

V. DISEASES OF FOREST AND SHADE TREESALMOND (Amygdalus communis)

BLIGHT - Coryneum Beijerinckii Oud.

B.C.- Blight was found causing growth proliferations on almond on Vancouver island in April.

BALSAM FIR (Abies balsamea)

WITCHES' BROOM - Melampsorella Caryophyllacearum Schroet.

N.B.- This rust is common in York and Queens counties.

P.E.I.- Witches' broom is common and causes great damage to balsam.

BEECH (Fagus)

Cankers caused by Hypoxylon cohaerens (Pers.) Fr., occur commonly on the beeches in Prince Edward Island. (R.R. Hurst)

BIRCH (Betula)

LEAF CURL - Taphrina flava Parl.

N.S.- This disease was collected at Tremont on B. alba var. papyrifera. (R.W. Ward)

Branches covered with the acervuli of Melanconium parvulum Dearn. & Barth., were found on a dying tree of B. alba var. purpurea at Macdonald College. The fungus appeared to be parasitic, although the tree may have been weakened by root trouble. (Dorothy E. Newton)

ELM (Ulmus)

BLACK SPOT - Gnomonia ulmea (Schw.) Thum.

Ont.- Black spot was widespread in Kent county, but it caused slight damage.

Que.- This disease heavily infected the leaves of elms in Jacques Cartier, Laval and Terrebonne counties.

N.B.- Black spot was found at one place each in York and Queens counties; infection was slight.

CANKER - Sphaeropsis ulmicola Ell. & Ev.

N.B.- Two trees were severely affected by this canker in West St. John.

EUROPEAN LIME (Tilia vulgaris)

Gloeosporium Tiliae Oud. caused heavy leaf drop to a European lime in Halifax. (K.A. Harrison)

HEMLOCK (Tsuga canadensis)

RUST - Thekapsora Vacciniorum Karst  
(Peridermium Peckii Thum.)

N.S.- Specimens of this rust were collected at Cloud Lake by R.W. Ward. (I.L. Connors)

HORSECHESTNUT (Aesculus)

LEAF BLIGHT - Guignardia Aesculi (Pk.) Stewart  
(Phyllosticta Paviae Desm.)

N.B.- Leaf blight was found on 2 trees at the Experimental Station, Fredericton.

MAPLE (Acer)

One large tree of box-elder (A. Negundo) was killed at Edmonton. Creonectria purpurea (L.) Seaver, was found fruiting on the dead branches.

Tar spot (Rhytisma acerinum (Pers.) Fr.) was reported to be general on maple in St. Hypolite Tp., Terrebonne Co., Que. One tree was found infected in Queens Co., N.B. Infection was fairly heavy on A. saccharinum and A. saccharum on Prince Edward Island.

Twig blight (Creonectria purpurea (L.) Seaver) slightly infected trees of A. rubrum in Queens county, P.E.I.

MOUNTAIN ASH (Sorbus)

FIRE BLIGHT - Bacillus amylovorus (Burr.) Trev.

Ont.- Fire blight caused serious damage to mountain ash trees at Cobourg in June. The organism was isolated. (D.H. Jones)

Que.- Fire blight was severe on three mountain ash trees at Macdonald College; large limbs were killed. On 2 other trees blossom blight was severe and some twigs and small branches were killed. The rest of the trees had only a trace of blossom blight or were free from the disease. In Kamouraska county some large limbs on 2 trees were infected; 3 others had some twig blight and the rest were free from disease.

P.E.I.- Many fine trees are severely damaged by fire blight

throughout the province.

### PINE (Pinus)

#### WHITE PINE BLISTER RUST - Cronartium ribicola Fischer

Ont.- Blister rust on white pine (P. Strobus) was first observed in Algonquin Park by the present reporter in 1932, although some cankers were obviously several years old. Scattered infections were found killing the twigs and branches. (W.R. Haddow)

Que.- At Valmorin half the trees bore 2 to 12 infections of blister rust per tree. A slight infection of blister rust was seen at lake Connelly.

N.B.- Although the damage is still slight, blister rust is spreading.

N.S.- Many limbs were cankered by blister rust in a small group of trees at the Experimental Station, Kentville. Aecia were opening on May 3.

P.E.I.- Blister rust is severe in native stands and in ornamental plantings.

#### WITCHES' BROOM - Arceuthobium americanum Nutt.

Witches' broom was abundant on jack pine (P. Banksiana) at Prince Albert, Sask. (W.P. Fraser)

### POPLAR (Populus)

#### LEAF BLIGHT - Sclerotium bifrons Ell. & Ev.

N.S.- A single small tree of P. tremuloides was found affected at Stillwater lake on June 16.

#### POWDERY MILDEW - Uncinula Salicis (DC.) Wint.

Alta.- Powdery mildew was found on P. tremuloides at Edmonton; moderate to severe infections were commonly observed on P. balsamifera in zone 10.

#### HYPOXYLON CANKER - Hypoxyylon pruinatum (Klotzsch) Cke.

Ont.- A few trees of P. tremuloides bearing trunk cankers caused by this fungus in fruit were found at Achray in September. Severe damage was caused to young trees at Midhurst, Camp Borden, and in a tract along the Rouge river in York county. (W. R. Haddow)

### SPRUCE (Picea)

#### WITCHES' BROOM - Arceuthobium pusillum Pk.

N.S.- A few specimens of witches' broom were collected on a

single red spruce (P. rubra) at Lily Lake near Tremont on Aug. 6.

NEEDLE RUST - Peridermium spp.

P.E.I.- Needle rust heavily infected spruce in Queens county; it caused slight damage to P. pungens.

#### ENGLISH WALNUT (Juglans)

BACTERIAL BLIGHT - Pseudomonas Juglandis Pierce

B.C.- Bacterial blight was general on English walnut trees at the Experimental Station, Saanichton. About 20% of the crop was lost.

#### WILLOW (Salix)

TAR SPOT - Rhytisma salicinum (Pers.) Fr.

P.E.I.- A slight infection of tar spot was reported by Mr. Blythe Hurst Sr. from Brackley Beach.

SCAB - Fusicladium saliciperduum (All. & Tub.) Tub.

N.B.- Scab was widespread and the damage was severe in the St. John River valley. (D.J. MacLeod)

It caused slight defoliation of S. pentandra at Loggieville. This is the most severe infection I have ever observed on this species. (K.A.Harrison)

P.E.I.- Scab caused severe damage in Queens county.

POWDERY MILDEW - Uncinula Salicis (DC.) Wint.

P.E.I.- Powdery mildew moderately infected willows in Queens county.