegus sp. ES
Cydonia oblonga Mill. SU
Pyrus communis L. SU

Gloeosporium sp.

Ligularia kaempferi Sieb. & Zucc. PDR Sup. 90
Sassafras albidum (Nutt.) Nees ES

Gloeosporium apocryptum Ell. & Ev.

Acer platanoides L. SU
**A. rubrum* L. Ellett
A. saccharum Marsh. ES

Gloeosporium aridum Ell. & Ev.

Fraxinus americana L. SU
**F. pennsylvanica* Marsh. Ellett

Gloeosporium berberidis Cke.

Berberis vulgaris L. PDS Index

Gloeosporium betularum Ell. & Martin

Betula nigra L. ES

Gloeosporium caryae Ell. & Dearn.
(*Gnomonia caryae* Wolf)

Carya ovalis (Wang.) Sarg. SU
C. ovata (Mill.) K. Koch SU

Gloeosporium cingulatum Atk.
(*Glomerella cingulata*)

Lingustrum sp. ES

Gloeosporium inconspicuum Cav.

Ulmus americana L. PDR Sup. 29

Gloeosporium liriodendri Ell. & Ev.

Liriodendron tulipifera L. PDR Sup. 11

Gloeosporium melongenae Ell. & Halst.

Solanum melongena L. Ohio Agr. Exp. Sta. Bull. 214

Gloeosporium musarum Cke. & Mass.

Musa paradisiaca L. 4th Ann. Rpt. Ohio Acad. Sci.

Gloeosporium nervisequum (Fckl.) Sacc.
(*Gnomonia veneta* (Sacc. & Speg.) Kleb.)

Platanus occidentalis L. SU
P. orientalis L. PDS Index

Gloeosporium piperatum Ell. & Ev.

Capsicum frutescens L. Ohio Agr. Exp. Sta. Bull. 214

Gloeosporium quercinum West.
(*Gnomonia quercina* Kleb.)

Quercus alba L. SU
**Q. bicolor* Willd. Ellett
Q. coccinea Muenchh. Ellett

- **Quercus imbricaria* Michx. Ellett
- **Q. lyrata* Walt. Ellett

Gloeosporium ribis (Lib.) Mont. & Desm.
(*Pseudopeziza ribis* Kleb.)

- Ribes grossularia* L. ES
- R. nigrum* L. ES
- R. oxycanthoides* L. OB
- R. sativum* (Reichb.) Syme SU

Gloeosporium rumicis Ell. & Ev.

- Rumex obtusifolius* L. SU

Gloeosporium saccharinum Ell. & Ev.

- Acer saccharum* Marsh. SU

Gloeosporium sanguinariae Ell. & Ev.

- Sanguinaria canadensis* L. SU

Gloeosporium ulmeum Miles
(*Gnomonia ulmea* (Schw. ex Fr.) Thuem.)

- Ulmus americana* L. SU
- U. parvifolia* Jacq. Ellett
- U. rubra* Muhl. ES

**Marssonina delastrei* (Delac.) Magn.

- **Agrostemma githago* L. ES

Marssonina fragariae (Sacc.) Kleb.
(*Diplocarpon earliana* (Ell. & Ev.) Wolf)

- Fragaria chiloensis* (L.) Duchesne PDR Sup. 90

Marssonina grossulariae (Oud.) P. Magn.

- Ribes* sp. (gooseberry) PDS Index

Marssonina juglandis (Lib.) Magn.
(*Gnomonia leptostyla* (Fr.) Ces. & DeN.)

Carya sp. BiMonth. Bull. Ohio Agr. Exp. Sta. 1:335
Juglans cinerea L. PDR Sup. 37
J. nigra L. SU
J. regia L. ES

Marssonina martini (Sacc. & Ell.) Magn.

Quercus alba L. ES

Marssonina ochroleuca (Berk. & Curt. ex Pk.) Lentz

Castanea dentata (Marsh.) Borkh. SU

Marssonina panattoniana (Berl.) Magn.

Lactuca sativa L. Ohio Agr. Exp. Sta. Bull. 73

Marssonina populi (Lib.) Magn.

Populus sp. BiMonth. Bull. Ohio Agr. Exp. Sta. 1:339

Marssonina quercina (Wint.) Lentz

Quercus imbricaria Michx. Ohio Nat. 13:35
Q. rubra L. SU

Marssonina thomasina (Sacc.) Magn.

Euonymus atropurpureus Jacq. PDR Sup. 73

Melanconium fuligineum (Scribner & Viala) Cav.

Vitis sp. (cult.) Ohio Agr. Exp. Sta. Bull. 214

Monochaetia desmazieri Sacc.

Quercus coccinea Muench. PDS Index
Q. rubra L. PDS Index
Q. velutina Lam. PDS Index

Myxosporium corticola Edg.

Pyrus malus L. PDR Sup. 1

Pestalotia aquatica Ell. & Ev.

Sarracenia sp. SU

Pestalotia macrotricha Kleb.

Rhododendron sp. SU

Pestalotia oenotherae Ell. & Barth.

Oenothera biennis L. PDS Index

Pestalotia uvicola Speg.

Vitis sp. (cult.) PDR Sup. 47

This fungus is probably secondary.

Pestalotia versicolor Speg.

Neomarica gracilis Sprague PDR 25:200

**Septogloeum podophyllum* (Ell. & Ev.) Sacc.
(*Septotinia podophyllina* Whet.)

**Podophyllum peltatum* L. ES

Septomyxa affinis (Sherb.) Wr.

Nicotiana tabacum L. PDS Index

Sphaceloma ampelinum DBy.
(*Elsinoe ampelina* (DBy.) Shear)

Vitis sp. (cult.) SU

Sphaceloma necator (Ell. & Ev.) Jenkins & Shear
(*Elsinoe veneta* (Burk.) Jenkins)

Rubus sp. (blackberry) Ohio Agr. Exp. Sta. Bull. 79

Rubus idaeus L. SU
R. occidentalis L. SU

Sphaceloma plantaginis Jenkins & Bitanc.

Plantago major L. PDR 31:162
P. rugelii Dcne. PDR 31:162

Sphaceloma rosarum (Pass.) Jenkins

Rosa sp. (cult.) SU
Rosa setigera Michx. Ellett

MONILIALES

Alternaria sp.

Capsicum frutescens L. PDR Sup. 68
Cucurbita pepo L. Althaus, M.S. Thesis OSU
Daucus carota L. Althaus, M.S. Thesis OSU
Ficus elastica Roxb. PDS Index
Hibiscus esculentus L. 55th Ann. Rpt. Ohio State Hort. Soc. 1922
Hydrastis canadensis L. Ohio Agr. Exp. Sta. Bull. 214
Ipomoea batatas (L.) Lam. Althaus, M.S. Thesis OSU
Liriodendron tulipifera L. SU
Symphoricarpos albus (L.) Blake PDS Index

Alternaria brassicae (Berk.) Sacc.

Armoracia lapathifolia Gilib. Ill. Agr. Exp. Sta. Bull. 469
Brassica chinensis L. SU
B. nigra (L.) Koch SU
B. oleracea L. SU
B. rapa L. SU

Alternaria crassa (Sacc.) Rands

Datura stramonium L. SU

Alternaria cucumerina (Ell. & Ev.) J. A. Elliott

Citrullus vulgaris Schrad. PDR Sup. 3
Cucumis melo L. SU
C. sativus L. PDR Sup. 96

Alternaria dauci (Kuehn) Groves & Skolko

Daucus carota L. SU

Alternaria dianthi F. L. Stev. & Hall

Dianthus caryophyllus L. PDS Index

Alternaria mali Roberts

Pyrus malus L. Ellett

Alternaria panax Whet.

Panax quinquefolius L. ES

Alternaria raphani Groves & Skolko

Raphanus sativus L. PDS Index

Alternaria saponariae (Pk.) Neerg.

Saponaria officinalis L. ES

Alternaria solani (Ell. & G. Martin) Sor.

Capsicum frutescens L. SU

Lycopersicon esculentum Mill. SU

L. glandulosum C. H. Mul. PDR Sup. 136

L. hirsutum Humb. & Bonpl. in Dun. PDR Sup. 136

L. peruvianum (L.) Mill. PDR Sup. 136

L. pimpinellifolium (Jusl.) Mill. PDR Sup. 136

Solanum melongena L. SU

S. tuberosum L. SU

Alternaria tabacina (Ell. & Ev.) Hori

Nicotiana tabacum L. ES

**Alternaria zinniae* Pape

**Zinnia elegans* Jacq. Ellett

Aspergillus niger v. Tiegh.

Allium cepa L. SU
A. sativum L. PDS Index

Botrytis sp.

**Convallaria majalis* L. Ellett
Cucurbita maxima Dcne.
Fragaria chiloensis (L.) Duchesne Pl. Dis. Ohio 1920 (Mimeo.)
Lilium sp. PDR 12:82
Paeonia lactiflora Pall. ES
P. suffruticosa Haw. Ellett
Vitis sp. (cult.) PDR Sup. 14

Botrytis allii Munn

Allium cepa L. SU

Botrytis byssoidea J. C. Walker

Allium cepa L. Althaus, M.S. Thesis OSU

Botrytis cinerea Pers.

Antirrhinum majus L. Ellett
Begonia rex-cultorum Bailey Ellett
B. semperflorens Link & Otto ES
Chrysanthemum morifolium (Ramat.) Hemsl. Ellett
Cucumis sativus L. PDS Index
Cyclamen sp. PDS Index
Dahlia pinnata Cav. PDS Index
Daucus carota L. PDS Index
Dianthus caryophyllus L. Ellett
Glycine max (L.) Merr. PDS Index
Hydrastis canadensis L. USDA Farmers' Bull. 613
Lactuca sativa L. Ohio Agr. Exp. Sta. Bull. 73
Lilium sp. PDR Sup. 73
Lycopersicon esculentum Mill. SU
Pelargonium hortorum Bailey Ellett
Primula sp. PDR Sup. 50
Ranunculus abortivus L. ES
Rosa sp. (cult.) PDR Sup. 5
Rubus idaeus L. PDR Sup. 39
Sequoiadendron giganteum Buchholz PDS Index
Sinningia speciosa Benth. & Hook. Alexander
Solanum tuberosum L. PDS Index
Viola odorata L. PDS Index

Botrytis gladiolorum Timmermans

Gladiolus sp. Ellett

Botrytis paeoniae Oud.

Paeonia officinalis L. PDR Sup. 17

This fungus is considered by some to be a race of *Botrytis cinerea* Pers.

Botrytis squamosa Walker

Allium cepa L. FDS Index

Botrytis tulipae (Lib.) Lind

Tulipa gesneriana L. SU

Cephalosporium acremonium Cda. sensu Fres.

Zea mays L. Jour. Agr. Res. 27:177

Cephalosporium gregatum Allington & Chamberlain

Glycine max (L.) Merr. USDA Cir. 931

Cercospora acalyphae Pk.

Acalypha virginica L. SU

Cercospora althaeina Sacc.

Althaea rosea Cav. SU

Cercospora ampelopsidis Pk.

Parthenocissus quinquefolia (L.) Planch SU

Cercospora apii Fres.

Apium graveolens L. SU

Cercospora arcti-ambrosiae Halst.

Arctium lappa L. SU

Cercospora armoraciae Sacc.

Armoracia lapathifolia Gilib. SU

Cercospora asclepiadis Ell.

Asclepias syriaca L. OB

Cercospora asiminae Ell. & Kell.

Asimina triloba (L.) Dunal OB

Cercospora avicularis Wint.

Polygonum aviculare L. SU

Cercospora barbareae (Sacc.) Chupp

Barbarea vulgaris R. Br. Chupp

Cercospora beticola Sacc.

Beta vulgaris L. SU

B. vulgaris cicla (L.) Moq. SU

Cercospora brunckii Ell. & Galloway

Pelargonium sp. SU

Cercospora callae Pk. & Clint.

Peltandra virginica (L.) Schott & Endl. OB

Cercospora canescens Ell. & Martin

Phaseolus lunatus L. PDR 27:26

Cercospora capsici Heald & Wolf*Capsicum frutescens* L. PDR Sup. 96*Cercospora carotae* (Pass.) Solheim*Daucus carota* L. SU*Cercospora catalpae* Wint.*Catalpa bignonioides* Walt. SU*Cercospora caulophylli* Pk.*Caulophyllum thalictroides* (L.) Michx. SU*Cercospora cercidicola* Ell.*(Mycosphaerella cercidicola* (Ell. & Kell.) Wolf)*Cercis canadensis* L. SU*Cercospora circumscissa* Sacc.*Prunus avium* L. PDR Sup. 9*P. virginiana* L. ES*Cercospora citrullina* Cke.*Citrullus vulgaris* Schrad. Ohio Agr. Exp. Sta. Bull. 105*Cucumis sativus* L. Ohio Agr. Exp. Sta. Bull. 214*Cercospora clavata* (Gerard) Cke.*Asclepias amplexicaulis* Sm. SU*A. incarnata* L. OB*A. syriaca* L. SU*Cercospora cruenta* Sacc.*Glycine max* (L.) Merr. SU*Phaseolus lunatus* L. SU

Cercospora davisii Ell. & Ev.
(*Mycosphaerella davisii* (Ell. & Ev.) F. R. Jones)

Melilotus albus Desr. SU
**M. officinalis* (L.) Lam. Ellett

Cercospora depazeoides (Desm.) Sacc.

Sambucus canadensis L. SU

Cercospora desmodii Ell. & Kell.

Desmodium canescens (L.) DC. SU
D. cuspidatum (Muhl.) Loud. SU
It may be *C. desmodiicola* on this species.

Cercospora diantherae Ell. & Kell.

Justicia americana (L.) Vahl SU

Cercospora diffusa Ell. & Ev.

Physalis sp. SU

Cercospora dioscoreae Ell. & Martin

Dioscorea sp. Chupp

Cercospora dubia (Riess) Wint.

Atriplex patula L. SU
A. rosea L. PDS Index
Chenopodium album L. SU

Cercospora echinocystis Ell. & Martin

Echinocystis lobata (Michx.) T. & G. SU

Cercospora effusa (Berk. & Curt.) Ell.

Lobelia inflata L. SU
L. siphilitica L. SU

Cercospora elongata Pk.

Dipsacus sylvestris Huds. SU

Cercospora flagellaris Ell. & Martin

Phytolacca decandra SU

Cercospora geranii Kell. & Swingle

Geranium maculatum L. SU

Cercospora gerardiae Ell. & Dearn.

Gerardia flava L. OB

Cercospora granuliformis Ell. & Holw.

Viola sp. SU

Cercospora gymnocladi Ell. & Kell.

Gymnocladus dioica (L.) Koch. SU

Chupp (1955 p.309) says this is a *Helminthosporium*, or *Pseudocercospora*.

Cercospora helianthi Ell. & Ev.

Helianthus hirsutus Raf. SU

H. mollis Lam. Ohio Nat. 13:35

Cercospora heucherae Ell. & Martin

Heuchera americana L. SU

Cercospora houstoniae Ell. & Ev.

Houstonia caerulea L. SU

Chupp (1955) says this species is known only from the type locality. The collection in the herbarium was by F. L. Stevens. No spores were seen.

Cercospora ipomoeae Wint.

Ipomoea purpurea (L.) Roth PDS Index

Cercospora kalmiae Ell. & Ev.

Kalmia latifolia L. ES

Cercospora kikuchii Mat. & Tomoy.

Glycine max (L.) Merr. SU

Cercospora lippiae Ell. & Ev.

Lippia lanceolata Michx. SU

Cercospora liriodendri Ell. & Hark.

Liriodendron tulipifera L. SU

Chupp (1955 p.364) says this is not a *Cercospora* but closer to *Brachysporium*.

Cercospora maiianthemii Fekl.

Maiianthemum canadense Desf. SU

Cercospora malvicola Ell. & Martin

Malva rotundifolia L. SU

Cercospora medicaginis Ell. & Ev.

Medicago sativa L. SU

**M. lupulina* L. Ellett

Cercospora menispermii Ell. & Holw.

Menispermum canadense L. Ellett

Cercospora microsora Sacc.

Tilia americana L. OB

Cercospora mimuli Ell. & Ev.

Mimulus alatus Ait. OB

Cercospora monoica Ell. & Holw.

Amphicarpa bracteata (L.) Fern. Ohio Nat. 13:36

Cercospora moricola Cke.

Morus rubra L. PDS Index

Cercospora murina Ell. & Kell.

Viola sp. Chupp

Cercospora noveboracensis Ell. & Ev.

Vernonia noveboracensis (L.) Michx. SU

Cercospora omphacodes Ell. & Holw.

Phlox divaricata L. SU

Cercospora osmorrhizae Ell. & Ev.

Osmorhiza sp. ES

Osmorhiza claytoni (Michx.) Clarke Ohio Nat. 13:36

O. longistylis (Torr.) DC. PDS Index

Cercospora oxybaphi Ell. & Halst.

Mirabilis nyctaginea (Michx.) MacM. Ohio Nat. 13:36

Cercospora pastinacae (Sacc.) Pk.

Pastinaca sativa L. SU

Cercospora petersii (Berk. & Curt.) Atk.

Smilax sp. SU

Cercospora physalidis Ell.

Physalis sp. SU
P. pubescens L. OB

Cercospora polygonacea Ell.

Polygonum convolvulus L. SU

Cercospora polygonorum Cke.

Polygonum punctatum Ell. SU

Cercospora prenanthis Ell. & Kell.

Prenanthes sp. OB

Cercospora rhoina Cke. & Ell.

Rhus glabra L. SU

Cercospora ribis Earle

Ribes sativum (Reichb.) Syme SU

Cercospora rosicola Pass.

(*Mycosphaerella rosicola* (Pass.) B. H. Davis)

Rosa sp. SU

Cercospora rubi Sacc.

Rubus flagellaris Willd. ES

Cercospora sabbatae Ell. & Ev.

Sabatia angularis (L.) Pursh SU

Cercospora sagittariae Ell. & Kell.

Sagittaria latifolia Willd. SU

Cercospora saururi Ell. & Ev.

Saururus cernuus L. OB

Cercospora smilacis Thuem.

Smilax bona-nox L. PDR 27:26

Cercospora sojina Hara

Glycine max (L.) Merr. SU

Cercospora sordida Sacc.

(*Mycosphaerella tecomae* Wolf)

Campsis radicans (L.) Seem. PDS Index

Cercospora symplocarpi Pk.

Symplocarpus foetidus (L.) Nutt. SU

Cercospora teucrii Ell. & Kell.

Teucrium canadense L. ES

Cercospora trifidae Chupp

Ambrosia trifida L. SU

Cercospora tuberosa Ell. & Kell.

Apios americana Medic. SU

Cercospora varicolor Wint.

Paeonia officinalis L. SU

Cercospora violae Sacc.

Viola sp. SU

Cercospora zebrina Pass.

Trifolium pratense L. SU
T. repens L. SU

Cercospora cana Sacc.

Erigeron annuus (L.) Pers. SU
E. canadensis L. Chupp

Cercospora nivosa Ell. & Ev.

Penstemon digitalis Nutt. Proc. Acad. Nat. Sci., Phil. p.438(1895)

Cercospora persica Sacc.

(*Mycosphaerella persica* Higgins & Wolf)

Prunus persica (L.) Batsch Ohio Agr. Exp. Sta. Bull. 214

Cercospora rubi (Wint.) Plakidas

Rubus sp. (dewberry) USDA Bull. 1366

Chalara quercina Henry

(*Endoconidiophora fagacearum* Bretz)

Quercus alba L.
Q. bicolor Willd.
Q. coccinea Muench.
Q. macrocarpa Michx.
Q. palustris Muench.
Q. prinus L.
Q. rubra L.
Q. velutina Lam.

Information from G. J. Bart, Dept.
of Botany and Plant Pathology, Ohio
Agr. Exp. Station.

Cladosporium carpophilum Thuem.

Prunus americana Marsh Ohio Agr. Exp. Sta. Bull. 79
P. persica (L.) Batsch SU

Cladosporium cucumerinum Ell. & Arth.

Cucumis melo L. SU
C. sativus L. Ohio Agr. Exp. Sta. Bull. 73

Cladosporium cyclaminis Massey & Tilford

Cyclamen persicum Mill. PDS Index

Cladosporium fulvum Cke.

Lycopersicon esculentum Mill. SU

Cladosporium paeoniae Pass.

Paeonia lactiflora Pall. PDS Index

P. officinalis L. PDR Sup. 29

**Curvularia crepini* (Westend.) Boedijn.

**Ophioglossum vulgatum* L. SU

This is the first report of this fungus in North America and the first record of any parasite on this host in North America. The collection was by G. W. Blaydes, Dept. of Botany and Plant Pathology, Ohio State University, and the determination by C. W. Ellett.

Cylindrocladium scoparium Morg.

Rosa sp. (cult.) PDR Sup. 63

Didymaria didyma (Ung.) Schroet.

Anemone canadensis L. Ohio Nat. 13:35

Ranunculus pennsylvanicus L. Ohio Nat. 13:35

R. recurvatus Poir. Rpt. Geol. Sur. Ohio v.7(1893)

Epicoccum sp.

Ipomoea batatas (L.) Lam. Althaus, M.S. Thesis OSU

Fusarium sp.

Apium graveolens L. Month. Bull. Ohio Agr. Exp. Sta. 9:88

Chrysanthemum morifolium (Ramat.) Hemsl. PDS Index

Cucurbita maxima Dene. Althaus, M.S. Thesis OSU

Dahlia pinnata Cav. PDS Index

Delphinium sp. PDR Sup. 23

Glycine max (L.) Merr. Ellett

Hydrastis canadensis L. PDR Sup. 29
Laburnum anagyroides Medic. PDR Sup. 65
Lactuca sativa L. PDS Index
Pisum sativum L. PDR Sup. 2
 **Sansevieria* sp. Ellett
Trifolium pratense L. PDS Index

Fusarium avenaceum (Fr.) Sacc.

Avena sativa L. Sprague
Dianthus caryophyllus L. PDS Index
Secale cereale L. Sprague

Fusarium culmorum (W. G. Sm.) Sacc.

Avena sativa L. Sprague

Fusarium graminearum Schw.
 (*Gibberella zeae* (Schw.) Petch)

Avena sativa L. ES
Hordeum vulgare L. SU
Secale cereale L. SU
Triticum aestivum L. SU
T. dicoccum Schrank Ohio Agr. Exp. Sta. Bull. 214
T. spelta L. Ohio Agr. Exp. Sta. Bull. 214
Zea mays L. SU

Fusarium lateritium Nees ex Fr.

Ostrya virginiana (Mill.) K. Koch PDS Index

Fusarium moniliforme Sheldon
 (*Gibberella fujikuroi* (Saw.) Wr.)

Zea mays L. SU

Fusarium oxysporum Schlecht.

Cattleya sp. Foster, Ph.D. Diss. OSU
Solanum tuberosum L. Ohio Agr. Exp. Sta. Bull. 615

Fusarium oxysporum f. *anethi* Janson

Anethum graveolens L. Phytopath. 42:152

Fusarium oxysporum f. *apii* (R. Nelson & Sherb.) Snyder & Hansen

Apium graveolens L. SU

Fusarium oxysporum f. *aurantiacum* (Ik.) Wr.

Viola odorata L. PDS Index

V. tricolor L. PDS Index

Fusarium oxysporum f. *batatas* (Wr.) Snyder & Hansen

Ipomoea batatas (L.) Lam. Phytopath. 5:124

Fusarium oxysporum f. *callistephi* Beach

Callistephus chinensis (L.) Nees Ohio Agr. Exp. Sta. Bull. 659

Fusarium oxysporum f. *conglutinans* (Wr.) Snyder & Hansen

Brassica oleracea L. SU

Raphanus sativus L. Thayer, M.S. Thesis OSU

Fusarium oxysporum f. *dianthi* (Prill. & Dell.) Snyder & Hansen

Dianthus caryophyllus L. PDS Index

Fusarium oxysporum f. *gladioli* (Massey) Snyder & Hansen

Gladiolus sp. Month. Bull. Ohio Agr. Exp. Sta. 9:99

Fusarium oxysporum f. *lilii* Imle

Lilium spp. PDR 12:82

Fusarium oxysporum f. *lini* (Bolley) Snyder & Hansen

Linum usitatissimum L.

No report of this fungus in Ohio has been found. However, it seems probable that it must have been a pathogen of flax around 1900 and earlier when flax was a common crop in Ohio.

Fusarium oxysporum f. *lycopersici* Sacc.

Lycopersicon esculentum Mill. SU

Fusarium oxysporum f. *melonis* (Leach & Currence) Snyder & Hansen

Cucumis melo L. Ellett

Fusarium oxysporum f. *narcissi* Snyder & Hansen

Narcissus sp. Ellett

Fusarium oxysporum f. *nicotianae* (J. Johnson) Snyder & Hansen

Nicotiana tabacum L. SU

Fusarium oxysporum f. *niveum* (E. F. Sm.) Snyder & Hansen

Citrullus vulgaris Schrad. PDR Sup. 10

Cucumis sativus L. SU

Fusarium oxysporum f. *pisi* Linford Race 1

Pisum sativum L. PDR Sup. 67

**Fusarium poae* (Pk.) Wr.

**Dianthus caryophyllus* L. Ellett

Fusarium sambucinum Fekl.

Medicago sativa L. PDS Index

Fusarium solani f. *eumartii* (Carpenter) Wr.

Solanum tuberosum L. Ohio Agr. Exp. Sta. Bull. 615

Fusarium solani f. *phaseoli* (Burk.) Snyder & Hansen

Phaseolus lunatus L. PDS Index

Fusarium solani f. *pisi* (F. R. Jones) Snyder & Hansen

Lathyrus odoratus L. PDR Sup. 42

Pisum sativum L. PDR Sup. 45

Fusarium solani f. *radicicola* (Wr.) Snyder & Hansen

Solanum tuberosum L. PDR Sup. 26

Fusarium trichothecioides Wr.

Solanum tuberosum L. PDS Index

Fusicladium cerasi (Rab.) Sacc.

Prunus cerasus L. ES

Fusicladium dendriticum (Wallr.) Fckl.
(*Venturia inaequalis* (Cke.) Wint.)

Pyrus baccata L. Ellett

P. coronaria L. SU

P. ioensis (Wood) Bailey Ellett

P. malus L. SU

Fusicladium pyracanthae (Otth) Rostr.

Pyracantha coccinea Roem. SU

Fusicladium pyrinum (Lib.) Fckl.
(*Venturia pyrina* Aderh.)

Pyrus communis L. ES

Fusicladium robiniae Shear

Robinia pseudo-acacia L. ES

Graphium rubrum Rumbold

Liriodendron tulipifera L. PDS Index

Quercus alba L. PDS Index

Graphium ulmi Schwarz
(*Ceratostomella ulmi* Buis.)

Ulmus americana L. SU

U. rubra Muhl. PDS Index

Helminthosporium avenae Eidam
(*Pyrenophora avenae* Ito & Kurib.)

Avena sativa L. SU

Helminthosporium bromi Drechs.
(*Pyrenophora bromi* Drechs.)

Bromus inermis Leyss. SU

Helminthosporium carbonum Ullstrup

Zea mays L. SU

Helminthosporium erythrospilum Drechs.

Agrostis alba L. Sprague

Helminthosporium gramineum Rab.

Hordeum vulgare L. SU

Helminthosporium maydis Nisik. & Miyake
(*Cochliobolus heterostrophus* Drechs.)

Zea mays L. SU

Helminthosporium papulosum Berg

Pyrus malus L. SU

Helminthosporium sativum Pam., King & Bakke

Hordeum vulgare L. SU
Secale cereale L. Sprague
Triticum aestivum L. SU

Helminthosporium siccans Drechs.

Lolium perenne L. PDS Index
Triticum aestivum L. PDR 25:200

Helminthosporium teres Sacc.
(*Pyrenophora teres* Drechs.)

Hordeum vulgare L. SU

Helminthosporium turcicum Pass.

Sorgum halepense (L.) Pers. SU
S. vulgare sudanense (Piper) Hitchc. SU
Zea mays L. SU

Helminthosporium vagans Drechs.

Poa pratensis L. SU

Helminthosporium victoriae Meehan & Murphy

Avena sativa L. Janson, M.S.Thesis OSU

Heterosporium iridis (Fautr. & Roum.) Jacques
(*Didymellina macrospora* Kleb.)

Iris sp. SU
Iris germanica L. SU

Heterosporium ornithogali Klotzsch ex Cke.

Ornithogallum umbellatum L. PDR 25:200

Kabatiella caulivora (Kirchn.) Karak.

Trifolium pratense L. SU

Kabatiella nigricans (Atk. & Edg.) Karak.

Vicia villosa Roth PDS Index

Microstroma sp.

Acer platanoides L. PDS Index

Microstroma juglandis (Bereng.) Sacc.

Carya ovata (Mill.) K. Koch SU
Juglans cinerea L. SU
J. regia L. ES

Monilochaetes infuscans Ell. & Halst.

Ipomoea batatas (L.) Lam. Jour. Agr. Res. 5:787

Myceliophthora lutea Cost

Agaricus campestris Fr. PDR 31:418

Myrothecium roridum Tode ex Fr.

Eremurus robustus Regel. PDS Index
Lycopersicon esculentum Mill. PDS Index

Nigrospora sphaerica (Sacc.) Mason

Zea mays L. SU

Oidium sp.

**Antirrhinum majus* L. Ellett
 **Saintpaulia ionantha* Wendl. Ellett

Ovularia monosporia (West.) Pound & Clements

Rumex crispus L. SU

Penicillium sp.

Daucus carota L. Althaus, M.S. Thesis OSU
Glycine max (L.) Merr. Phytopath. 35:144
Ipomoea batatas (L.) Lam. Althaus, M.S. Thesis OSU
Lilium sp. PDR 34:54
Lycopersicon esculentum Mill. Althaus, M.S. Thesis OSU
Pyrus communis L. Ellett
Vitis sp. (cult.) PDR Sup. 14

Penicillium expansum Lk. ex Thom

Pyrus malus L. Ohio Agr. Exp. Sta. Bull. 214

Penicillium gladioli McCull. & Thom

Gladiolus sp. BiMonth. Bull. Ohio Agr. Exp. Sta. 16:72

Piricularia grisea (Cke.) Sacc.

Digitaria sanguinalis (L.) Scop. SU

Panicum miliaceum L. ES

Setaria italica (L.) Beauv. ES

Polythrincium trifolii Ktze.

(*Cymadothea trifolii* (Pers. ex Fr.) Wolf)

Trifolium hybridum L. ES

T. pratense L. SU

T. repens L. SU

Pseudocercospora vitis (Lev.) Speg.

Vitis sp. (cult.) PDR Sup. 1

This is sometimes reported as *Isariopsis clavispora* (Berk. & Curt.) Sacc. The perfect stage has been described as

Mycosphaerella personata Higgins.

**Ramularia aequivoca* (Ces.) Sacc.

**Ranunculus hispidus* Michx. SU

Ramularia armoraciae Fckl.

Armoracia lapathifolia Gilib. SU

Ramularia arvensis Sacc.

Potentilla norvegica L. SU

Ramularia barbareae Pk.

Barbarea vulgaris R. Br. SU

Ramularia brunelliae Ell. & Ev.

Prunella vulgaris L. PDS Index

Ramularia celastri Ell. & Martin

Celastrus scandens L. Ohio Nat. 13:35

Ramularia circumfusa Ell. & Ev.

Rumex obtusifolius L. Proc. Acad. Nat. Sci., Phil. p.437(1895)

Ramularia cyclaminicola Trel.

Cyclamen persicum Mill. PDS Index

Ramularia geranii (West.) Fekl.

Geranium maculatum L. PDR 27:26

Ramularia heraclei (Oud.) Sacc.

Heracleum maximum Bartr. SU

Ramularia lineola Pk.

Taraxacum officinale Weber ES

Ramularia mimuli Ell. & Kell.

Mimulus ringens L. Amer. Nat. 17:1166

Ramularia mitellae Pk.

Mitella diphylla L. Rpt. Geol. Sur. Ohio v.7(1893)

Ramularia pastinacae (Karst.) Lindr. & Vest.

Pastinaca sativa L. SU

Ramularia plantaginis Ell. & G. Martin

Plantago major L. SU

P. rugelii Dcne. Rpt. Geol. Sur. Ohio v.7(1893)

Ramularia ranunculi Pk.

Ranunculus recurvatus Poir. 6th Ann. Rpt. Ohio Acad. Sci.

Ramularia rubicunda Bres.

Maianthemum canadense Desf. PDS Index

Ramularia rufomaculans Pk.

Fagopyrum sagittatum Gilib. Ohio Agr. Exp. Sta. Bull. 214

**Ramularia taraxaci* Karst.

**Taraxacum officinale* Weber Ellett

Ramularia tulasnei Sacc.

(*Mycosphaerella fragariae* (Tul.) Lindau)

Fragaria chiloensis (L.) Duchesne SU

F. virginiana Duchesne ES

Ramularia urticae Rob. ex Desm.

Urtica gracilis Ait. SU

Ramularia variabilis Fckl.

Verbascum thapsus L. SU

Ramularia veronicae Fckl.

Veronica peregrina L. Rpt. Geol. Sur. Ohio v.7(1893)

Rhynchosporium secalis (Oud.) J. J. Davis

Hordeum vulgare L. SU

Scolecotrichum graminis Fekl.

Alopecurus geniculatus L. SU
Hordeum vulgare L. PDS Index

Sepedonium chrysospermum (Bull.) Fr.
 (*Hypomyces chrysospermus* Tul.)

Boletus ornatipes Fk. SU

Septocylindrium ramunculi Fk.

Ranunculus sp. 5th Ann. Rpt. Ohio Acad. Sci.

Spondylocladium atrovirens Harz.

Solanum tuberosum L. PDR Sup. 2

Stemphylium cucurbitacearum Osner

Cucumis sativus L. Jour. Agr. Res. 13:295
Cucurbita pepo melopepo (L.) Alef. PDS Index
C. pepo ovifera (L.) Alef. PDS Index

Stemphylium sarcinaeforme (Cav.) Wiltshire

Trifolium pratense L. SU

Stemphylium solani Weber

Lycopersicon esculentum Mill. PDR 33:387

Stigmata platani (Fekl.) Sacc.
 (*Mycosphaerella stigmata-platani* Wolf)

Platanus occidentalis L. SU

Thielaviopsis basicola (Berk. & Br.) Ferr.

Begonia semperflorens Lk. & Otto Ohio Agr. Exp. Sta. Bull. 73
Catalpa speciosa Warder Ohio Agr. Exp. Sta. Bull. 214
Euphorbia pulcherrima Willd. Alexander
Lathyrus odoratus L. PDR Sup. 11
Nicotiana tabacum L. Ohio Agr. Exp. Sta. Bull. 214

Panax quinquefolius L. PDS Index
Viola sp. Ohio Agr. Exp. Sta. Bull. 214

Trichoderma lignorum (Tode) Harz.

Rhizoctonia solani Kuhn Ellett

Trichothecium roseum Lk. ex Fr.

Lycopersicon esculentum Mill. Phytopath. 41:633
Pyrus malus L. ES

Tuberculina persicina (Ditm.) Sacc.

Aecidium compositarum Mart. Ohio Nat. 13:36

Verticillium sp.

Agaricus campestris Fr. PDR 16:25
Cercis canadensis L. PDS Index

Verticillium albo-atrum Reinke & Berth.

Acer platanoides L. ES
A. saccharinum L. Ohio Agr. Exp. Sta. Bull. 630
A. saccharum Marsh. SU
Berberis thunbergii DC. BiMonth. Bull. Ohio Agr. Exp. Sta. 2:324
Catalpa sp. PDS Index
Chrysanthemum morifolium (Ramat.) Hemsl. SU
Cucumis sativus L. PDS Index
Dahlia pinnata Cav. PDS Index
Humulus lupulus L. PDS Index
Liatris sp. Ohio Agr. Exp. Sta. Bull. 630
Lycopersicon esculentum Mill. Ohio Agr. Exp. Sta. Bull. 470
Paeonia lactiflora Pall. PDS Index
P. officinalis L. PDS Index
Panax quinquefolius L. PDS Index
**Parthenocissus tricuspidata* (Sieb. & Zucc.) Planch. Ellett
Rubus occidentalis L. PDR Sup. 39
Solanum melongena L. PDR Sup. 45
S. tuberosum L. Ohio Agr. Exp. Sta. Bull. 615
Ulmus americana L. Ohio Agr. Exp. Sta. Bull. 497

- **Volutella pachysandrae* Hutchinson
 (Pseudonectria pachysandricola B. O. Dodge)
- **Pachysandra terminalis* Sieb. & Zucc. Ellett

MYCELIA STERILIA

Papulospora stoveri Warren

Rhizoctonia solani Kuhn Mycologia 40:391

Rhizoctonia crocorum (Pers.) DC. ex Fr.

Beta vulgaris L. PDS Index
Catalpa sp. PDS Index

Rhizoctonia solani Kuhn

- Agrostis alba* L. Sprague
A. alba palustris (Huds.) Pers. Sprague
Antirrhinum majus L. SU
Allium cepa L. PDS Index
Apium graveolens L. Ohio Agr. Exp. Sta. Bull. 214
Begonia semperflorens Lk. & Otto PDS Index
Beta vulgaris L. PDS Index
Brassica oleracea L. SU
B. rapa L. PDR Sup. 26
Chrysanthemum morifolium (Ramat.) Hemsl. Ellett
Cucumis sativus L. Ellett
Dianthus caryophyllus L. Ellett
Digitaria sanguinalis (L.) Scop. Sprague
 **Euphorbia pulcherrima* Willd. Ellett
Festuca ovina L. Sprague
F. rubra L. Sprague
F. rubra commutata Gaud. Sprague
Ficus elastica Roxb. Alexander
Fittonia verschaffeltii Coem. PDR 37:373
Glycine max (L.) Merr. Ellett
Ipomoea batatas (L.) Lam. ES
Lactuca sativa L. Ohio Agr. Exp. Sta. Bull. 214
Lathyrus odoratus L. PDS Index
Liriodendron tulipifera PDR 21:82
Lobelia sp. PDS Index
Lobularia maritima (L.) Desv. Phytopath. 20:587
Lycopersicon esculentum Mill. Ohio Agr. Exp. Sta. Bull. 496
Matthiola incana (L.) R. Br. PDS Index

Medicago sativa L. Ohio Agr. Exp. Sta. Bull. 725
Nicotiana tabacum L. USDA Yearbook 1904
Phaseolus lunatus L. PDS Index
P. vulgaris L. PDR Sup. 2
Pinus resinosa Ait. BiMonth. Bull. Ohio Agr. Exp. Sta. 12:46
Pisum sativum L. PDS Index
 **Plantago rugelii* Dcne. Ellett
Poa pratensis L. Sprague
 **Polygonum aviculare* L. Ellett
Raphanus sativus L. USDA Dept. Bull. 1366
Salvia splendens Sello PDS Index
Sansevieria sp. Alexander
 **Sinningia speciosa* Benth. & Hook. Alexander
Solanum tuberosum L. SU
Trifolium hybridum L. PDS Index
T. repens L. PDS Index
Zea mays L. Sprague

Rhizoctonia tuliparum Whet. & J. M. Arth.

Tulipa gesneriana L. SU

Sclerotium cepivorum Berk.

Allium cepa L. Ohio Agr. Exp. Sta. Bull. 214

Sclerotium rolfsii Sacc.

**Ajuga* sp. SU
Cucumis sativus L. PDR Sup. 3
C. melo L. PDR Sup. 3
Delphinium sp. SU
Lilium sp. SU
Lycopersicon esculentum Mill. Ohio Agr. Exp. Sta. Bull. 214
 **Penstemon* sp. (cult.) SU
Phlox paniculata L. PDS Index
 **Physostegia virginiana* (L.) Benth. SU
Veronica sp. PDS Index

DISCUSSION AND SUMMARY

Most agriculturists do not realize that several thousand species of bacteria and fungi are plant pathogens. Further, it is not recognized by most that the annual loss in the United States attributed to plant diseases is around three billion dollars (41). The fungi and bacteria probably account for two-thirds of this loss. A conservative estimate for the annual loss in Ohio is 75,000,000 dollars. This estimate is based on 1950 prices.

Bacterial and/or fungus diseases have been largely responsible for limiting the areas of commercial production of many crops during the last 100 years. Crops in Ohio which have been thus limited include grape, pear, watermelon, and flax. There are many instances of fungus and bacterial diseases being the limiting factor in crop production in one or more areas of the state in a given year. A few examples include potato late blight, tomato late blight, wheat stem rust, barley powdery mildew, corn leaf blight, sweet corn bacterial wilt, sugar beet leaf spot, peach brown rot, apple scab, rose black spot, rose powdery mildew, soybean root rot, cucumber and muskmelon bacterial wilt, alfalfa bacterial wilt, sugar beet root rot, and *Helminthosporium* blight of oats.

Parasitic fungi may be present in an area for many years causing little loss. Then, when new varieties (genotypes) of crop plants are introduced or when cultivation of the crop is intensified, these parasitic fungi may become the limiting factors to successful cultivation of that crop. *Helminthosporium turcicum* Pass., a leaf

parasite of corn, was first reported in Ohio in 1900 (34). From that date until 1939 it was seldom mentioned in reports or discussions of corn pathology. In 1939 the writer reported H. turcicum as a major disease of certain corn hybrids and the factor limiting their cultivation in parts of southern Ohio (17). It is important, then, that plant pathologists, geneticists and agronomists working together in the development and introduction of new crops and crop varieties be cognizant of the pathogens, minor or major, of these crops.

There is evidence (4) that the species of fungi outnumber the species of vascular plants, at least in temperate regions. The smaller the area under consideration the more the species of fungi outnumber those of vascular plants (4, 28). In Britain the number of valid fungus species is estimated to be nearly three times the number of species of vascular plants (5). In Manitoba the number of known species of fungi is about twice the number of vascular plants (6). No estimate of the number of fungus species in Ohio has been made. The reported Ohio species of fungi, saprophytic and parasitic, have not been tabulated since 1893. The writer estimates the known species at 3,000 and suggests that there are 5,000 to 6,000 species, unreported and reported, of fungi in Ohio. Of these, 3,000 are estimated to be pathogens.

In this dissertation 983 species and varieties of parasitic fungi and bacteria are reported on Ohio plants with over 2,100 combinations of host and parasite.

Included among the parasites in Ohio are 49 bacteria, 44 downy mildews, 27 powdery mildews, 47 smuts, 164 rusts, 48 species of

Phyllosticta, 82 species of Cercospora, 95 species of Septoria. The host with the largest number of pathogens is Pyrus malus L. with 30. The fungus with the largest number of suscept is Erysiphe cichoracearum DC. ex Merat. with 51. In this dissertation 43 species of fungi are reported in Ohio for the first time. In addition, 72 fungi are reported for the first time on a particular host.

This list of plant parasitic fungi is incomplete. No parasites of the algae, lichens or liverworts are recorded. Certainly there are many parasites of these plants. It is estimated that there are over 1,000 species of vascular plants in Ohio on which no fungi have been reported. It is not likely that these are free of pathogens.

APPENDIX

Key to the Ohio Genera of Plant Pathogens
of the Fungi Imperfecti.

- 1 - Conidia and conidiophores borne within a pycnidium
or within locules in a stroma----- SPAEROPSIDALES (p. 144)
- 1 - Conidia and conidiophores borne in an
acervulus----- MELANCONIALES (p. 147)
- 1 - Conidia and conidiophores not developing within a
pycnidium or acervulus----- MONILIALES (p. 149)
- 1 - Conidia not known----- MYCELIA STERILIA
 - Rhizoctonia
 - Papulaspora
 - Sclerotium

SPHAEROPSIDALES

- 1 - Pycnidium complete and well-developed----- 2
- 1 - Pycnidium with well-developed base, but the upper part
vanishing very early leaving the basal part in the shape
of a cup or saucer----- 22
- 1 - Pycnidium with well-developed top but base poorly formed
(dimidiate or shield-shaped), opening by an ostiole or
by a longitudinal fissure----- 24
- 2 - Conidia slender, many times as long as broad (filiform)- 20
- 2 - Conidia spherical, ellipsoid, or oval; not more than
a few times longer than broad----- 3
- 3 - Conidia hyaline----- 4
- 3 - Conidia colored----- 17
- 4 - Conidia one-celled----- 5
- 4 - Conidia two-celled----- 16
- 4 - Conidia three- or more-celled----- STAGONOSPORA
- 5 - Stroma present,----- 13
- 5 - Stroma lacking----- 6
- 6 - Pycnidium with appendages (bristles or hairs)-- PYRENOCCHAETA
- 6 - Pycnidium smooth----- 7
- 7 - Pycnidium in or on the hyphae of powdery mildew
fungi----- CIC INNOBOLUS
- 7 - Pycnidium without a definite ostiole, opening irregularly;
spores oblong, ends rounded----- PLENODOMUS
- 7 - Pycnidium with an ostiole (not always present in Phomopsis)- 8
- 8 - Conidia of two kinds; oval on long conidiophores, and
slender stylospores usually curved like a hook at one
end----- PHOMOPSIS
- 8 - Conidia of one kind----- 9

- 9 - Conidiophores branched; conidia very small (3-8 by 1-3 microns)----- DENDROPHOMA
- 9 - Conidiophores simple, or not evident; conidia various, usually larger----- 10
 - 10 - Conidia falcate or lunate (not yet reported in Ohio)----- SELENOPHOMA
 - 10 - Conidia mostly straight----- 11
- 11 - Conidia more than 15 microns long, usually at least 20 microns----- MACROPHOMA
- 11 - Conidia less than 15 microns long----- 12
 - 12 - Pycnidia usually in definitely limited spots on leaves; conidia egg-shaped, cylindric, or nearly spherical----- PHYLLOSTICTA
 - 12 - Pycnidia on other parts of host; if on leaves not in definite spots. (Not mycologically distinguishable from Phyllosticta)----- PHOMA
- 13 - Pycnidia mostly occurring singly in the stroma, or often without definite stroma; conidia of two kinds----- PHOMOPSIS
- 13 - Pycnidia or locules several in a stroma, with separate ostioles----- 14
 - 14 - Stroma more or less valloid (pycnidia arranged more or less in a circle in the stroma)----- 15
 - 14 - Stroma not valloid, but pycnidia in botryose clusters (like grapes) on the stroma, occasionally immersed in a pulvinate stroma; conidia ovate or oblong---- DOTHIORELLA
- 15 - Conidia fusoid or elliptic-fusoid, straight or nearly so----- FUSIOCCUM
- 15 - Conidia allantoid, small (3-10 microns)----- CYTOSPORA
 - 16 - Conidia with slimy or hair-like appendages at each end; parasitic on sori of Uredinales----- DARLUCA
 - 16 - Conidia without appendages; on higher plants----- ASCOCHYTA
- 17 - Conidia one-celled----- 18
- 17 - Conidia two-celled----- 19

- 18 - Conidia small----- CONIOTHYRIUM
- 18 - Conidia large (20 or more microns)----- SPHAEROPSIS
(Considered by some to be an immature Diplodia)
- 19 - Pycnidia single, not in a stroma----- DIPLODIA
- 19 - Pycnidia borne in a stroma----- BOTRYODIPLODIA
- 20 - Stroma present; locules one to several and separate;
conidia one to five septate----- DOTHISTROMA
- 20 - Stroma not present----- 21
- 21 - Pycnidia mostly in spots on leaves or herbaceous stems;
ostioles small----- SEPTORIA
- 21 - Pycnidia on leaves; not completely developed, wall very
thin; opening by a wide mouth (similar to Septoria)-- PHLEOSPORA
- 22 - Pycnidium with setae----- AMEROSPORIUM
- 22 - Pycnidium without setae----- 23
- 23 - Pycnidium opening radiately; on Medicago----- SPORONEMA
- 23 - Pycnidium opening irregularly; on Populus----- DOTHICHAIZA
- 24 - Pycnidium superficial, shield-shaped----- 25
- 24 - Pycnidium irregular in shape, not usually superficial; said
to be the spermagonial phase of certain leaf spot
fungi----- PIGGOTIA
- 25 - Pycnidium gelatinous within----- GLOEODES
- 25 - Pycnidium not gelatinous within----- 26
- 26 - Pycnidium borne on a stalk; our species on
Quercus leaves----- ACTINOPELTE
- 26 - Pycnidium not borne on a stalk; our species
on Pyrus----- LEPTOTHYRIUM

MELANCONIALES

- 1 - Conidia hyaline, filiform, many times as long
as broad----- CYLINDROSPORIUM
- 1 - Conidia hyaline, globose, ellipsoid, fusoid, or
allantoid; not more than 3 or 4 times longer than broad----- 2
- 1 - Conidia colored----- 9
 - 2 - Conidia one-celled----- 3
 - 2 - Conidia more than one-celled----- 6
- 3 - Acervuli with bristles or setae----- COLLETOTRICHUM
- 3 - Acervuli without bristles or setae----- 4
 - 4 - Acervuli in herbaceous plant parts----- 5
 - 4 - Acervuli in woody stems----- MYXOSPORIUM
- 5 - Acervuli immersed and remaining covered by host
epidermis for a considerable time----- GLOEOSPORIUM
(This genus and Colletotrichum are similar)
- 5 - Like Gloesporium, but the conidiophores arising from a
well-developed base, almost stromatic; perfect stage
Elsinoe----- SPHACELOMA
 - 6 - Acervuli subcuticular, finally erumpent, surrounded
by and on radiating dark hyphae----- ACTINONEMA
 - 6 - Acervuli not surrounded by or on dark radiating hyphae-- 7
- 7 - Conidia two-celled; acervuli on leaves----- MARSSONINA
- 7 - Conidia two-celled; acervuli on fruits or stems----- SEPTOMYXA
- 7 - Conidia with three or more cells----- 8
 - 8 - Conidia with appendages----- ENTOMOSPORIUM
(Often included in the Sphaeropsidales)
 - 8 - Conidia without appendages----- SEPTOGLOEUM
- 9 - Conidia one-celled----- MELANCONIUM
- 9 - Conidia with three or more cells----- 10

- 10 - Conidia with filiform appendages----- 11
- 10 - Conidia without appendages, oblong, more or less
clavate, or broadly fusoid----- CORYNEUM
- 11 - A single hyaline setae from the apical cell----- MONOCHAETIA
- 11 - Two or more setae from the apical cell; end cells often
hyaline----- PESTALOTIA
- 11 - One appendage at the base----- CRYPTOSTICTIS

MONILIALES

- 1 - Conidiophores united into a compact column, and or arising from the surface of a more or less rounded mass of hyphae forming a cushion----- 30
- 1 - Conidiophores free, not as above----- 2
 - 2 - Conidia and conidiophores hyaline or bright colored---- 3
 - 2 - Conidia and or conidiophores with dark pigment----- 17
- 3 - Conidia one-celled, globose to elliptical----- 4
- 3 - Conidia two-celled, globose to elliptical----- 12
- 3 - Conidia three- or more-celled----- 14
 - 4 - Conidiophores not conspicuous, short, or if conspicuous then straight and unbranched----- 5
 - 4 - Conidiophores branched----- 9
- 5 - Conidiophores elongate with swollen apex; conidia forming in chains from the sterigmata on the swollen apex--- ASPERGILLUS
- 5 - Conidiophores short, one-celled, clavate, thickly massed, bearing conidia at the tips----- MICROSTROMA
- 5 - Conidiophores not as above----- 6
 - 6 - Conidia forming in chains; ovate, powdery in mass---- OIDIUM
 - 6 - Conidia not in chains; borne singly----- 7
- 7 - Growing on other fungi----- MYCELIOPHTHORA
- 7 - Not growing on other fungi----- 8
 - 8 - Conidia forming singly and collecting in droplets of mucilage at the apex of short, pointed conidiophores----- CEPHALOSPORIUM
 - 8 - Conidia attached at the sides and apex of the conidiophores which emerge in clusters from leaf tissues----- OVULARIA
- 9 - Conidiophores verticillately branched----- 10
- 9 - Conidiophores not verticillately branched----- 11

- 10 - Large rough chlamydospores always present----- SEPEDONIUM
- 10 - Chlamydospores not present----- VERTICILLIUM
- 11 - Conidiophores repeatedly branched toward the apex
resulting in a compact brush-like appearance----- PENICILLIUM
- 11 - Conidiophores irregularly branched, tree like; conidia
developing around the ends of the branches forming
grape-like clusters----- BOTRYTIS
- 12 - Conidiophores repeatedly branched; conidia mostly
two-celled, cylindrical----- CYLINDROCLADIUM
- 12 - Conidiophores not branched or only rarely branched---- 13
- 12 - Conidiophores not evident, apical cell of conidium
commonly with a short beak----- RHYNCHOSPORIUM
- 13 - Conidiophores arising from the leaf surfaces in clusters;
conidia ovate, single----- DIDYMARIA
- 13 - Conidiophores long, septate, not in clusters; conidia
ovate, single, apical cell often larger than the
basal cell----- TRICHOTHECIUM
- 14 - Conidia pyriform, single; mostly parasites
of grasses----- PIRICULARIA
- 14 - Conidia not pyriform----- 15
- 15 - Conidia elongate, cylindrical----- 16
- 15 - Conidia more or less crescent-shaped----- FUSARIUM
- 16 - Conidia borne in chains----- SEPTOCYLINDRIUM
- 16 - Conidia single or occasionally in short chains
mostly one to three septate; conidiophores growing
through stomates of leaves, in clusters----- RAMULARIA
- 16 - Conidia single, slender, often curved, mostly more
than three septate----- CERCOスポРЕLLA
- 17 - Conidia endogenous----- 18
- 17 - Conidia exogenous----- 19
- 18 - Chlamydospores, dark and multicellular; conidia
hyaline, rod-shaped----- THIELAVIOPSIS

- 18 - Chlamydospores absent; conidia hyaline, rod-shaped- CHALARA
- 19 - Conidia one-celled, hyaline----- MONILOCHAETES
- 19 - Conidia one-celled, dark, globose----- NIGROSPORA
- 19 - Conidia two-celled----- 20
- 19 - Conidia three- or more-celled----- 23
- 20 - Conidiophores wavy----- POLYTHRINCUM
- 20 - Conidiophores not wavy----- 21
- 21 - Conidiophores usually branched; conidia in chains,
sometimes three-celled----- CLADOSPORIUM
- 21 - Conidiophores not branched; conidia not in chains----- 22
- 22 - Mycelium subcuticular; conidiophores not in
clusters----- FUSIDIADIUM
- 22 - Mycelium subepidermal; conidiophores in
clusters----- SCOLECOTRICHUM
- 23 - Conidia muriform----- 29
- 23 - Conidia not muriform----- 24
- 24 - Conidia filiform, hyaline or dark, single,
multiseptate----- CERCOSPORA
- 24 - Conidia not filiform, dark, multiseptate----- 25
- 25 - Conidiophores very short, not much longer than the
conidia, unbranched, in clusters from leaf stomates;
conidia ovoid to ellipsoid----- STIGMINA
- 25 - Conidiophores usually much longer than the spores----- 26
- 26 - Conidia in whorls from the upper cells of the
unbranched conidiophores----- SPONDYLOCLADIUM
- 26 - Conidia not as above----- 27
- 27 - Conidia smooth----- 28
- 27 - Conidial walls rough (echinulate)----- HETEROSPORIUM
- 28 - Conidia sharply curved, central cell or cells
enlarged; end cells often lighter in color----- CURVULARIA

- 28 - Conidia straight or slightly curved; central cell not enlarged; end cells not of a different color----- HELMINTHOSPORIUM
- 29 - Conidia not in chains, rounded at both ends----- STEMPHYLIUM
- 29 - Conidia in chains or not, attenuated at the apex----- ALTERNARIA
- 30 - Conidiophores united in an erect fascicle (coremium), dark, bearing a spherical, terminal mass of one-celled spores embedded in a slime----- GRAPHIUM
- 30 - Conidiophores usually short and arising from a cushion-like, mass of fungus tissue (sporodochium)----- 31
- 31 - Conidia dark----- 32
- 31 - Conidia hyaline----- 33
- 32 - Conidia ovoid, one-celled; conidiophores repeatedly branched----- MYROTHECIUM
- 32 - Conidia globose, one- to several-celled; conidiophores short, radiating from the dark sporodochia----- EPICOCUM
- 33 - Conidia one-celled----- 34
- 33 - Conidia more than one-celled; conidia more or less crescent-shaped, pointed at the ends; often accompanied by one-celled microconidia; sporodochia often not present----- FUSARIUM
- 34 - Parasitic on rust fungi----- TUBERCULINA
- 34 - Parasitic on other plants----- 35
- 35 - Sporodochia with prominent setae----- VOLUTELLA
- 35 - Sporodochia without setae----- 36
- 36 - Sporodochia white, breaking through epidermis of leaves; conidiophores short, one-celled, clavate, bearing up to six elongate conidia at the tip in basidiospore fashion (sometimes included in the Melanconiales)----- MICROSTROMA
- 36 - Sporodochia light in color; conidiophores clavate, usually septate, with a warty tip; conidia often slightly curved, borne at the tip in basidiospore fashion (often included in the Melanconiales)----- KABATIELLA

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I, Clayton Wayne Ellett, was born in Northfield, Ohio, November 12, 1916. I attended the public schools of Hudson, Ohio, graduating in 1934. I obtained the degree of Bachelor of Science from Kent State University in 1938. I received the degree Master of Science from The Ohio State University in 1940. While in residence at The Ohio State University I served as graduate assistant in the Department of Botany and Plant Pathology and as assistant in extension plant pathology. From May, 1944, to August, 1944, I was in the United States Army and from August, 1944, to August, 1946, I was on active duty with the United States Navy. Since 1946, I have been an Instructor in Botany and Plant Pathology at The Ohio State University. From April to September, 1948, I was on leave of absence and employed as a research assistant in the Division of Plant Pathology, University of Minnesota.