

D I S E A S E S O N M I S C E L L A N E O U S P L A N T S .

The parasitic fungi here reported are from records received from collaborators or from specimens collected and are now being added to the herbarium. Many of collections made in 1929 still remain to be identified, but it is hoped that in time a complete record of each year's additions made be published here as far as the addition adds new information on the distribution or host range of the particular fungus. Fungi new to or rarely collected in Canada will be reported in every case. This list is arranged alphabetically by host.

Agrimonia gryposepala Wallr.

Pucciniastrum Agrimoniae (Schw.) Tranz. Murray Bay, Que.

Agropyron Griffithsii Scribn. & Smith.

Claviceps purpurea (Fr.) Tul. Glenwoodville, Alta.

Agropyron ?Smithii Rydb.

Claviceps purpurea (Fr.) Tul. Rainy River, Ont.

Agropyron repens (L.) Beauv.

Puccinia graminis Pers. South of Montreal, Que.; quite general. Widespread over Prince Edward Island. It develops earlier in season than stem rust of wheat and oats (Hurst).

Phyllachora graminis (Pers.) Fuck. Rougemont and Hemmingford, Que.

Agrostis spp.

Claviceps purpurea (Fr.) Tul.- Observed in Alberta.

Amaranthus retroflexus L.

Cystopus Bliti (Biv.) Lév. Fairly heavy infection. Oospores plentiful in the tissues of the leaves, some mature. Saskatoon, Sask. Sept. 9, 1929. Common on the Island of Montreal, Que.

Amarella strictiflora (Rydb.) Greene (= Gentiana Amarella L. var.

Acuta (Michx.) Herder).

Puccinia Gentianae (Strauss) Link II. Fairly common in a wooded draw, Dana, Sask.

Amelanchier alnifolia Nutt.

Apiosporina Collinsii (Schw.) v. Höhnelt, Manitoba. Agricultural College, Winnipeg, Man. and Redberry Lake, Sask.

Amelanchier sp.

Gymnosporangium germinale Kern. O.I. Highbury, N. S. Quite common in an old mountain pasture. Abundance of juniper in the neighborhood.

Arabis brachycarpa (T. & G.) Britton and A. retrofracta Greene
Puccinia monoica (Peck.) Arth. O.I. This systemic rust is
common on Arabis at Saskatoon, Sask. The pycnial stage appears
very early in the spring (May 5, 1929). Aecia collected May 27,
1929. (R. C. Russell).

Arctium Lappa L.

Puccinia Bardanae Corda. This rust was quite common on
Oct. 5, 1929, at Kentville, N. S.

Artemisia graphalodes Nutt.

Puccinia Absinthii (Hedw.f.) DC. Lethbridge, Alta.
Puccinia universalis Arth. Duchess, Alta.

Artemisia sp.

Erysiphe Cichoracearum DC. St. Gregor, Sask. The fungus
apparently stimulates the host to produce fasciations.

Avena fatua L.

Puccinia graminis Pers. - P. E. I.

Puccinia coronata Cda. St. Agathe, Man., July 22, 1929.

This was the first collection of crown rust in Manitoba for the
year. Only one pustule found. Several fields of cultivated oats
were examined, but no rust was found.

Avena Hookeri Scribn.

Claviceps purpurea (Fr.) Tul. - Rosetown, Sask.
Light infection.

Aster ?Lindleyanus Torr. & Gray.

Puccinia Asterum (Schw.) Kern. Manitoba Agricultural
College, Winnipeg, Man.
Puccinia Asteris Duby - Covey Hill, Que.

Bromus Pampellianus Scribn.

Spikelet blight caused by mites. Found at Wolf Creek,
Alta. and at several points between there and Edmonton. Affected
spikelets much enlarged.

Claviceps purpurea (Fr.) Tul. Wolf Creek, Alta.

Capsella Bursa-pastoria (L.) Medic.

Cystopus candidus (Pers.) de Bary. Common in York Co. N.B.

Chenopodium capitatum (L.) Asch.

Septoria sp. Lake Waskesin, Sask. The leaves were well
infected.

Cirsium arvense L.

Puccinia suaveolens (Pers.) Rostr. Generally distributed
in New Brunswick.

Claytonia caroliniana Michx.

Puccinia claytoniata (Schw.) Arth. OI. - The rust was very general at Vaudreuil.

Comandra pallida DC.

Puccinia Andropogonis Schw. Stockton, Man.
Cronartium Comandrae Peck. St. Gregor, Sask. This rust is frequently found miles from the nearest pine trees.

Corylus rostrata Ait.

Gnomoniella Coryli (Batsch.) Sacc. Dana, Sask. Common.

Crataegus sp.

Gymnosporangium germinale (Schw.) Kern. Very common rust on once species of Crataegus. P.E.I.

Dactylis glomerata L.

Puccinia graminis Pers. P. E. I.

Distichlis sp.

Puccinia subnitens Diet. Vonda, Sask. Infection light.
Phyllachora graminis (Pers.) Fuck. Vonda, Sask. Infection heavy.

Dodecatheon pauciflorum (Durand) Greene.

Uromyces acuminatus Arth. OI. Humboldt, Sask. Rather rare.

Eleagnus commutata Bernh.

Puccinia Caracis-Shepherdiae Davis OI. Redberry Lake, Sask. Infection was quite severe. The more or less stellate arrangement of the pycnia was quite evident.

Erythronium americanum Ker.

Ustilago Heufleri Fuck. Vaudreuil, Que. Abundant in isolated patches of the host plants.

Galium boreale L.

Puccinia rubefaciens Johans. Souris, Man. Abundant.

Glycyrrhiza lepidota (Nutt.) Pursh.

Uromyces Glycyrrhizae (Rabh.) P. Magnus - Saskatoon, Sask. Infection was quite heavy.

Grindelia squarrosa (Pursh.) Dunal.

Puccinia Grindeliae Peck. Wakan, Sask. A patch by the roadside was quite heavily rusted. Not found very commonly.

Hedysarum boreale Nutt.

Uromyces Hedysarii-obscuri (DC.) Car. & Picc. Foxwarren, Man. and Humboldt, Sask. Common.

Halerpestes Cymbalaria (Pursh.) Greene.
Puccinia Clematidis (DC.) Lagerh. OI. Redberry Lake, Sask.
Common.

Helianthus sp.
Puccinia Helianthi Schw. III. Montfort, Que. Abundant
on wild sunflowers growing in open places in the woods.

Hordeum jubatum L.
Puccinia glumarum (Schmidt) Erikss. & Henn. Alberta.
Ustilago Lorentziana Thüm. Payton and Rosetown, Sask.
Puccinia graminis Pers. Alberta and P. E. I.
Erysiphe graminis DC. Alberta.

Iva axillaris Pursh.
Puccinia intermixta Peck. I. Milestone, Sask.

Juniperus communis L. var. hibernica Gord.
Gymnosporangium germinale (Schw.) Kern.
" clavariaeforme (Jacq.) DC.
Telia stages of both these fungi were found on the same
plant at the Experimental Station, Kentville, N. S.

Laciniaria punctata (Hook) Kuntze.
Puccinia Liatridis (Ell. & And.) Bethel. OI. Dana, Sask.
Comparatively rare.

Lactuca pulchella (Pursh.) DC.
Puccinia hemisphaerica (Pk.) Ell. & Ev. OI. and II. West
Emerson, Man.; OI, and II, III, Redberry Lake, Sask.
Puccinia patruelis Arth. OI. Redberry Lake, Sask.

Lathyrus ochroleucus Hook.
Uromyces Fabae (Pers.) de Bary III, Saskatoon, Sask.
Rather heavy infection on plants growing in poplar grove.
Septoria Astragali Rob. & Desm. - leaf spot. St. Gregor,
Sask.

Leontodon sp.
Puccinia Hieracii (Schum.) Mart. II. Zealandia, Sask.
II. III. Melfort, Sask. Heavy infection.

Lygodesmia juncea (Pursh.) D. Don.
Puccinia patruelis Arth. I, Pike Lake, Sask. Medium
infection on the majority of plants in one spot.

Maianthemum sp.
Puccinia sessilis Schneid. New Minas, N. S.

Malva rotundifolia L.
Puccinia Malvacearum Bert. Kentville, N. S. Very common.

Malvastrum coccinium (Pursh.) Gray.

Puccinia Sherardiana Körn. Blackie, Alta.

Monarda menthaefolia Benth.

Puccinia Menthae Pers. III & II. Dana, Sask.

Nabulus racemosa (Michx.) DC.

Puccinia orbicula Peck. & Clint. III - Cudworth, Sask.

Persicaria Persicaria (L) Small.

Septoria Polygonorum Desm. Island of Montreal, Que.

Petasites palmata (Ait.) Gray.

Puccinia conglomerata (Strauss) Schmidt. & Kunze.

Redberry, Sask. Infection quite severe along edge of swamp.

Plantago major. L.

Erysiphe Cichoracearum DC. Common everywhere in Quebec.

Ramularia Plantaginis Ell. & Mart. Ronville Co., Quebec.

General.

Polygonum aviculare L.

Uromyces Polygoni (Pers.) Duchess, Alta.; Morris, Man.

and Henrysbury, Que.

Poa pratensis L.

Puccinia Poarum Niels. Duhamel, Alta.

Erysiphi graminis DC. Olds, Alta.

Portulaca oleracea L.

Cystopus Portulacae (DC.) Lev. Cambridge, N. S. Very common in local gardens.

Potentilla camporum Rydb. and Potentilla pulcherrima Lehm.

Phragmidium Ivesiae Syd. Beaverlodge, Alta. These two species of Potentilla were closely associated.

Potentilla monspeliensis L.

Ramularia arvensis Sacc. Hartney, Man.

Pyrola ?americana Sweet.

Melampsoropsis Pyrolae (DC.) Arth. M.A.C. Winnipeg, Man.

Raphanus Raphanistrum L.

Peronospora parasitica (Pers.) Fr. Kentville, N. S. Very prevalent at this time.

- Ribes nigra.
Puccinia Pringsheimiana. Kleb. M.A.C. Winnipeg, Man.
- Rosa Sp.
Phragmidium speciosum (Fr.) Cooke. Moden, Man.
- Rubus spp.
Gymnoconia interstitialis (Schlect.) Lagerh. Gananoque, Ont. Very abundant in a woods.
- Rudbeckia laciniata L.
Ramularia Rudbeckiae Pk. - Neepawa, Man.
- Shepherdia canadensis (L.) Nutt.
Puccinia coronata Cda. OI. Saskatoon, Sask. Quite common.
- Solidago canadensis L.
Phylachora Solidaginum Sacc. Macdonald College, Que. Very abundant.
- Solidago sp.
Puccinia extensicola Plowr. I. Redberry Lake, Sask. Heavy infection.
- Stieronema ciliatum (L.) Raf.
Puccinia Distichlidis Ell. & Ev. M.A.C. Winnipeg, Man.
- Stipa viridula Trin.
Ustilago hypodytes (Schl.) Fr. Neepawa, Man.
Puccinia substerilis Ell. & Ev. X. Raymore, Sask.
As is usual the collection shows amphispores almost to the exclusion of urediniospores or teliospores.
- Symphoricarpos sp.
Septoria Symphoricarpi Ell. & Ev. St. Gregor, Sask. Fairly common.
- Taraxacum officinale Weber.
Puccinia Hieracii (Schum.) Mart.- About Montreal, Que. and York Co., N. B. Infection heavy.
- Ramularia Taraxaci Karst. General around Montreal, Que.
- Thalictrum dasycarpum Fisch, Mey. & Ave.-Lall.
Puccinia clematidis (DC.) Lagerh. Edmonton, Alta.
- Thalictrum sp.
Puccinia clematidis (DC.) Lagerh. Redberry Lake, Sask. Moderate infection.

Trifolium hybridum L.

Cereospora zebrina Pass. Dauphin, Man.

Vicia sparsifolia Nutt.

Uromyces albus Diet. & Holw. O. & I. Saskatoon, Sask.

Heavy systematic infection in certain patches. The rust appears to prevent the host from flowering.

Viola pedatifida G. Don.

Puccinia Violae (Schum.) DC. G. & I. Sutherland, Sask.

The host is quite rare.