VI. DISEASES OF FOREST AND SHADE TREES

ABIES BALSAMEA - Balsam Fir

Needle Cast (<u>Bifusella Faullii</u> Darker) has been observed each year for several years in P.E.I. (R. R. Hurst)

ACER - Maple

Leaf Spot (Phyllosticta acericola) was locally abundant on A.

saccharum on Ile Perrot, Que. (I. H. Crowell)

Tar Spot (Rhytisma acerinum) was severe on two trees of A. saccharinum var. Wierii at the Covenanters' Church in Kings Co., N.S.

Wilt (Verticillium sp.) severely affected a tree of A. platanoides

Wilt (<u>Verticillium</u> sp.) severely affected a tree of <u>A. platanoides</u> in Queens Co., P.E.I. This is the second case to be recorded. (R. R. Hurst)

AESCULUS - Horsechestnut

Leaf Blight (<u>Guignardia Aesculi</u>) was almost if not entirely absent on trees at Kentville and Grand Pre, N.S. (R. J. Baylis). A heavy infection was noted in Annapolis and Yarmouth Counties on Sept. 5 (G. W. Hope).

BETULA - Birch

Rust (Melampsoridium betulinum) was collected on B. fontinalis at Edson, Alta. (A. W. Henry)

CORNUS - Dogwood

Leaf Blight (Monilia Corni) was general in the woods as well as in residential areas in the Fraser Valley and Vancouver Island, B.C. Usually, there is a browning and dropping of individual leaves, but this year, the flowers as well were also discoloured and browned. (W. Jones)

FRAXINUS - Ash

Twig Blight. Hendersonia Fraxini was found fruiting on the small dead branches of a tree at Edmonton, Alta. (W. C. Broadfoot)

JUGLANS REGIA - Walnut

Bacterial Blight (Phytomonas Juglandis) was less severe than usual on the Lower Mainland and Vancouver Island, B.C. (W. Jones)

JUNIPERUS - Red Cedar

Rust (Gymnosporangium Juniperi-virginianae). A single gall caused by this rust was found on a red cedar tree planted this season at Abbotsford, Que. The tree was probably brought from Western Ontario. This is the first time that this species has been found in Quebec. Whether or not it can establish itself is impossible to say, but escapes of Juniperus virginiana are already established in the district since plantings were made 40 to 50 years ago. G. globosum now occurs on these trees. (H. N. Racicot and I. L. Conners).

PICEA - Spruce

Tip Blight was found on blue spruce at Medicine Hat, Alta.; Phoma sp. was isolated. (A. W. Henry)

Needle Blight (Rhizosphaera Kalkhoffii Bubak). From specimens from Ellwood Wilson it was concluded this fungus was rather abundant on blue spruce (P. pungens) at Knowlton, Que. The second and third year needles turn at first purplish and then brown. The fungus was in fruit on the brown needles. (Ruth Macrae and I. L. Conners)

PINUS - Pine

White Pine Blister Rust (<u>Cronartium ribicola</u>) appears to have become more prevalent in N.S. in recent years and now to be quite severe along the eastern shore particularly in the district between Halifax and Sheet Harbour (G. W. I. Creighton). All trees in one P.E.I. area examined on May 20 were affected; it was severe on most trees. (R. R. Hurst)

? Canker (Fusarium sporotrichoides Sherb.). The fungus was found fruiting on a branch of P. Banksiana received from R. M. Lewis, Preston, Ont., and was determined by W. L. Gordon.

Needle Cast (Lophodermium nitens). Infection was slight at Hudson, Que. and moderate at Truro, N.S. (I. H. Crowell)

POPULUS - Poplar

Leaf spot (Cladosporium subsessile) was common and in some cases severe on small trees of P. tremuloides at Edmonton, Alta.

Leaf spot (Marssonina sp.) was general at Summerland, B.C. on P. tremuloides. (G. E. Woolliams)

Ink Spot (Sclerotium bifrons) was observed on P. tremuloides, July 26, on Ile Perrot, Que. (I. H. Crowell)

Powdery Mildew (Uncinula Salicis) was severe on young trees of P. tremuloides and P. trichocarpa at Summerland, B.C. (G. E. Wooliams)

SALIX - Willow

Scab (Fusicladium saliciperdum) moderately affected a hedge of S. laurifolia at the Station, Ste. Anne de la Pocatiere, Que. (R. O. Lachance). Sprayed trees of S. vitellina at Grand Pre, N.S. were healthy, while the infection was light elsewhere. (K. A. Harrison)

Black Canker (Physalospora Miyabeana). The fungus was fruiting freely on a number of cankers collected on a specimen willow at Abbotsford, B.C. The imperfect stage was abundant, but the perfect stage was also present. F. saliciperdum was present on the petiole of a leaf, the only leaf material enclosed. Additional material collected in August, showed numerous cankers covered with ascervuli, but no Fusicladium could be found on the blighted leaves. (I. L. Conners, A. W. McCallum and J. E. Bier)

Powdery Mildew (<u>Uncinula Salicis</u>) was general and severe on willows in the southern Okanagan Valley.

THUJA - Arbor vitae

Blight (Phomopsis juniperovora Hahn) was very common on white cedars (T. occidentalis) in the Georgian Bay district, Ont. Many of the trees on the roadsides and in the swamps had most of the terminal leaves browned. This is the first time I have observed this blight causing injury in Ont. (J. E. Howitt)

ULMUS - Elm

Black Spot (Gnomonia ulmea) was widespread in York Co., N.B.; it caused yellowing of the leaves and early defoliation. (J. L. Howatt)

BERRY BOXES

Inspection revealed that of six different lots of berry boxes all were contaminated by <u>Rhizopus nigricans</u>. In two lots, contamination was heavy, while the other lots showed only scattered contamination. Some boxes were stained badly with <u>Penicillium</u>. (G. C. Chamberlain)

INSECTS

A severe aphid infestation was greatly reduced in the potato fields in York, Carleton, Victoria, and Sunbury counties, N.B. when at least 65% of the aphids were destroyed by Empusa Aphidis in the first two weeks of September. (J. L. Howatt)

A severe infestation of the sod web worm near the N.B.- N.S. border was believed controlled in June, according to Mr. R. P. Gorham, by an organism identified as a species of Empusa. (J. L. Howatt)