

V. DISEASES OF TREES AND SHRUBS

ABIES BALSAMEA

Twig Canker (Fusicoccum abietinum Prill. & Delacr.) was found on two specimens from N. B., one collected in 1954, the other in 1956. There are no previous records of this fungus in Canada, although it may be a synonym of Phoma abietina Hartig according to W. B. Grove. P. abietina occurs on A. grandis and A. lasiocarpa in U. S. A. (J. A. Parmelee).

ACER

Canker (Cytospora chrysosperma) killed many young trees of Acer platanoides in nurseries and in street plantings in Montreal, Que. Large trees of Acer saccharinum were completely girdled by this disease (E. Jacquet).

Leaf Spot (Gloeosporium apocryptum) caused leaf curl and defoliation of Japanese maple at Essex, Ont. The tree has been affected for several years (R. Walsh). G. saccharinum was found on leaves of A. saccharum from P. E. I. (J. A. Parmelee).

AESCULUS - Horsechestnut

Leaf Blotch (Guignardia aesculi) was present in sl. amounts on shade trees in Kentville, N. S. (C. O. Gourley).

AMELANCHIER

Black Leaf Curl (Apiosporina collinsii). Sev. damage to a branch of a tree noted in a nursery at Calgary, Alta. (M. W. Cormack).

BERBERIS - Barberry

Rust (Puccinia graminis) affected 1 bush in a hedge at Meadowvale, Ont., and 4 large bushes at Burlington (H. S. Thompson).

BETULA - Birch

Leaf Curl (Taphrina carnea) was noted on specimens of B. lutea from Kings and Victoria counties, N. B. (J. A. Parmelee).

CATALPA

Wilted and apparently dying trees were reported by 3 householders nr. Harrow, Ont. The cause was thought to be Verticillium. By late August new leaves were appearing on affected limbs (R. W. Walsh).

CORNUS

Leaf Spot (Septoria cornicola) affected 85 plants of C. sanguinea var. variegata in a nursery at Whitby, Ont. (H. S. Thompson).

CRATAEGUS - Hawthorn

Rust (Gymnosporangium clavariaeforme) was found on 90% of fruits on Rosa Plena variety at Kentville, N.S. (J.F. Hockey). The English hawthorns on the Kentville Experimental Station were sev. affected (D.W. Creelman).

Powdery Mildew (Podosphaera oxycanthae) was found on a sample received from L'Islet, Que. (D. Leblond).

FAGUS - Beech

Leaf Spot (Gloeosporium fagicola) was found on specimens of F. grandifolia from Kent Co. and York Co., N.B. Specimens in DAOM herbarium include others from N.B. and one from Ont. (J.A. Parmelee).

ILEX

Trochila ilicis was found on leaves of I. aquifolium sent from Victoria, B.C. for identification. No previous N. American reports have been found. The fungus was placed in Phacidiales as Eustegia ilicis Chev. but sections show the fruit body to be cup-shaped and the fungus is more properly included in Helotiales as Trochila ilicis (Chev.) Rehm (J.A. Parmelee).

JUGLANS

The Melanconium stage of Melanconis juglandis was found on J. cinerea from Fredericton, N.B. (J.A. Parmelee).

JUNIPERUS

Rust (Gymnosporangium bermudianum) was collected nr. Ferndale, Bruce Co., Ont. The rust is unusual in having aecia on juniper on galls that later produce telia. Collections made in May were immature, but mature specimens were collected in August. The previously known range of this species was Bermuda, Bahama Islands, and the Gulf States. This report extends greatly the range of the fungus and is the first report on J. horizontalis (J.A. Parmelee).

LONICERA - Honeysuckle

Kabatia lonicerae was found on spots on L. americana leaves collected at Boischatel, Que. The infection was mod. (D. Leblond, R.A. Shoemaker).

Leaf Blight (Herpobasidium deformans) was present in mod. amounts on 2000 trees in a nursery at Clarkson, Ont. (H.N. Racicot, H.S. Thompson). In Que. this disease was general in nurseries again this year on L. tatarica. Most of the infections were mod. but a few sev. infections were noted (J. Ringuet). Also reported on L. tatarica from Ancienne Lorette, (D. Leblond).

Powdery Mildew (Microsphaera alni) was sev. on L. tatarica in a nursery at Charlesbourg, Que. (J. Ringuet).

MALUS - Flowering crab

Disfigurement (Phomopsis mali) of the fruit occurred in a garden in Vancouver, B.C. (H.N.W. Toms, R.A. Shoemaker).

Scab (Venturia inaequalis) affected a tree on the University campus, Vancouver, B. C. (H. N. W. T.).

PINUS - Pine

Blister Rust (Cronartium ribicola). Near Kenora, Ont. the characteristic flags of blister rust were noted on P. strobus on the mainland and islands. Usually only one flag was seen on each infected tree. No dead trees were seen (W. L. Gordon). One specimen was received from Saint-Hilaire, Que. (P. Duval), and one from St. Gregoire (D. Leblond). About 5% of a young stand of white pine was lost because of trunk infections at Kentville, N. S. Aecia were shedding spores on May 17. (C. O. Gourley).

POPULUS - Poplar

Leaf Spot (Septoria musiva) was found on P. tremuloides from York Co., N. B. (J. A. Parmelee).

Yellow Leaf Blister (Taphrina populina) was present on two leaves sent in from Antigonish Co., N. S. The fungus is represented in DAOM by 2 collections from Que. and 1 from B. C. (D. W. Creelman, R. A. Shoemaker).

QUERCUS - Oak

Powdery Mildew (Microsphaera alni) occurred on a Q. rubra specimen from Hobbscross, N. B. (J. A. Parmelee).

Twig Curl (Coryneum stage of Pseudovalsa longipes) was found on Q. rubra from Fredericton, N. B. (J. A. Parmelee).

ROBINIA - Locust

Tubercularia vulgaris was found on twigs of R. pseudo-acacia from La Gorgendiere, Que. (D. Leblond). A species of Ascochyta was also present on the pods but conidia were smaller than the dimensions give for A. robiniae described in Europe.

SALIX - Willow

Blight (Fusicladium saliciperidum) noted from Riviere du Loup, and Perce, Que. on S. lucida and from St. Redempteur on S. alba var. tristis (D. Leblond). S. babylonica var. aurea trees in a nursery in Charlottetown, P. E. I. were sev. infected and blighted in June. Twenty trees from this nursery planted at Montague also exhibited die-back (J. E. Campbell).

Marssonina kriegeana was present in mod. amounts on S. alba var. tristis at Sillery, Que. (D. Leblond).

Canker (Cytospora chrysosperma stage of Valsa sordida). Several sev. diseased specimens were obtained from Winnipeg, Man. (W. C. McDonald).

Crown Gall (Agrobacterium tumefaciens) occurred on S. alba var. tristis tree at Sillery, Que. (D. Leblond).

SORBUS

Micropera sorbi (Fr.) Sacc. and the Sphaeropsis stage of Physalospora obtusa occurred on S. americana from Robertsons Point, N. B. (J. A. Parmelee).

Fire blight (Erwinia amylovora). Mod. infection was noted on 1 tree at Lethbridge, Alta. (F. R. Harper). In Edmonton many fine trees were lost because of fire blight in 1956 (W. P. Campbell). Several trees were heavily infected at Lachine. It was also found on nursery stock at Aylmer, Que. (H. S. Thompson). Infection was sev. in one row of trees in Montreal Botanical Garden. Many specimens were received from private gardens in Montreal (P. Duval). Also noted from Grand Mere, Que. (D. Leblond).

TAXUS

Sunburn. Because frost penetrated deeply in the fall of 1955 before the ground was covered with snow, woody plants, particular conifers suffered more winter damage than usual in the Ottawa district, Ont. Observations indicate that reflected heat from the snow surface or from white-painted walls often causes more damage than the direct rays of the sun. This burning is one of the determining factors in choosing evergreens for this district. Both erect and spreading forms of Taxus cuspidata are far superior to the hybrid forms 'Hicksii' and 'Hatfieldii,' which have been regularly injured and were worse than usual this year. With the exception of Juniperus communis var. suecica and J. squamata var. meyeri, most of the commonly used junipers seem to stand up well. They do well on the south and west of buildings. Cedars (Thuja) are very susceptible to sunburn. Most of the hedges at the Farm are brown and will take a season or two to recover. Some of the named varieties are quite susceptible. The form 'rosenthalii' showed more damage than the common pyramidal form, the form 'woodwardii' than the common globe forms, and 'douglasii pyramidalis' more than the ordinary golden form. (R. W. Oliver).

THUJA

Winter drying was severe. It was noted specifically on T. occidentalis at Carleton and Charlesbourg, Que. in addition to telephoned inquiries. Similar damage was noted on wild white cedar (D. Leblond).

TILIA - Linden

Cercospora microsora affected 25% of the foliage of 20 young T. europaea trees in a nursery in Annapolis Co., N. S. Bordeaux spray applied to control spot anthracnose failed to control the Cercospora leaf spot (D. W. Creelman).

Spot Anthracnose (Elsinoe tiliae) caused mod. sev. damage to T. europaea in Lunenburg Co. Trees sprayed with captan were less severely affected. The disease was not so sev. as in 1954 or 1955. (D. W. Creelman).

Anthracnose (Gloeosporium tiliae). One specimen on T. europaea was received from Halifax, N. S. (D. W. Creelman).

ULMUS - Elm

Dutch Elm Disease (Ceratocystis ulmi (Buism.) Moreau). Large numbers of trees have died in woodlots and resort areas in s. e. Essex Co. About 35 infected trees were destroyed on the Experimental Station, Harrow, Ont. (R. W. Walsh). This binomial was proposed by Moreau (Rev. Mycol. 17, Suppl. Col. No. 1, p. 22, 1952) based on Ceratostomella ulmi Buism. Hunt, in his monograph of Ceratocystis (Lloydia 19:1-58. 1956) has accepted the name (D. W. C.).

Black Spot (Gnomonia ulmea) caused defoliation of trees at two locations nr. Harrow (R. W. Walsh). It was seen in 5 nurseries in Que. where it caused sl. spotting of U. pumila leaves (J. Ringuet).

Coral Spot (Tubercularia ulmea). Many specimens were received at Montreal Botanical Gardens from Montreal residents. The Botanical Garden staff does not recommend planting chinese elm because they are destroyed by coral spot (P. Duval).

Canker (Nectria sp.) was found on U. pumila in Quebec City, Que. (D. Leblond). The Tubercularia vulgaris conidial state of Nectria cinnabarina was found on 2 specimens; 1 from Pointe Claire, Que. and the other from Sydney, N. S. (H. S. Thompson).