

V: DISEASES OF TREES AND SHRUBS

ACER - Maple

Wilt (Verticillium albo-atrum) affected one tree at Kingston, N.S. (J.F. Hockey).

Low Temperature Injury. Cold winds in June in Que. resulted in considerable browning and drying-out of maple leaves. Specimens were received from Carleton, Bonaventure Co., Ste. Angele, Nicolet Co., and Ste. Rose de Degele, Temiscouata Co. (D. Leblond). Moderate damage **also** occurred in L'Islet and Kamouraska counties (L.J. Coulombe).

AESCULUS - Horsechestnut

Leaf Blotch (Guignardia aesculi). Trace infections occurred at Kentville, N.S. (C.O. Gourley) whereas infection was heavy in central and eastern P.E.I. (J.E. Campbell).

ARBUTUS

Red Leaf Gall (Exobasidium vaccinii) was found causing discrete pustules on infected leaves of A. menziesii at Saanichton, B.C. (W.R. Orchard).

CRATAEGUS - Hawthorn

Rust (Gymnosporangium sp.). A moderate infection of rust on C. arnoldiana was observed near a planting of ornamental juniper at Morden, Man. (W.A.F. Hagborg).

DAPHNE

Anthracnose (Marssonina daphnes) caused the death of shrubs in 2 Vancouver, B.C. gardens. This is a very common disease on D. mezereum in the district (H.N. W. Toms).

FAGUS - Beech

Anthracnose (Gloeosporium fagicola). Affected specimens were received from Charlesbourg, Que. (D. Leblond),

HYDRANGEA

Gray Mold (Botrytis cinerea) caused mod. damage on H. paniculata at St. Roch, L'Islet Co., Que. (L.J. Coulombe).

Powdery Mildew (Erysiphe cichoracearum) was sev. on the foliage of 54/175 plants in a greenhouse at Dunnville, Ont. The remaining plants showed sl. -mod. infections. Plants were closely spaced and aeration was poor (W.G. Kemp). Specimens were received from St. Boniface, St. Maurice Co., Que. (D. Leblond),

PINUS - Pine

White Pine Blister Rust (Cronartium ribicola). In a young stand of white pines at the Research Station, Kentville, N.S., 10% of the trees had blister rust infections on the main limbs and trunks. Aecia had broken open and spores were being liberated on May 12 (C. O. Gourlep).

PLATANUS - Plane Tree

Anthraxnose (Gnomonia veneta). A mod. infection at Royal Oak, Vancouver Island, B.C. caused sev. injury to foliage of P. orientalis. The Gloeosporium stage of organism was fruiting profusely on veins and petioles of affected leaves (W.R. Orchard).

POPULUS - Poplar

Canker (Cytospora chrysosperma) was sev. on P. canadensis var. eugenei at Ste. Foy, Que. (D. Leblond).

Anthraxnose (Marssonina populi). Infected specimens of P. nigra var. italica were received from Port Daniel, Bonaventure Co., Que. (D. L.).

Yellow Leaf Blister (Taphrina populina) occurs annually on P. nigra var. italica at Saanichton, B.C. Usually about 2% of the leaves are affected resulting in slight damage to the trees (W.R. orchard),

PRUNUS - Flowering Cherry

Crown Call (Agrobacterium tumefaciens) was found, when transplanting, on 75/1000 trees on the University Campus, Vancouver, B.C. (H. N. W. Toms).

Shot Hole (Stigmina carpophila = Clasterosporium carpophilum) is common on hedges of P. lauro-cerasus in Vancouver, B.C. gardens (H.N. W. T.). According to M.B. Ellis (C.M.I. Mycological Paper 72, p. 56. 1959) the fungus commonly known as Clasterosporium carpophilum properly belongs in the genus Stigmina. He has, therefore, made the new combination Stigmina carpophila (Lév.) M. B. Ellis (D. W. Creelman).

Rough Bark (virus). Some 30 trees of the Miyako and Kwansan varieties in the nurseries of the Vancouver, B.C. Parks Board exhibited typical foliage and bark symptoms. The diagnosis was confirmed by T.B. Lott and M. F. Welsh (H.N. W. T.).

Drought Injury. Some trees in Vancouver, B.C. gardens died in the spring of 1959 as the result of severe drought conditions in the summer of 1958 (H. N. W. T.).

PYRUS - Mountain Ash

Fire Blight (Erwinia amylovora) caused mod.-sev. damage to mountain ash transplants in Lethbridge, Alta. (E. J. Hawn). Several reports of fire blight damage to mountain ash were received at Winnipeg, Man. (W. A. F. Hagborg). It was seen on 2 trees at St. Jean, Que. (L. Cinq Mars).

Rust (Gymnosporangium cornutum), Pyrus decora was moderately infected at Clearwater Bay, Ont. No infection was seen on nearby Pyrus aucuparia (W. L. Gordon).

RHAMNUS - Buckthorn

Crown Rust (Puccinia coronata). A hedge of R. cathartica at Summerside, P. E. I. was moderately infected (J. E. Campbell).

RIBES - Flowering Currant

Anthracnose (Drepanopeziza ribis) was found on R. alpinum in 9 nurseries inspected in Que. Infections were light to moderate (J. Ringuet).

RHODODENDRON

Leaf Gall (Exobasidium vaccinii) caused marked distortions on leaves of azalea in a garden at Victoria, B. C. (W. R. Orchard).

Leaf Spot (Pestalotia macrotricha) was found on the lower leaves of a few potted plants at Hamilton, Ont. (W. G. Kemp).

ROSA - Rose

Crown Gall (Agrobacterium tumefaciens) was sev. on a shipment of shrubs at Lethbridge, Alta. (J. B. Lebeau). A large gall was seen on one plant at Truro, N. S. (K. A. Harrison).

Black Spot (Diplocarpon rosae). Heavy rainfall in April favored a higher than usual amount of black spot infection on Vancouver Island, B. C. (W. R. Orchard). Specimens were received from Windsor East, Richmond Co., Que. (D. Leblond).. Unsprayed hybrid tea and floribunda bushes were defoliated at Kentville, N. S. (J. F. Hockey). The variety, The Doctor, seems very susceptible to black spot (R. G. Ross),

Anthracnose (Gloeosporium ? rosae) was sev. on rose fruits in Battlefields Park, Quebec City, Que. (D. L.).

Powdery Mildew (Sphaerotheca pannosa) was extremely severe on the floribunda varieties Pink Garnet and Pink Garnet Supreme in a greenhouse at Richmond Hill, Ont. Over 50% of the bloom in a 400-foot bench of Pink Garnet had to be discarded and the remaining blooms were below top grade. Two other varieties, Jingles and Gold Strike, on either side of the severely affected bench, remained unaffected. Mildew was also severe on the varieties Johanna Hill and Golden Sceptre. Better Times was moderately affected. Pink Delight was the most severely affected hybrid tea variety (W. G. Kemp). Sl.-mod. infections were seen at St. Jean and St. Chrysostome, Que (R. Crete). A rambler rose bush at Wilmont, Annapolis Co., N. S. was 100% infected (K. A. H.).

SALIX - Willow

Crown Gall (Agrobacterium tumefaciens) caused a marked, localized hypertrophy of roots, close to the crown, on S. babylonica at North Saanichton, B. C. Two trees were affected (W. R. Orchard).

Canker (Cytospora chrysosperma). Numerous pycnidia were present on a tree of S. alba var. tristis which had apparently been killed by canker at Sillery, Que. (J. Ringuet).

Blight (Fusicladium saliciperdum) was quite severe on a hedge of S. pentandra at Ste. Foy, Que. (J.R.). A severe infection developed on French Willow in an isolated clump of sucker growth at Kentville, N.S. (K. A. Harrison),

Anthraxnose (Marssonina kriegeriana). The occurrence of anthracnose was general in the southern part of Vancouver Island, B.C. and damage to S. babylonica was severe (W. R. O.).

Rust (Melampsora spirea) was abundant at Woburn, Frontenac Co., and in the Laurentide Park in Que. (D. Leblond),

SPIRAEA

Leaf Spot (Cylindrosporium ? filipendulae). Slight to moderate infections were observed on S. vanhouttei in a nursery in Labelle Co., Que. (J. Ringuet). For a discussion of the taxonomy of Cylindrosporium spp. occurring on Spiraea see Fergus, C. L., Mycologia 49: 262-267, 1957 (D. W. Creelman).

SYRINGA - Lilac

Powdery Mildew (Microsphaeraalni). Severe infections developed in Aug. and Sept. at Ste. Anne de la Pocatiere, Que. (R.O. Lachance). Mildew on lilacs was very common in western N.S. in 1959 (J. F. Hockey).

Bacterial Blight (Pseudomonas syringae) was observed on many lilac varieties at the Experimental Farm, Morden, Man. Blight was particularly severe on S. oblata var. dilitatta x Syringa sp. (W.A. F. Hagborg).

TSUGA - Hemlock

Leaf Rust (Pucciniastrum vaccinii) infected 40% of the needles of T. canadensis at Concession, Digby Co., N.S. (C.L. Lockhart).

ULMUS - Elm

Black Mold (Chalaropsis thielavioides) was slight on branches of nursery plants of U. pumila at Cap Rouge, Que. (D. Leblond).

Coral Canker (Nectria cinnabarina). A hedge of U. pumila at Quebec City, Que, was heavily infected. (D. L.).

VIRBUNUM - Snowball

Leaf Spot (Phyllosticta lentaginis). A moderate infection was seen on V. opulus in Battlefields Park, Quebec City, Que, (D. L.).