Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

THE PLANT DISEASE REPORTER

Issued By

Division of Mycology and Disease Survey

BUREAU OF PLANT INDUSTRY

UNITED STATES DEPARTMENT OF AGRICULTURE

Supplement 123

PRELIMINARY HOST INDEX

TO FUNGI OF MOUNT SHASTA, CALIFORNIA

October 1, 1940

The Plant Disease Reporter is issued as a service to plant pathologists throughout the United States. It contains reports, summaries, observations, and comments submitted voluntarily by qualified observers. These reports often are in the form of suggestions, queries, and opinions, frequently purely tentative, offered for consideration or discussion rather than as matters of established fact. In accepting and publishing this material the Division of Mycology and Disease Survey serves merely as an informational clearing house. It does not assume responsibility for the subject matter.

PRELIMINARY HOST INDEX TO FUNGI OF MOUNT SHASTA, CALIFORNIA

By Wm. Bridge Cooke 1/

Plant Disease Reporter
Supplement 123

Note
See corrections
P253 Vol 26
Pl. Dis. Report,
October 1, 1940.

During the summers of 1937, 1938, and 1939, the writer had the privilege of spending at least three months each summer at timberline on the southwest slopes of Mount Shasta, California. The area studied lies in the Mount Shasta Recréational Area of the Shasta National Forest in south-central Siskiyou County. Mt. Shasta is a Cascade volcano with a comparatively poor flora of few more than 400 species of flowering plants. The area studied roughly coincides with that described in "A Flora of Mount Shasta", by the writer, published in the American Midland Naturalist for May-June 1940.

The collection of saprobic species of fungi was largely confined to a brief period of time during and immediately following the rapid melting of the winter snows in late June and early July. At those times, because of inconvenience of reaching other stands, the fungi saprobic on Abies magnifica var. shastensis, the Shasta red fir, have been collected most intensively. While Pinus albicaulis, the white-bark pine, occurred near my headquarters, the Shasta Alpine Lodge at Horse Camp, it was rather free from such fungi. Saprobie species of Tsuga mertensiana, the mountain hemlock, were not collected thoroughly because of the locations of the two large communities of this tree.

Of the parasitic fungi several seem to be reported from California for the first time, especially in the groups of rusts and smuts. Leaf spots are very infrequent.

I am indebted to the following persons for assistance with determinations: Dr. D. H. Linder, Farlow Herbarium; Dr. A. H. Smith, University of Michigan; Dr. Lee Bonar, University of California; Dr. Roderick Sprague, Division of Cereal Crops and Diseases, U. S. Bureau of Plant Industry; Dr. Fred J. Seaver, New York Botanical Gardens; Dr. George L. Zundel, Pennsylvania State College; Dr. L. E. Wehmeyer, University of Michigan; Dr. Ruth Rensberg, Cornell University; Dr. G. W. Martin, State University of Iowa; and Dr. A. J. Mix,

1/ Custodian of the Shasta Alpine Lodge for the Sierra Club of California

University of Kansas. I am also indebted to Dr. J. H. Hoskins and the Botany Department of the University of Cincinnati for use of laboratory space and equipment while studying many of these species.

A number in brackets following the name of a species, (Exs.1), indicates the number of the fungus in the writer's recently issued exsiccati.

Abies concolor Lindl. & Gord.

Hypoderma robustum Tub. (Exs. 69)

Abies magnifica Murr. var. *shastensis* Lemmon

Armillaria sp. Rhizomorphs seen.

Botryobasidium ochraceum (Mass.) Donk

Coniophora olivaceus (Fr.) Karst.

Corticium cremoricolor Berk. & Curt.

Corticium roseum Pers. ex Fr.

Corticium scutellare Berk. & Curt.

Cryptoporus volvatus (Pk.) Hubbard

?*Cylindrocolla* sp. Probably the imperfect stage of *Guepinionsis alpinus*

Dacrymyces deliquescens (Bull.) DBy. Both perfect and imperfect stages collected together.

Dasyscypha arida (Phil.) Sacc. (Exs.66)

Dasyscypha sp.

Echinodontium tinctorum Ell. & Ev.

Fomes annosus (Fr.) Cke.

Fomes subroseus (Fr.) Cke.

Flammula penetrans (Fr.) Quel.

Ganoderma oregonensis Murr.

Guepiniopsis alpinus (Tr. & Earle) Brasfield (Exs. 50)

Hymenochaete rugispora Ell. & Ev. (Exs. 45)

Hysterographium formosum (Cke.) Sacc. (Exs. 34)

Lachnellula chrysophthalma (Pers.) Karst.

Merulius americanus Burt (Exs. 46)

Merulius bellus Berk. & Curt. (Exs. 47)

Merulius ceracellus Berk. & Curt. (Exs. 48)

Neopeckia coulteri (Pk.) Sacc.

Odontotrema minus Nyl.

Oxydantia albobiride (Morgan) Miller

Patella scutellata (L.) Morgan

Phlebia centrifuga Karst.

Pleurotus petaloides (Fr.) Quel.

Polyporus abietinus Fr.

Polyporus alboluteus Ell. & Ev. (Exs. 49)

Polyporus leucospongia Cke. & Hark. (Exs. 30A)

Abies magnifica Murr. var. *shastensis* Lemmon (Continued)

Poria candidissima (Schw.) Sacc.

Poria lenis Karst.

Poria subincarnata (Pk.) Murr. (Exs. 57)

Sepedonium chrysospermum (Bull.) Fr.

Solenia candida Pers. ex Fr. (Exs. 44)

?*Sorangium* sp. A member of the Myxobacteriaceae.

Sphaeridium luteum v. Hoehn.

Tilachlidium tomentosum (Schrad.) Lindau

Trametes pini Fr. var. *abietis* Karst.

Tremellodon gelatinosum Pers. ex Fr.

Tulasnella fuscoviolacea Bres.

Tympanis pinastri (Tul.) Rehm.

Agoseris scorzoneraefolia Greene

Puccinia hieracii (Schum.) Mart.

Agrostis exarata Trin.

Erysiphe graminis DC. (Exs. 20)

Allium validum Wats.

Uromyces aureus Diet. & Holw. (Exs. 15)

Amelanchier alnifolia Nutt.

Gymnosporangium libocedri (P. Henn.) Kern (Exs. 37)

Arabis platysperma Gray var. *howellii* (Wats.) Jepson

Puccinia monoica (Pk.) Arth.

Arctostaphylos nevadensis Gray

Exobasidium vaccinii (Fekl.) Wor.

Exobasidium vaccinii-uliginosii Bond.

Phyllosticta amicta Ell. & Ev. (Exs. 51)

Arctostaphylos patula Greene

Cryptostictis arbuti (Bonar) Zeller

Exobasidium vaccinii-uliginosii Bond. (Exs. 25)

Godronia sp.

Arnica mollis Hook.

Sphaerotheca humuli (DC.) Burr. var. *fuliginea* (Schlecht.) Salm.

(Exs. 23)

Asarum hartwegii Wats.

Synchytrium asari Arth. & Holw.

Athyrium americanum (Butters) Maxon

Hysterium magnosporum Ger. (Exs. 33)

Bromus carinatus Hook. & Arn.

Scolecotrichum graminis (Pers.) Fekl.

Puccinia glumarum (Schmidt) Erikss. & Henn.

Ustilago bromivora (Tul.) Fisch. (Exs. 43)

Calyptridium umbellatum (Torr.) Greene var. *caudicifera* (Gray) Jepson

Uromyces spragueae Hark. (Exs. 18)

Cardamine bellidifolia L. var. *pachyphylla* Cov. & Leib.

Puccinia cruciferarum Rud.

Carex brainerdii Mke.

Puccinia extensicola Plowr. (Exs. 5)

Carex spectabilis Dewey

Cintractia caricis (Pers.) Magn. (Exs. 65)

Cintractia externa (Griff.) Clint.

Carex sp.

Cladosporium herbarum (Pers.) Lk.

Castanopsis chrysophylla A. DC.

Dothidella castanicola (Ell. & Ev.) Bonar (Exs. 28)

Taphrina castanopsidis Ell. & Ev. ex Jenkins

Castilleja arachnoidea Greenm.

Phoma herbarum Westd.

Sphaeropsis microscopicum Tassi

Chamaesaracha nana Gray

Puccinia chamaesarachae Syd. (Exs. 4)

Chrysothamnus nauseosus (Pall.) Britt. var. *occidentalis* (Greene) Hall

Epochnium isthmophorum Sacc.

Cryptantha affinis (Gray) Greene

Erysiphe cichoraccarum DC.

Cymopterus terebinthinus (Hook.) T. & G.

Puccinia jonesii Pk. var. *cymopteri* (Diet. & Holw.) Arth. (Exs. 8)

Puccinia pseudocymopteri Holw.

Cystopteris fragilis (L.) Bernh.

Hyalopsora polypodii (Pers.) Magn. (Exs. 38)

Delphinium pauciflorum Nutt.

Ramularia delphinii Jaap

- Elymus glaucus* Buckl. var *jepsonii* Davy
Puccinia glumarum (Schmidt) Erikss. & Henn. (Exs. 6)
- Epilobium clavatum* Trel.
Puccinia scandica Johanss. (Exs. 11)
- Epilobium hornemannii* Hausskn.
Sphaerotheca epilobii (Lk.) Duby
- Epilobium lactiflorum* Hausskn.
Sphaerotheca epilobii (Lk.) Duby (Exs. 41A)
- Erigeron inornatus* Gray
Erysiphe cichoracearum DC. (Exs. 19)
- Eriogonum latifolium* Smith ssp. *nudum* (Dougl.) Stokes
Uromyces intricatus Cke.
- Eriogonum marifolium* T. & G.
Erysiphe polygoni DC.
Uromyces intricatus Cke. (Exs. 17)
- Ganoderma oregonensis* Murr.
Hypomyces aurantius (Pers.) Fckl.
- Gayophytum ramosissimum* T. & G.
Puccinia vagans (DC.) Arth. var. *gayophytii* Arth. (Exs. 12)
- Glyceria elata* (Nash) Hitchc.
Scolecotrichum graminis (Pers.) Fckl.
- Hieracium albiflorum* Hook.
Puccinia hieracii (Schum.) Mart. (Exs. 7)
- Juncus balticus* Willd. var. *montanus* Engelm.
Leptosphaeria juncicola Karst. (Exs. 68)
Scelobelonium melanosporum (Rehm.) v. Hoehn. (Exs. 68)
- Juncus parryi* Engelm.
Cintractia californica Zundel (Exs. 64) 2/
Dothidella junci (Fr.) Sacc. (Exs. 40A) - -
Uromyces junci (Desm.) L. Tul. (Exs. 39A)
- Juncus* sp.
Heteropatella alpina (Ell. & Ev.) W. B. Cooke

Kelloggia galioides Torr.
 ? *Placosphaeria* sp.

Libocedrus decurrens Torr.
 Gymnosporangium libocedri (P. Henn.) Kern (Exs. 1)
 Patella scutellata (L.) Morgan

Ligusticum grayi C. & R.
 Heteropatella alpina (Ell. & Ev.) W. B. Cooke (Exs. 28A)
 Nyssopsora echinata (Lév.) Arth. (Exs. 3)
 Puccinia ligustici Ell. & Ev. (Exs. 41)

Lupinus albicaulis Dougl. var. *shastensis* C.P. Smith
 Phyllosticta ferax Ell. & Ev. (Exs. 52)
 Pleospora amplispora Ell. & Ev. (Exs. 54)

Lupinus obtusilobus Heller
 Mollisia sp.
 Pleospora balsamorhizae Tr. & Earle (Exs. 55)
 Typhula sp.

Monardella odoratissima Benth.
 Phyllosticta monardellae W. B. Cooke (Exs. 70) 2/
 Placosphaeria shastensis Sprague & W. B. Cooke (Exs. 31)
 Pleospora permunda Cke. (Exs. 31)
 Puccinia menthae Pers. (Exs. 9)
 Stemphyllum sp.

Osmorrhiza nuda Torr.
 Puccinia pimpinellae (Str.) Mart.

Pedicularis densiflora Benth.
 Puccinia rufescens Diet. & Holw.

Pentstemon deustus Dougl. ssp. *typicus* Keck
 Puccinia pentstemonis Pk. (Exs. 10)

Pentstemon gracilentus Gray
 Pleospora permunda Cke. (Exs. 36)

Pentstemon newberryi Gray
 Puccinia palmeri Diet. & Holw. (Exs. 42)

Phlox douglasii Hook.
 Macrophoma cylindrospora (Desm.) Berl. & Vogl.

Pinus albicaulis Engelm.

?*Allantophomopsis* sp.

Dasyscypha arida (Phil.) Sacc.

Guepiniopsis alpinus (Tr. & Earle) Brasfield. Seen, but not collected.

Hysteroglyphium formosum (Cke.) Sacc.

Lentinus lepideus Fr.

Lophodermium pinastri (Schrad.) Chev. (Exs. 53)

Neopeckia coulteri (Pk.) Sacc. (Exs. 35)

Phoma harknessii Sacc.

Polyporus leucospongia Cke. & Hark.

Tympanis pinastri (Tul.) Rehm.

Pinus contorta Dougl. var. *Murrayana* Engelm.

Cronartium comptoniae Arth.

Pinus lambertiana Dougl.

Armillaria sp. Rhizomorphs seen.

Pinus ponderosa Dougl.

Lentinus lepideus Fr.

Poria rufa (Schrad. ex Fr.) Cke.

Poa pratensis L.

Erysiphe graminis DC. (Exs. 26)

Helminthosporium vagans Drechs. (Exs. 30)

Polygonum shastense Brewer

Ustilago shastense Zundel (Exs. 63) 2/

Prunus emarginata (Dougl.) Walp.

Taphrina flectans Mix (Exs. 25)

Pteridium aquilinum (L.) Roth ex Mertens var. *pubescens* Underw.

Gloeosporium pteridis Hark. (Exs. 29)

Salix scouleriana Barr.

?*Torula crustacea* Schw.?

Salix sitchensis Bong.

Melampsora arctica Rostr. (Exs. 2)

Senecio aronicioides DC.

Ramularia senecionis (Berk. & Br.) Sacc. var. *carniolica* Jaap (Exs. 32)

Sisymbrium altissimum L.

Cystopus candidus (Pers.) Lév.

Sitanion hansenii (Scribn.) J. G. Smith

Puccinia glumarum (Schmidt) Erikss. & Henn. (Exs. 40)

Ustilago hypodytes (Schl.) Fr. (Exs. 58)

Sitanion hystrix (Nutt.) J. G. Smith

Erysiphe graminis DC. (Exs. 27)

Phoma herbarum Westd.

Ustilago hypodytes (Schl.) Fr. (Exs. 59)

Ustilago minima Arth. (Exs. 62)

Stellaria longipes Goldie

Melampsorella cerastii (Pers.) Schroot. (Exs. 39)

Stipa californica Merr. & Davy

Ustilago hypodytes (Schl.) Fr. (Exs. 60)

Stipa occidentalis Thurb.

Anguina sp.

Scolecotrichum graminis (Pers.) Fekl.

Ustilago hypodytes (Schl.) Fr. (Exs. 61)

Streptanthus orbiculatus Greene

Naemosphaera shastensis Sprague & W. B. Cooke

Trisetum spicatum (L.) Richt.

Puccinia rubigo-vera (DC.) Wint.

Tsuga mertensiana (Bong.) Sarg.

Dasyscypha agassizii (Berk. & Curt.) Sacc.

Guepiniopsis alpinus (Tr. & Earle) Brasfield

Poria vaporaria (Fr.) Cke.

Vaccinium caespitosum Michx.

Pucciniastrum goeppertianum (Kühn) Kleb. (Exs. 13)

Pucciniastrum myrtillii (Schum.) Arth. (Exs. 14)

Vicia americana Muhl.

Erysiphe polygoni DC. (Exs. 21)

Uromyces fabae (Pers.) DBy. (Exs. 16)

Viola purpurea Kell.

Sphaerotheca humuli (DC.) Burr. (Exs. 22)

On various dead grasses, sedges and rushes (leaves and stems which have overwintered in situ in clumps or in springs).

Cladosporium herbarum (Pers.) Lk.

Phoma herbarum Westd.

Typhula sp.

On old boards (Shasta Fir or Yellow Pine)

Dasyscypha agassizii (Berk. & Curt.) Sacc. (Exs. 67)

On the ground and on or under duff

Calodon amicum Quel. (Exs. 56)

Coprinus comatus Fr.

Discina ancilis (Pers.) Sacc.

Helvella californica Phill.

Paxina nigrella Seaver

Peziza sp.

Polyporus perennis Fr.

Pseudoplectania fulgens (Pers.) Eckl.