

D I S E A S E S O F F O R E S T A N D S H A D E T R E E S .

ALDER (Alnus)

CATKIN DEFORMATION - Taphrina Alni-incanae (Kthn) Magn.
Very common on swamp alders in P. E. I.

BALSAM FIR (Abies balsamea)

NEEDLE BLIGHT - Asterina nuda Peck.
Moderate to severe infections in York county, N. B.
Disease specimens were received from Sault Ste. Marie, Ont.
Identified by Dr. Dearness.

NEEDLE BLIGHT - Sclerophoma sp.
Slight infection in York county, N. B.

WITCHES' BROOM RUST - Melampsorella elatina (Alb. & Schw.) Arth.
Reported from Highbury, N. S.

BUTT ROT - Polyporus Schweinitzii Fr.
General but slight infection in New Brunswick.

BEECH (Fagus)

WOOD ROT - Fomes fomentarius Fr.
Reported as uncommon in P. E. I.

BIRCH (Betula)

SAPWOOD ROT - Polyporus betulinus Fr.
Common in New Brunswick and Prince Edward Island.

HEART ROT - Fomes igniarius Fr.
Caused considerable damage in second growth birch.

BUTTERNUT (Juglans)

ANTHRACNOSE - Gnomonia leptostyla (Fr.) Ces. & de Not.
Moderate infection occurred on a number of trees at
Maguerville, N. B.

CONIFERS

DAMPING OFF - Cause undetermined.
Damping off has proved troublesome on conifers at
Rosthern, Sask.

ELM (Ulmus)

LEAF SPOT - Gnomonia ulmea (Sacc.) Thüm.
The disease is present in various localities in N. B.
but infection is slight. Not common in P. E. I. The disease

Elm.

was very noticeable in the Eastern Townships and west of Montreal, Que.

ROT - Pleurotus ulmarius Bull.
Observed once on elm in Prince Edward Island.

CANKER - Nectria cinnabarina (Tode) Fr.
Considerable damage was done to elms at Charlottetown, P. E. I.

HORSE CHESTNUT (Aesculus)

LEAF BLOTCH - Guignardia Aesculi (Pk.) V.B. Stewart.
Only isolated specimens were observed in New Brunswick. The disease was general over Prince Edward Island and caused partial defoliation.

LEAF SPOT - Phyllosticta sphaeropsoides Ell. & Ev.
Reported from Ottawa, Ont.

MAPLE (Acer)

DIE BACK - Sphaeropsis albescens Ell. & Ev.
The whole top of a box elder (A. Negundo) was killed back a 2 to 3 feet at Saskatoon, Sask., and the bark of the dead shoots bore pycnidia in abundance. Fungus identified by Dr. Dearness.

LEAF SPOT - Phyllisticta minima (Berk. & Curt.) Ell. & Ev.
A trace of this leaf spot was observed on sugar maple (A. saccharum) in P. E. I.

HEART ROT - Fomes igniarius Fr.
Isolated trees of sugar maple were affected in N. B.

ANTHRACNOSE - Gloeosporium apocryptum Ell. & Ev.
It caused conspicuous disfiguration on the foliage of the ornamental and shade trees (A. platanoides) around a city residence (J. Dearness). It is also reported on sugar maple from P. E. I.

WILT - Verticillium sp.
Wilt was quite prevalent on maple at Coverdale, N. B.

MOUNTAIN ASH (Sorbus)

CANKER - Cytospora chrysosperma (Pers.) Fr.
The disease was observed in York county, N. B. and an affected specimen was received from Quebec City, Que.

PINE - (Pinus).

RUST - Cronartium Comptonae Arth.

Slight infection was present on young trees of jack pine in Sussex, N. B.

STEM CANKER - Ceuthospora sp.

A stem canker caused by Ceuthospora sp. was present on jack pine in York county, N. B. and in the Ottawa Valley in Quebec.

WHITE PINE BLISTER RUST - Cronartium ribicola Fisch.

A brief account of the places where blister rust was found on white pines or on wild Ribes, is here given. These records were obtained from short surveys made by members of the Dominion Laboratories of Plant Pathology or from correspondents, who submitted specimens to the Division of Botany for identification. For the prevalence of rust on cultivated currants see page 49.

Ont.-

A survey for white pine blister rust was conducted in Lincoln county by G. O. Madden. Six of the twenty-eight pine lots visited were found infected with blister rust. These were situated as follows, Ridgeville 2, Fonthill 2, Four Mile Creek 1, and Ball's Falls, near Vineland 1. At all these places the disease was also found on wild currants and gooseberries near infected pines. At the time the survey was made the rust was beginning to appear on cultivated currants, but no effort was made to learn the distribution of the disease on pine from examination of the alternate host. In addition infected pines were received from Renfrew County.

Que.-

Infected pines were received or reported from several places in Quebec with additional comments in many instances as follows:-

Macdonald College - The rust had been found for several years upon Ribes at the college, but this was the first time it was observed in the vicinity on pines. The disease was also abundant on wild currants in the woods.

Lachute - 300 trees have been found infected and removed from an extensive plantation. The Ribes are now being eradicated.

Lakefield - 35 per cent of the trees in a year old plantation were infected with blister rust. Many of the infections were on the main trunk.

Berthier - A few infections have been observed.

Pointe du Lac - Rust has been collected at this place.

Perthuis Seigneurie - Rust was present.

Pine

Lacharite - Twelve four-year-old trees were killed by blister rust.

Kirks Ferry - A tree 6 to 8 feet high was killed by rust.

St. Aubert - About 25 per cent of trees from 1 to 4 inches in diameter were attacked. These trees were located on two rocky hills east of St. Aubert.

Ste. Louise - Rust was found on pines near this place.

Ste. Ouesime - About 50 per cent of the trees near St. Ouesime were found attacked with rust.

Ste. Lucie de Doncaster, Grand Mere and Lac Brule near St. Agathe. Specimens of the rust on Ribes was also sent from Lac Marois.

N. B. -

A survey trip for white pine blister rust was made through York, Sunbury and Queens counties. Rust was found only at Petersville, where several trees were found infested. The disease was present, however, on wild and cultivated currants in all the three counties. The rust has also been collected on pines at St. Andrews.

N. S. -

As the result of a survey in Nova Scotia, white pine blister rust was found at five places in Kings county, two in Annapolis, four in Colchester and one in Antigonish. In addition rust was found on Ribes at two places in Cumberland county, one in Pictou, one in Cape Breton and two additional places in Colchester.

In addition it was reported that the rust was becoming serious on pine about Kentville. Rust was also observed in considerable abundance on white pine at one place in Pictou county. Black currants near by were badly infected.

P. E. I. -

White pine blister rust was reported as destructive in Queens county.

NEEDLE BLIGHT - Lophodermium brachysporum Rostr.

A slight amount of needle blight of white pine was observed in N. B.

POPLAR (Populus)

BARK CANKER - Hypoxylon pruinatum (Klotzsch) Cke.

This disease was reported from four places in Saskatchewan on Populus tremuloides by R. C. Russell.

Poplar.

Kelliher - Disease was prevalent in several bluffs (groves) of trees in an old pasture. Infection ranged from 0.5 to 15 per cent. These trees were dead or dying.

A small percentage of the trees were dead or dying from bark canker at Naisberry, Poplar Beach, Waken and Hazel Dell. The fungus appears to be highly parasitic and to kill the trees in their prime.

DIE BACK - Fusicladium radiosum (Lib.) Lind.

About five inches of the tips of many young shoots on certain trees near Raymore, Sask., were killed. The affected tips were blackened and curled. Infected leaves were also collected at Manitoba Agricultural College, Winnipeg, Man.

LEAF SPOT - Septoria musiva Peck.

Collected at Beaver Creek, Sask., on P. balsamifera. The spots were small, brown and angular. Identified by Dr. Dearness.

POWDERY MILDEW - Uncinula Salicis (DC.) Wint.

Collected on P. balsamifera at Vonda, Sask. Mature perithecia present.

INK SPOT - Sclerotinia bifrons (Ell. & Ev.) Seaver.

(Sclerotium bifrons Ell. & Ev.)

Collected at Mossisburg, Ont.

LIMB GALLS - Cucurbitaria staphula Dearn.

This disease has been found on Populus balsamifera at Buchanan, Devils Lake, Naisbury and Beaver Creek, Sask., by R. C. Russell. He says: "The site of the original collection, which was made in 1924, was revisited. Many trees which were then infected are still living, except some badly infected branches. A similar disease on the bark of the trunks was also observed. At Beaver Creek a high percentage of the trees in one locality along a creek were more or less heavily infected. Most of the infected limbs were dead, some were dying and a few were still green". The percentage of infection was also high at Naisbury in a similar situation.

BLIGHT - Dothichyza populea Sacc. & H. Briard.

Several trees at the Experimental Station, Kentville, N. S. were almost entirely defoliated.

WOOD ROT - Fomes igniarius Fr.

This rot was very prevalent on native poplars in Queens county, P. E. I.

SPRUCE (Picea)

NEEDLE RUSTS -

The needle rusts of spruce were examined or reported as follows:-

Melampsoropsis ledicola (Peck.) Arth. on black spruce - Lawrence Station, near St. Stephen Highway, N. B. Also on white spruce, Riviere-du-Loup, Que. and on blue spruce (P. pungens) at Experimental Farm, Charlottetown, P.E.I.

Melampsoropsis abietina (Alb. & Schw.) Arth. - slightly prevalent on spruce in Victoria County, N. B. (D. J. MacLeod).

ENGLISH WALNUT (Juglans regia)

CROWN ROT - Cause unknown.

A few trees of Franquette variety were found affected with crown rot at Westbank, B. C.

WILLOW (Salix)

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

In Quebec the disease has been very destructive in Gaspé peninsula and Matapedia Valley and is now spreading to Rimouski and Temiscoutata counties. From 10 to 50 or 60 per cent of willows at several places in these latter counties are affected.

In New Brunswick the disease is serious on willows over the entire Province. It is also very destructive in Nova Scotia and Prince Edward Island. Most of the ornamental willows are succumbing to the disease.

RUST - Melampsora Bigelowii Thum.

Light infection at Redberry Lake, Sask.

TAR SPOT - Rhytisma salicinum Fr.

Slight infections observed in N. B.

POWDERY MILDEW - Uncinula Salicis (DC.) Wint.

Mildew was common on willow in Alberta. Also a moderate infection of the swamp willows was reported from Prince Edward Island.