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JOHN M. CLARKE Director

CHARLES H. PECK State Botanist

Bulletin 105

BOTANY 9

REPORT OF THE STATE BOTANIST 1905

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NEW YORK STATE EDUCATION DEPARTMENT
1906

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*New York State Education Department
Science Division, January 2, 1906*

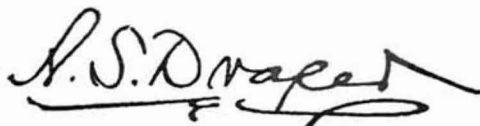
*Hon. Andrew S. Draper LL.D.
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SIR: I herewith transmit for publication as a bulletin of the State Museum the annual report of the State Botanist for the year ending September 30, 1905.

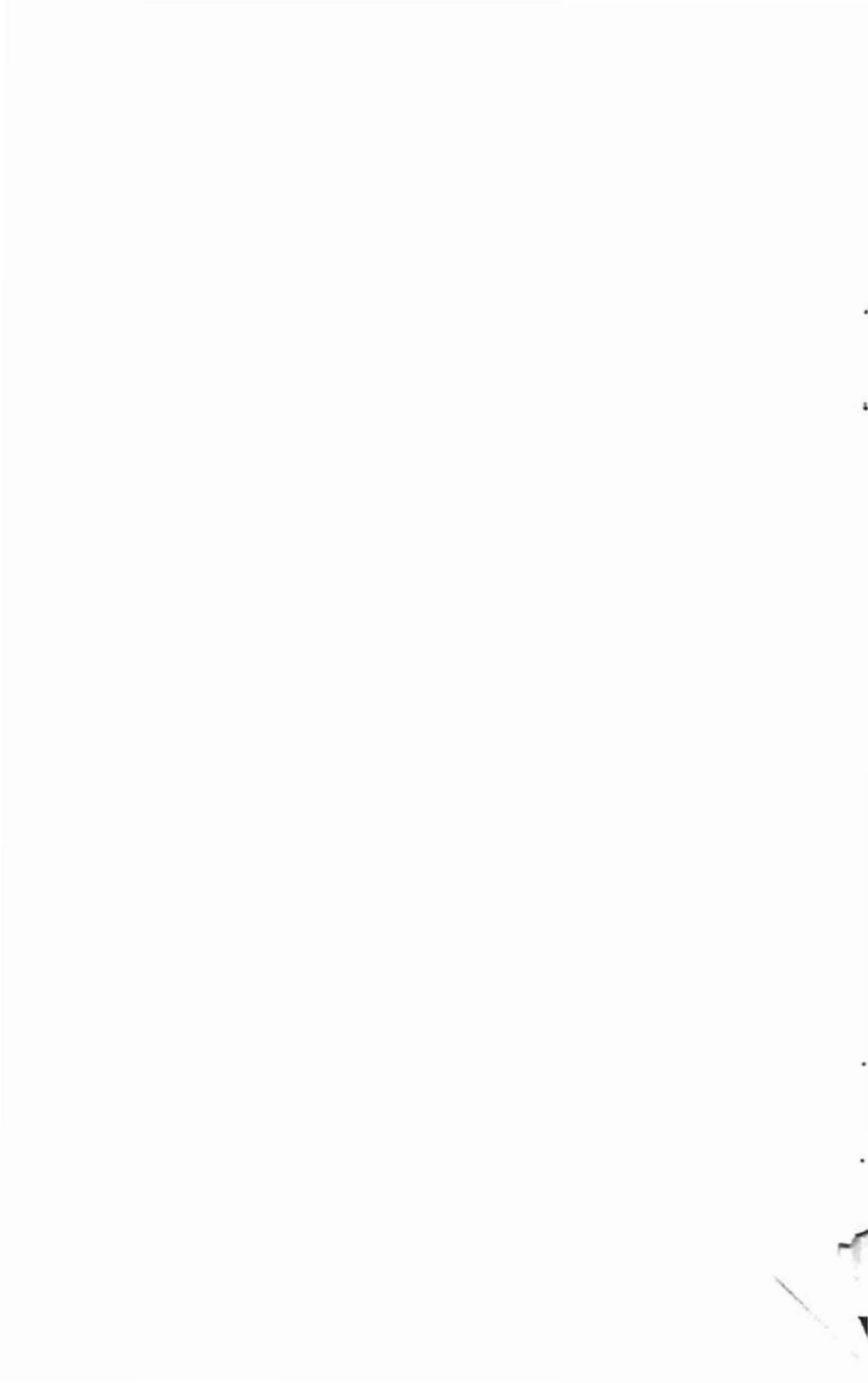
Very respectfully

JOHN M. CLARKE
Director

Approved for publication, January 5, 1906

A handwritten signature in cursive script that reads "A. S. Draper". The signature is written in dark ink and is positioned above the printed name of the Commissioner of Education.

Commissioner of Education



New York State Museum

JOHN M. CLARKE Director
CHARLES H. PECK State Botanist

Bulletin 105

BOTANY 9

REPORT OF THE STATE BOTANIST 1905

To John M. Clarke, Director of Science Division:

I have the honor of submitting to you the following report of work done in the botanical department of the State Museum during the year 1905.

Specimens of plants for the State herbarium have been collected in the counties of Albany, Allegany, Essex, Livingston, Rensselaer, Saratoga, Steuben, Suffolk, Warren and Wyoming. Specimens have been contributed that were collected in the counties of Albany, Chautauqua, Columbia, Fulton, Herkimer, Monroe, Oneida, Onondaga, Orleans, Oswego, Queens, Rensselaer, Suffolk, Tompkins, Warren, Washington, Wayne and Westchester. Specimens have also been contributed or sent for identification that were collected in the states of California, Connecticut, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Jersey, North Carolina, Pennsylvania and Virginia; also in the District of Columbia, and in the country of Mexico and the provinces of Alberta, British Columbia, New Brunswick and Ontario.

The number of New York species added to the herbarium is 277. Of these, 76 are new to the herbarium. A list of the names of these species may be found under the title "Plants added to the herbarium."

The number of contributions received, including specimens sent for identification, when their character and condition was such as to make their preservation desirable, is 63. A list of the names of the contributors and their respective contributions is given under the title "Contributors and their contributions."

One of the most notable of these contributions consists of a bell jar containing about 6 quarts of dried specimens of an edible

mushroom which is found in China and Japan growing on oak branches. A cabinet case about 4 feet long and 2 feet wide, containing four oak branches bearing specimens of the mushroom in place and showing their mode of growth, forms a part of the contribution. There are certain marks on the branches indicating that the mushroom is cultivated. These specimens had been on exhibition at the Louisiana Purchase Exposition at St. Louis and at the close of the fair they were presented to the New York State herbarium by the Osaka Mushroom Merchants Association. The botanical name of the mushroom is *Pleurotus breetschedleri*, the common Japanese name is Shiitake.

The number of species added to the flora of the State is 82. Some of these have before been recorded as varieties of various species, but recently they have been raised to specific rank and they are herein reported as species. Of the 82 additions, 41 are considered new species and are described as such in this report. Of the new species, 19 belong to the genus *Crataegus* and are described in a chapter entitled "Species of *Crataegus* found within 20 miles of Albany." The remaining 22 are fungi. A chapter on species not before reported contains the names of the species new to our flora, descriptions of the new species not elsewhere described in this report and remarks concerning the others with the names of the places where and the times when the specimens were collected.

A record of new stations of rare plants and of persistence in old stations, descriptions of new varieties and remarks concerning peculiar and distinguishing features of closely related species may be found under the title "Remarks and observations." In this chapter 38 species are noticed.

The investigation of our species of *Crataegus* has been continued. In the study of our species in the vicinity of Albany I deem myself fortunate in having had the expert aid of Prof. C. S. Sargent, our highest authority on this, our largest and most difficult genus of trees and shrubs. He has visited with me some of the most prolific and interesting localities and personally examined the trees and shrubs in their place of growth and has kindly identified others from specimens sent him. He has named and described the new species reported in the chapter on species of *Crataegus* found within 20 miles of Albany and has prepared the bibliographic references of the others. Specimens collected in other parts of the State have not yet been fully identified. The number of species of this genus already identified and known to belong to our flora is 89.

The number of species of plants identified for correspondents and others who have sent or brought specimens to the office of the Botanist for this purpose is 601. The number of persons for whom identifications have been made is 86.

The work of testing our wild mushrooms for their edible qualities has been continued. The number of species tried and approved is 11. Descriptions of these have been written and constitute a chapter on edible fungi. They are illustrated on 10 plates by colored figures of natural size. Similar figures of four new species of fungi have been prepared on two plates. The number of species and varieties of New York edible mushrooms figured and described up to the present time is 172.

Mr Stewart H. Burnham was employed as temporary assistant during July, August and September. He continued the work begun by him last year and was chiefly engaged in disinfecting, arranging and labeling specimens. He also assisted in conducting the correspondence of the office and in the identification of specimens sent by correspondents.

Respectfully submitted

CHARLES H. PECK
State Botanist

Office of the State Botanist
Albany October 1, 1905

SPECIES ADDED TO THE HERBARIUM

New to the herbarium

- Accidium tridentatum* *Tram.*
Anthostoma gastrina (*Fr.*) *Sacc.*
Boletus acidus *Pk.*
Clavaria conopsea *Pe.*
Clitophle squamulosa *Pe.*
Coccospira aurantiaca *Waldw.*
Cortinarius rubripes *Pk.*
Crataegus acuminata *Sarg.*
C. ambrosia *Sarg.*
C. aperiola *Sarg.*
C. beckiana *Sarg.*
C. cincta *Sarg.*
C. caesiata *Sarg.*
C. complana *Sarg.*
C. contortifolia *Sarg.*
C. demissa *Sarg.*
C. divergens *Sarg.*
C. eatoniana *Sarg.*
C. edsoni *Sarg.*
C. flagrans *Sarg.*
C. genialis *Sarg.*
C. halliana *Sarg.*
C. helderbergensis *S.*
C. howeana *Sarg.*
C. hystericina *Ashe*
C. illuminata *Sarg.*
C. mellita *Sarg.*
C. menandiana *Sarg.*
C. oblongifolia *Sarg.*
C. peckietta *Sarg.*
C. pentandra *Sarg.*
C. polita *Sarg.*
C. rhombifolia *Sarg.*
C. robbinsiana *Sarg.*
C. rubrocarnea *Sarg.*
C. sejuncta *Sarg.*
Entoloma flavifolium *Pk.*
Erinella raphidospora (*Ellis*)
- Excuscus cecidomophilus* *Atk.*
Geopyxis melulosa (*Cke.*) *Sacc.*
Geranium silvaticum *L.*
Glossosporium riessii *S. & S.*
Hydnum cyathoductum *Pk.*
Hymenoglyphus campforati *Pk.*
H. lactosus (*Fr.*) *Tul.*
Inocybe diminuta *Pk.*
I. radiata *Pk.*
Lactella flammea (*A. & S.*) *Fr.*
Lactarius rimosellus *Pk.*
Lentinus spectus *Pk.*
Leptosphaeria substerilis *Pk.*
Marasmius longistriatus *Pk.*
Melanogaster durissimus *Cke.*
Melanthium latifolium *Desr.*
Morulus pruni *Pk.*
M. ulmi *Pk.*
Oligonema nitens (*Lib.*) *Rost.*
Panus fulvidus *Bres.*
Perichaena quadrata *Marb.*
Phyllosticta pallidior *Pk.*
Physoderma menyanthidis *DeBy.*
Pluteus grandis *Pk.*
Polyporus underwoodii *Murr.*
Psathyra vestita *Pk.*
Russula subsordida *Pk.*
R. viridella *Pk.*
Sporotrichum anthophilum *Pk.*
Stropharia melasperma (*Bull.*)
Tilmadoche compacta *Wing.*
Tricholoma paeonium *Fr.*
T. unifactum *Pk.*
Uredinopsis atkinsoni *Magn.*
U. osmundae *Magn.*
Verbascum phlomoides *L.*
Veronica chamaedrys *L.*
Zygodon pallidofulvus *Pk.*

Not new to the herbarium

- Acer pennsylvanicum* *L.*
A. saccharum *L.*
Accidium pentstemonis *Schw.*
Agaricus abruptibullus *Pk.*
A. arvensis *Schaeff.*
A. campester *L.*
Amanita frostiana *Pk.*
A. phalloides *Fr.*
A. rufescens *Fr.*
A. russuloides *Pk.*
A. solitaria *Bull.*

- Amanitopsis vaginata (Bull.) Reze
 A. volvata (Pk.) Sacc.
 Amelanchier oligocarpa (Mx.)
 Aralia nudicaulis L.
 Aretium lappa L.
 Artemisia caudata Mx.
 Asplenium eben. hortonae Dav.
 A. eben. incisum Howe
 Betula lenta L.
 B. papyrifera Marsh.
 B. populifolia Marsh.
 Bidens bipinnata L.
 Boletus aureipes Pk.
 B. bicolor Pk.
 B. castaneus Bull.
 B. chromapes Frost
 B. chrysenferon Fr.
 B. felleus Bull.
 B. frostii Russ.
 B. rugosiceps Pk.
 B. russellii Frost
 B. subaureus Pk.
 Bovista plumbea Pers.
 Bulgaria rufa Schw.
 B. rufa magna Pk.
 Cassia chamaecrista L.
 C. nictitans L.
 Chimaphila umbellata (L.) Nutt.
 Cicuta maculata L.
 Clitocybe ochropurpurea Berk.
 Clitopilus noveboracensis Pk.
 C. prunulus (Scop.) Fr.
 Collybia dryophila (Bull.) Fr.
 Cornus amomum Mill.
 C. candidissima Marsh.
 C. circinata L'Her.
 Cortinarius amarus Pk.
 C. bolaris (Pers.) Fr.
 C. corrugatus Pk.
 C. heliotropicus Pk.
 C. semisanguineus (Fr.)
 C. torvus Fr.
 Crataegus acclivis Sarg.
 C. champlainensis Sarg.
 C. coccinea L.
 C. durobrivensis Sarg.
 C. ferentaria Sarg.
 C. gemmosa Sarg.
 C. oxyacantha L.
 C. succulenta Lk.
 Drosera rotund. comosa Fern.
 Elatine americana (Pursk) Arn.
 Entomosporium maculatum Lev.
 Epipactis viridiflora (Hoffm.)
 Equisetum hyemale L.
 E. variegatum Schleich.
 Fomes conchatus (Pers.) Fr.
 F. rimosus Berk.
 Gentiana quinquefolia L.
 Gyromitra esculenta (Pers.) Fr.
 Gyrostachys gracilis (Bigel.)
 Hibiscus moscheutos L.
 Hicoria glabra (Mill.) Britton
 Hordeum hexastichon L.
 Hydnum albonigrum Pk.
 H. aurantiacum A. & S.
 H. caput-ursi Fr.
 H. mucidum Pers.
 H. rufescens Pers.
 H. schiedermayeri Heuf.
 H. serobiculatum Fr.
 H. septentrionalis Fr.
 H. spongiosipes Pk.
 H. vellereum Pk.
 Hygrophorus peckii Atk.
 Hypholoma perplexum Pk.
 Hypocrea citrina (Pers.) Fr.
 Hypomyces lactifluorum (Schw.)
 Ilex vert. cyclophylla Robins.
 Inocybe flocculosa Berk.
 Iris pseudacorus L.
 Irpex nodulosus Pk.
 Juglans cinerea L.
 Juncus brachycephalus (Engelm.)
 Lactarius brevis Pk.
 L. camphoratus (Bull.)
 L. fuliginosus Fr.
 L. indigo Schw.
 L. parvulus Pk.
 L. serobiculatus (Scop.)
 L. serifluus (DC.) Fr.
 L. sordidus Pk.
 L. subdulcis (Bull.) Fr.
 L. trivialis Fr.
 L. vellereus Fr.
 Lathyrus maritimus (L.) Bigel.
 L. ochroleucus Hook.
 Lentinus cochleatus Fr.
 Lenzites sepiaria Fr.
 Lychnis chalconica L.
 Lysimachia quadrifolia L.
 L. vulgaris L.

Marasmius oreales Fr.	Rulius neglectus Pk.
M. salignus Pk.	Russula alloda Pk.
M. se-rodonius Fr.	R. decolorans Fr.
M. sicus Scha.	R. emetica Fr.
M. subnudus (Ellis) Pk.	R. flavida Frost
Monarda mollis L.	R. marinae Pk.
Monilia fructigena Pers.	R. serotina Pk.
Onosmodium carolinianum (Lam.)	R. sororia Fr.
Otidea onotica ochracea Fr.	R. uncialis Pk.
Panus torulosus Fr.	R. varnata Bannw.
Peranimum repens (L.) Saccb.	R. virescens (Schaff.)
Peltigera aphthosa (L.) Hoffm.	Sax. lucida Mühl.
Phallus duplicatus Bosc.	S. serotina (Bail.) Fern.
Pholiotia tomosa Fr.	Solenia villosa Fr.
P. squarrosoides Pk.	Stereum sericeum Scha.
P. vermicula Pk.	Strobilomyces strobilaceus (Scop.)
Phytolacca decandra L.	Stropharia semiglobata (Batsch)
Phylloporus rhodoxanthus (Scha.)	Thlephora intylloca Pers.
Picea brevifolia Pk.	T. laciniata Pers.
P. rubens Sacc.	Tilia vulgaris Hayne
Pleurotus cornucopioides Pers.	Trametes pini (Bret.) Fr.
P. ostreatus (Jacq.) Fr.	T. trogii Berk.
Polyporus berkeleyi Fr.	Tricholoma portentosum Fr.
P. frondosus Fr.	T. radicum Pk.
P. schweinitzii Fr.	T. subacutum Pk.
P. sulphureus (Bull.) Fr.	Triosteum aurantiacum Bickn.
Polystictus circinatus Fr.	Trillium grandiflorum (Mx.)
P. simillimus Pk.	Verticillium eneas Spog.
Prunus americana Marsh.	Vicia caroliniana Walt.
P. virginiana L.	Viola arenaria DC.
Pterospora andromedea Nutt.	V. conspersa Reichen.
Pyrola secunda L.	V. cucullata Ait.
Rhus glabra L.	V. fimbriatula J. E. Smith
Ribes prostratum L'Her.	V. palmata L.
Roestelia aurantiaca Pk.	V. rotundifolia Mx.
Rhynchospora glomerata (L.) Vahl	V. selkirkii Pursh

CONTRIBUTORS AND THEIR CONTRIBUTIONS

Miss H. C. Anderson, Lambertville N. J.

Coprinus comatus Fr. | Tricholoma personatum Fr.
Volvaria bombycina Pers.

Mrs E. B. Blackford, Boston Mass.

Hydnum blackfordae Pk.

Miss G. S. Burlingham, Binghamton

Epipactis viridiflora (Hoffm.) Reichen.

Mrs M. S. DeCoster, Little Falls

Asplenium eteneum hortonae Dar.

Mrs P. H. Dudley, New York
Melanthium latifolium Desr.

Miss Alice Eastwood, San Francisco Cal.
Hirneola polytricha Mont. | *Montagnites candollei Fr.*

Mrs L. L. Goodrich, Syracuse
Hydnum caput-ursi Fr. | *Trillium grandiflorum (Mx.) Salisb.*

Mrs T. J. Leach, Syracuse
Iris pseudacorus L.

Miss J. A. Moses, Jamestown
Hordeum hexastichon L.

Mrs F. W. Patterson, Washington D. C.
Lentinus spretus Pk.

Mrs F. C. Sherman, Syracuse
Tricholoma paeonium Fr. | *Boletus chrysenteron Fr.*

Miss T. L. Smith, Worcester Mass.
Corticium lilacino-fuscum B. & C. | *Hydnum cinnabarinum Schw.*
Phlebia radiata Fr.

Miss M. L. Sutliff, Sacramento Cal.
Galera reticulata Pk. | *Marasmius sutliffae Pk.*
Hypholoma incertum Pk. | *Rhizopogon luteolus Fr.*

Miss A. E. Tilton, Seal Harbor Me.
Hydnum suaveolens Scop.

Miss Adeline VanHorne, Montreal Can.
Armillaria imperialis Fr.

Mrs Elizabeth Watrous, New York
Pterospora andromedea Nutt.

Mrs M. S. Whetstone, Minneapolis Minn.
Clitocybe candicans Pers. | *Lentinus obconicus Pk.*

F. H. Ames, Brooklyn
Clitocybe trullisata Ellis

J. C. Arthur, Lafayette Ind.

Coleosporium campanulae (Pers.) Lev. | *Puccinia andropogonis Schw.*
C. vernoniae B. & C. | *P. schedonnardi K. & G.*
Peridermium holwayi Syd. | *Uredo panic Arth.*
P. ornamentale Arth. | *Uromyces hedydari paniculata Schw.*

H. J. Banker, Greencastle Ind.

Hydnum versipelle Fr. | *Polyporus underwoodii Murr.*
Thelephora intybacea Pers. | *P. berkeleyi Fr.*
Craterellus clavatus (Pers.) Fr. | *P. poripes Fr.*

F. S. Boughton, Pittsford

- Cortinarius rubripes* *Pk.* | *Hypomyces lateritius* (*Fr.*) *Tul.*
Pholiota comosa *Fr.*

F. J. Braendle, Washington D. C.

Boletus albellus *Pk.*

S. H. Burnham, Sandy Hill

- Ascidium orientale* *Tranz.* | *Polyporus cuticularis* (*Ball.*) *Fr.*
Asplenium eben. incanum *Hook.* | *Poria fusco-carnea* *Pers.*
Hydnum mucidum *Pers.* | *Puccinia helianthi* *Schw.*
H. septentrionale *Fr.* | *Scoletium acuminatum* *Mont.*
Merulius ulmi *Pk.* | *Stropharia melaspermia* (*Ball.*)
Peltigera apthosa (*L.*) *Hoffm.* | *Tricholoma uniatum* *Pk.*
 | *Verticillium cneovans* *Spiz.*

H. P. Burt, New Bedford Mass.

- Cortinarius lehotropicus* *Pk.* | *Geoglossum farlowi* *Cke.*

A. K. Cole, Albany

Lycoperdon giganteum *Batsch.*

Simon Davis, Boston Mass.

- Cortinarius violaceus* (*L.*) *Fr.* | *Mycena epipterygia* (*Scop.*) *Fr.*
Hygrophorus lauras *More.* | *Pholiota praecox minor* (*Ball.*)
H. marginatus *Pk.* | *Psilocybe foeniceci* (*Pers.*) *Fr.*
H. purus *Pk.* | *Stropharia alboeyana* *Desm.*

Frank Dobbin, Shushan

Boletus chrysenteron *Fr.*

P. H. Dudley, New York

Pinus palustris *Mill.* (wood specimen)

W. W. Eggleston, New York

- Amelanchier arguta* *Nutt.* | *Crataegus contigua* *Sarg.*
Crataegus blanchardi *Sarg.* | *C. paddockae* *Sarg.*
C. dissona *Sarg.* | *C. praecoqua* *Sarg.*
C. foetida *Ash.* | *C. rhombifolia* *Sarg.*
C. frizzelli *Sarg.* | *C. robbinsiana* *Sarg.*

C. E. Fairman, Lyndonville

- Coccospora aurantiaca* *Waltr.* | *Lachnella flammea* (*A. & S.*)
Erinella raphidospora (*Ellis*) | *Oligonema nitens* (*Lib.*) *Rost.*
Geopyxis nebulosa (*Cke.*) *Sacc.* | *Perichaena quadrata* *Mach.*
 | *Zygodesmus pallidofulvus* *Pk.*

W. G. Farlow, Cambridge Mass.

Stropharia formosa *Earl.* *mod.*

E. P. Felt, Nassau

- Polystictus perennis* (*L.*) *Fr.* | *Tricholoma portentosum* *Fr.*

O. E. Fischer, Detroit Mich.

Amanita cothurnata <i>Atk.</i>	Bulgaria rufa <i>Schae.</i>
Annularia sphaerospora <i>Pk.</i>	Peziza odorata <i>Pk.</i>

B. D. Gilbert, Clayville

Webera acuminata *Schp.*

N. M. Glatfelter, St. Louis Mo.

Inocybe desquamans <i>Pk.</i>	Lepiota nudipes <i>Pk.</i>
Lentinus microspermus <i>Pk.</i>	Russula nigrescentipes <i>Pk.</i>

W. R. Griffiths, Douglaston

Calochortus umbellatus *Wood*

Cephas Guillet, Toronto Can.

Galera later. albicolor <i>Pk.</i>	Psilocybe foenicecii (<i>Pers.</i>)
------------------------------------	---------------------------------------

J. V. Haberer, Utica

Achroanthes unifolia (<i>Mx.</i>) <i>Raf.</i>	Hieracium venosum <i>L.</i>
Alsine gram. lanceolata <i>Fenzl.</i>	Hypericum canadense <i>L.</i>
Antennaria arnoglissa <i>Greene</i>	Ilex vert. cyclophylla <i>Robins.</i>
Betula populifolia <i>Marsh.</i>	Juncus tenuis anthelatus <i>Wieg.</i>
Botrychium obliq. habereri <i>Gilb.</i>	Lathyrus maritimus <i>L.</i>
Callitriche heterophylla <i>Pursh</i>	Lemna minor <i>L.</i>
Carex albicans <i>Willd.</i>	L. trisulca <i>L.</i>
C. castanea <i>Wahl.</i>	Limnorchis huronensis <i>Rydb.</i>
C. muhlenbergii <i>Schk.</i>	Lycopodium inundatum <i>L.</i>
C. schweinitzii <i>Dew.</i>	Monarda mollis <i>L.</i>
Ceanothus americanus <i>L.</i>	Ranunculus repens <i>L.</i>
Corallorhiza multiflora <i>Nutt.</i>	Rhynchospora fusca (<i>L.</i>) <i>R. & S.</i>
C. mult. flavida <i>Pk.</i>	R. glomerata (<i>L.</i>) <i>Vahl</i>
Drosera intermedia <i>Hayne</i>	Scirpus subterminalis <i>Torr.</i>
D. rot. comosa <i>Fern.</i>	Sparganium angustifolium <i>Mx.</i>
Elatine americana (<i>Pursh</i>) <i>Arn.</i>	Triosteum aurantiacum <i>Bickn.</i>
Equisetum hyem. affine <i>Eaton</i>	Vaccinium penn. angustifolium (<i>Ait.</i>)
E. hyem. intermedium <i>Eaton</i>	Veronica chamaedrys <i>L.</i>
E. littorale <i>Kuehl.</i>	Xanthoxylon americanum <i>Mill.</i>
E. varieg. nelsoni <i>Eaton</i>	Xyris caroliniana <i>Walt.</i>
Galium aparine <i>L.</i>	X. montana <i>Ries</i>

C. C. Hanmer, East Hartford Ct.

Agaricus arv. purpurascens <i>Cke.</i>	Irpex mollis <i>B. & C.</i>
Craterellus pogonati <i>Pk.</i>	Merulius tremellosus <i>Schrad.</i>

J. W. Harshberger, Philadelphia Pa.

Specimens of 190 species of Pocono plateau plants

M. E. Hard, Chillicothe O.

Armillaria nardosmia <i>Ellis</i>	Hydnum adustum <i>Schw.</i>
Cordyceps herculea <i>Schw.</i>	H. spongiosipes <i>Pk.</i>
Cyclomyces greenei <i>Berk.</i>	Trametes rubescens <i>A. & S.</i>

A. A. Heller, Los Gatos Cal.

Erysiphe polygoni <i>DC.</i>		Puccinia baccharidis <i>D. & H.</i>
Marsdenia <i>post. helleri</i> <i>Pk.</i>		P. menth. americana <i>Barr.</i>
Melastoma arbuticola <i>A. Br.</i>		Sphaerotheca humuli (<i>DC.</i>) <i>Barr.</i>
Monilia avenae <i>Pk.</i>		Uromyces tritoli (<i>H. & A.</i>) <i>Lev.</i>

C. P. Hoag, Albany

Lycoperdon giganteum *Batsch*

E. W. D. Holway, Minneapolis Minn.

Puccinia gigantispora <i>Bubak</i>		Puccinia salicicola <i>D. & H.</i>
P. ostenta <i>Holway</i>		P. scandica <i>Johans.</i>
P. porteri <i>Condit</i>		Ravenelia spinulosa <i>D. & H.</i>

Edgar A. Houghtaling, Albany

An obconic nut, probably of some species of palm.

C. H. Kaufman, Ann Arbor Mich.

Cortinarius antractus <i>Fr.</i>		Cortinarius obliquus <i>Pk.</i>
C. annulatus <i>Pk.</i>		C. pholideus <i>Fr.</i>
C. armillatus <i>Fr.</i>		C. semisanguineus (<i>Fr.</i>)
C. belaris <i>Fr.</i>		C. sterilis <i>Kauff.</i>
C. castaneus <i>Pk.</i>		C. subbivelus <i>Kauff.</i>
C. collinitus <i>Fr.</i>		C. torvus <i>Fr.</i>
C. croceocolor <i>Kauff.</i>		C. umidicola <i>Kauff.</i>
C. cylindripes <i>Kauff.</i>		

E. A. Lehman, Winston-Salem N. C.

Hexalectis aphyllus (*Nutt.*) *Raf.*

R. B. Mackintosh, Peabody Mass.

Agaricus micromegethus <i>Pk.</i>		Secotium acuminatum <i>Mont.</i>
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E. R. Memminger, Flat Rock N. C.

Craterellus odoratus *Schw.*

G. E. Morris, Waltham Mass.

Boletinus cavipes <i>Opst.</i>		Eccilia atrides <i>Lusck.</i>
B. paluster <i>Pk.</i>		Flammula squalida <i>Pk.</i>
Boletus illudens <i>Pk.</i>		Hygrophorus marginatus <i>Pk.</i>
B. nobilis <i>Pk.</i>		H. speciosus <i>Pk.</i>

R. S. Phifer, Danville Va.

Boletus ravenelii *B. & C.*

William Richards, Albany

Lycoperdon giganteum *Batsch*

I. M. Shepherd, Trenton N. J.

Agaricus campester exannulatus *Cke.*

Perley Spaulding, St Louis Mo.

Daedalea ambigua <i>Berk.</i>		Polyporus obtusus <i>Berk.</i>
Fomes ribis (<i>Schum.</i>) <i>Fr.</i>		P. scruposus <i>Fr.</i>

E. B. Sterling, Trenton N. J.

Cantharellus aurantiacus <i>Fr.</i>		Panaeolus papilionaceus <i>Fr.</i>
Cordyceps sinensis (<i>Berk.</i>) <i>Sacc.</i>		Pleurotus bretschnideri <i>Kalchb.</i>

R. H. Stevens, Detroit Mich.

Guepinia bicolor *Pk.*

F. C. Stewart, Geneva

Gloeosporium riessii <i>S. & S.</i>		Sporotrichum anthophilum <i>Pk.</i>
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D. R. Sumstine, Kittanning Pa.

Cordyceps capitata (*Holmsk.*) *Lk.*

W. B. Varnum, Albany

Stropharia melasperma (*Bull.*) *Fr.*

E. A. White, Storrs Ct.

Amanitopsis volvata (<i>Pk.</i>) <i>Sacc.</i>		Collybia tuberosa (<i>Bull.</i>) <i>Fr.</i>
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T. E. Wilcox, Washington D. C.

Cortinarius anomalus *Fr.*

B. C. Williams, Newark

Polyporus frondosus *Fr.*

Osaka Mushroom Merchants Association, St Louis Mo.

Pleurotus bretschnideri *Kalchb.*

SPECIES NOT BEFORE REPORTED

Actaea eburnea Rydb.

Meadowdale and Karner, Albany co. May, in flower. July, in fruit. Formerly considered a form of *Actaea alba* with slender pedicels.

Aecidium trientalis Tranz.

On living leaves of star flower, *Trientalis americana*. East Lake George marsh. June. S. H. Burnham.

Anthostoma gastrina (*Fr.*) *Sacc.*

Dead bark of hickory. Crown Point, Essex co.

Boletus acidus n. sp.

PLATE T, FIG. I-6

Pileus fleshy, rather thin, firm, convex, very glutinous when moist, yellowish white, the margin of young plants often appendiculate with fragments of the whitish floccose and glutinous veil, flesh

whitish, taste acid and disagreeable; tubes short, adnate, concave in the mass in young plants, becoming plane with age, the mouths minute, subrotund, pale yellow, becoming darker with age; stem firm, equal or slightly tapering upward, subflexuous, solid, minutely dotted with brown or brownish glands, both above and below the slight, mostly glutinous and evanescent annulus; spores sub-ferruginous, oblong elliptic, .0003-.0004 of an inch long, .00012-.00016 broad.

Pileus 1-2 inches broad; stem 1.5-3 inches long, 2-3 lines thick. Under pine and hemlock trees. Port Henry, August.

This species belongs to the section *Viscipelles*. It is closely related to *Boletus punctipes* and *B. americanus* from which it is separated by its slight but mostly evanescent annulus and by its acid taste.

***Clavaria conjuncta* Pk.**

Among fallen leaves in woods. Bolton Landing, Warren co. July. For a description of the species, turn to the chapter on edible fungi.

***Clitopilus squamulosus* n. sp.**

PLATE 8, FIG. 5-8

Pileus thin, nearly plane, deeply umbilicate, floccose squamulose, specially in the center, grayish brown and shining, flesh whitish; lamellae close, adnate or slightly decurrent, tinged with flesh color; stem long, slightly tapering upward, hollow, fibrous striate and colored like or a little paler than the pileus in the upper part, even and white toward the base; spores flesh color, subquadrate, angular, .0005 of an inch broad, with a large shining nucleus.

Pileus 1-1.5 inches broad; stem 3-4 inches long, 2-3 lines thick. Among fallen leaves in woods. Bolton Landing, July.

A species easily recognized by its squamulose deeply umbilicate pileus. The squamules in the center of the pileus are erect.

***Coccospora aurantiaca* Wallr.**

Decayed wood. Lyndonville, Orleans co. C. E. Fairman.

***Cortinarius rubripes* n. sp.**

Pileus thin, broadly convex becoming plane or nearly so, sometimes slightly depressed in the center, rarely slightly umbonate, minutely silky fibrillose, grayish ferruginous or pale alutaceous, flesh whitish; lamellae subdistant, emarginate, violaceous becoming cinnamon; stem enlarged or subbulbous at the base, hollow, bright red; spores elliptic, .0003-.0004 of an inch long, about .0002 broad.

Pileus 1-1.5 inches broad; stem 1-1.5 inches long, 2-4 lines thick. Woods. Pittsford, Monroe co. September. F. S. Boughton.

The color of the stem of this species indicates a relationship with such species as *Cortinarius sanguineus* and *C. cinabarinus*. The discoverer of the species describes the colors of the cap and gills as very similar to those of *Clitocybe ochropurpurea*. The red stem and violet or purplish violet gills of the young plant make it a beautiful and very attractive species.

Crataegus acuminata Sarg.¹

The acuminate thorn is closely related to *C. streeterae* and *C. glaucophylla*, but it may be separated from the first by the absence of wrinkles from the leaves, and from the second by the absence of glaucous hues from them.

Crataegus ambrosia Sarg.

The ambrosial thorn is so closely allied to the Hall thorn that they are not readily distinguished from each other when in flower, but with the full development of the leaves and fruit they are easily separated, the leaves being broader and the fruit of the ambrosial thorn being much larger and fewer in a cluster. It also persists later in the season. The bushes are red with fruit to the end of November.

Crataegus asperifolia Sarg.

The roughish-leaved thorn is similar in its general characters to the rubicund thorn, *C. rubicunda*, from which it may be separated by its glabrous calyx tube, which is also less reddish, more glandular calyx lobes and shorter pointed leaves. The petioles in our specimens are also generally shorter. The fruit of typical *C. asperifolia* is described as having yellow flesh, but in our specimens it becomes tinged with red late in the season.

Crataegus beckiana Sarg.

The Beck thorn in some of its characters is suggestive of *C. rhombifolia*, but it is a much larger treelike shrub with thicker leaves, glabrous calyx tube and with large drooping clusters of fruit.

Crataegus caesariata Sarg.

The hairy thorn belongs to the group Coccineae and when in flower it might be taken to be a form of *C. coccinea*. Its

¹The descriptions of this and other new species of this genus will be found in the chapter on species of *Crataegus* found within 20 miles of Albany.

fruit, however, is quite different from the fruit of that species and is much later in ripening. Spines are almost entirely absent from the branches. In the North Albany clump only two small ones were found, in the Wynantskill clump none was found on the living branches and only three on one dead twig. In a third clump no spines are present.

***Crataegus casta* Sarg.**

The chest-thorn belongs to the large group Pruinoseae and to a possible section in which the flowers have 20 stamens with pink anthers. The fruit is beautifully colored and its pointed base affords an available character by which to distinguish the species from its near allies.

***Crataegus conspicua* Sarg.**

The conspicuous thorn is a large shrub quite distinct from our other species of this group by its very hairy inflorescence and by the hairy lower surface of the leaves. The fruit persists till late in the season and sometimes a considerable part of it hangs on the branches through the winter.

***Crataegus contortifolia* Sarg.**

The twisted-leaved thorn takes its name from one of the easily recognized and distinguishing characters of the species. This consists in a peculiar folding or wavelike curving of the margin of the leaf, as if there was a superabundant formation of marginal tissue for which there was no room in the ordinary plane of the leaf. This results in the curving of the margin. Such leaves do not press flat and smooth in the plant press. The species has affinities with *C. champlainensis*, *C. submollis*, *C. tataliana* and *C. arnoldiana*, but with none of them does it satisfactorily agree. It was erroneously referred to *C. tataliana* in New York State Museum Bulletin 94, page 28.

***Crataegus demissa* Sarg.**

The low thorn grows from 4 to 6 feet tall and has small leaves, small flowers and small fruit. It is quite diminutive in all its parts and easily recognized.

***Crataegus divergens* Sarg.**

The divergent thorn was formerly considered a variety of the unshaven thorn, *C. irrasa*, but it is now deemed worthy of specific distinction. It grows in patches rather than in clumps.

Crataegus eatoniana Sarg.

The Eaton thorn is yet limited to a single locality and a single small thicket in that locality. It is a peculiar species which by its leaves simulates species of the group *Tomentosae*, but its nutlets with plane inner faces forbid its reference to that group. It makes a second species for us in the group *Punctatae*.

Crataegus edsoni Sarg.

The Edson thorn has been found in a single locality in our territory. There are two clumps of it growing near each other a short distance north of Lansingburg. The species normally has 20 stamens in its flowers, but in our form of it the number ranges from 10 to 19. The prevailing number is 10 to 16. The fruit ripens about the first of September and soon falls.

Crataegus fragrans Sarg.

The fragrant thorn is a large shrub which is peculiar to a single locality. Its prominent characters are its thin leaves, hairy inflorescence with many flowered clusters and 10 stamens with white anthers.

Crataegus genialis Sarg.

The genial thorn is one of the common species in the vicinity of Albany. It is somewhat variable and not always readily recognizable. Its ascending branches and the ovate leaves being scarcely lobed except on vigorous shoots and the fruit commonly longer than broad are some of the most notable characters.

Crataegus halliana Sarg.

The Hall thorn has flowers with 20 stamens and white or pale yellow anthers. Its fruit is rather small but forms large many fruited drooping clusters which are conspicuous when ripe.

Crataegus helderbergensis Sarg.

The Helderberg thorn is a small tree with nearly horizontal wide-spreading branches suggestive of the appearance of the dotted fruited thorn, *C. punctata*. Its broad leaves and hairy inflorescence are distinguishing characters of the species. It has been found at Thompson Lake only, and belongs to the group *Crus-galli*.

Crataegus howeana Sarg.

The Howe thorn has the characteristic fruit of many species of the group *Pruinosae*. It is globose or depressed globose and more or less angular. It is rounded at the base and in this respect differs

from the fruit of *C. casta*. Its flowers have 20 stamens with pale pink anthers, and its branches are furnished with numerous short branchlets and rather small slender spines.

***Crataegus hystricina* Ashe**

The hedgehog thorn is probably so named because of its numerous spines. It has been found in our territory at Thompson Lake only.

***Crataegus illuminata* Sarg.**

The illuminated thorn, in habit and general appearance of its foliage, is similar to *C. dodgei*. Its fruit is usually a little longer than broad and ripens earlier than the fruit of *C. dodgei*.

***Crataegus mellita* Sarg.**

The honey thorn is very closely related to the Brainerd thorn, *C. brainerdii*, to which I formerly referred it, but from which it may be separated by its thinner leaves. Its fragrant honey-producing flowers are suggestive of the specific name. It is yet limited to a single locality. It inhabits rocky soil. It is remarkable in retaining the freshness of its reddish filaments almost to the time of ripening of its fruit.

***Crataegus menandiana* Sarg.**

The Menand thorn is a large shrub belonging to the group Tomentosae. Its flowers have 20 stamens, but it differs from all our other species with 20 stamens in having red anthers. They are more highly colored than in our specimens of *C. gemmosa* and *C. succulenta*.

***Crataegus oblongifolia* Sarg.**

The oblong leaved thorn belongs to the group Molles and is related to *C. exclusa*. Its flowers have the anthers more highly colored than in the Albany form of *C. exclusa*, and some of the leaves are much longer than broad, a character suggestive of the specific name. It is at present limited to the Menands locality so far as is known.

***Crataegus peckietta* Sarg.**

The second Peck thorn is a northern species. It has been found at Piscopo and Lake Pleasant in Hamilton county, at Keene and Port Henry in Essex county and at Horicon in Warren county. It sometimes retains a part of its fruit through the winter. The fruit is so peculiar in shape that often it is recognizable even after the shriveling and discoloration it undergoes during the winter.

It is broadly rounded or almost truncate at the base and slightly narrowed toward the apex. The plants bear fruit abundantly when only 4 or 6 feet tall, but they sometimes become 12 to 16 feet tall. They grow on rather light but rocky soil.

***Crataegus pentandra* Sarg.**

The five stamened thorn, in its typical form, is said to have five stamens and to be a tree. Our forms are mostly shrubs and the stamens vary from 5 to 10 in flowers on the same shrub.

***Crataegus polita* Sarg.**

The polished thorn has been found in only one locality in our territory. It there grows in poor rocky soil.

***Crataegus rhombifolia* Sarg.**

The rhombic leaved thorn belongs to the thin leaved section of the group *Tomentosae*. It is, with us, a shrub of moderate size and has flowers with 10 stamens and pink anthers. The pedicels are hairy and the calyx tube is also more or less hairy. The species is rather common in the vicinity of Albany.

***Crataegus robbinsiana* Sarg.**

The Robbins thorn sometimes forms a small tree but in the vicinity of Albany it is more often a shrub. The appearance of the leaves suggests a relationship to such species of the group *Intricatae* as *C. intricata* and *C. foetida*, but the fruit is pruinose and the species is referable to the group *Pruinosae*.

***Crataegus rubrocarnea* Sarg.**

The red fleshed thorn takes its name from the deep red color of the flesh of the fully ripened fruit. It is closely related to *C. rubicunda* but may be distinguished from it by its more globose fruit in fewer fruited clusters and more persistent calyx lobes. It is at present limited to a single locality.

***Crataegus sejuncta* Sarg.**

The separated thorn is allied to the polished thorn, *C. polita*, from which it is separated by its short, stout, hairy pedicels, more numerous stamens and rather larger crimson fruit. It is a large shrub.

***Entoloma flavifolium* n. sp.**

PLATE 5, FIG. 9-15

Pileus thin but firm, broadly convex or nearly plane, glabrous, hygrophanous, watery white and sometimes slightly striatulate on

the thin margin when moist, white when the moisture has disappeared, flesh-colored like the surface of the pileus, taste mild or slightly and tardily acrid; lamellae thin, close, rounded behind, adnexed, slightly eroded or uneven on the edge, pale yellow becoming pinkish; stem firm, equal, silky fibrillose, white mealy at the top, stuffed or hollow, whitish; spores bright pink, subglobose, slightly angular, .0003-.0004 of an inch broad, apiculate at one end.

Pileus 1-2 inches broad; stem 1.5-2 inches long, 2-4 lines thick. In dense woods among fallen leaves. Port Henry, Essex co. August. The species is well marked in the young plant by the clear pale yellow gills. Sometimes the margin of the pileus is wavy or irregular and the center tinged with brown when moist.

Erinella raphidospora (Ellis) Sacc.

Decaying wood. Lyndonville. C. E. Fairman.

Exoascus cecidomophilus Atk.

On fruit of chokecherry, *Prunus virginiana*. Bergen, Genesee co. July.

The diseased fruit is less elongated than when attacked by *Exoascus confusus* and is not curved. Moreover the calyx is not so conspicuously enlarged nor so persistent as when *E. confusus* is the parasite.

Geopyxis nebulosa (Cke.) Sacc.

Decaying wood. Lyndonville. July. C. E. Fairman.

Geranium sibiricum L.

The Siberian cranesbill is an introduced species but it was found growing plentifully and spontaneously at Wading River, Suffolk co. in August.

Gloeosporium riessii Schl. & Sacc.

On apple tree bark. Geneva. October. Collected by D. B. Slight; communicated by F. C. Stewart.

Hydnum cyaneotinctum Pk.

The blue tinted hydnum has the peculiar structure of the pileus attributed by Professor Fries to the pileus of *Polystictus circinatus*. The upper stratum is of a soft spongy texture, the lower is hard and continuous with the stem. Both are usually slightly zonate. The stem is covered with a dense spongy tomentum. It is sometimes eccentric or even lateral, specially when the plant grows against a stump, stone or other obstruction which prevents

the free development of the pileus. When young, the pileus is whitish or white tinged with yellow. It soon assumes a buff color, with the margin commonly tinged with blue and becoming a darker blue where bruised. In old specimens the center or sometimes the whole becomes ferruginous brown. The aculei are at first white but they become brown or ferruginous brown with age. The spores are purplish brown, subglobose or oval, .00016 of an inch in diameter.

The plant has a farinaceous odor when cut or bruised. It is sometimes cespitose. It grows under hemlock trees. Horicon, Warren co. July.

Hypomyces camphorati n. sp.

Subiculum thin, effused, overrunning and obliterating the hymenium of the host plant, yellow; perithecia numerous, minute, immersed in the subiculum, the ostiolum exposed, brown; asci very long, .005-.006 of an inch (sporiferous part), eight spored; spores monostichous, oblong fusiform, continuous, acute or slightly cuspidate at each end, .0005-.0006 of an inch long, .00016-.0002 broad.

On the hymenium of *Lactarius camphoratus*. Port Jefferson, Suffolk co. August.

Closely allied to *H. vollemi* Pk. from which it is distinguished by its yellow subiculum, its longer asci and acute or cuspidate spores.

Hypomyces lateritius (Fr.) Tul.

On the hymenium of *Lactarius indigo*. Pittsford, Monroe co. F. S. Boughton.

Inocybe diminuta n. sp.

Pileus thin, hemispheric becoming convex or nearly plane, squamose with hairy, erect or squarrose scales in the center, fibrillose on the margin, grayish brown; lamellae subdistant, broadly sinuate, adnexed, ventricose, at first whitish, then brownish or rusty brown; stem short, firm, solid, silky fibrillose, whitish in the upper part, grayish brown and subsquamulose toward the base; spores subglobose, nodulose, .0003-.0004 of an inch long, .0003 broad.

Pileus 3-6 lines broad; stem 4-8 lines long, about 1 line thick. Bare compact soil in wood roads. Wading River. August.

A small but distinct species belonging to the section *Lacerae*.

Inocybe radiata Pk.

Port Jefferson. August. Smaller than the type form but otherwise like it.

Juncus brachycephalus (Engelm.) Buch.

Formerly considered a variety of *Juncus canadensis*, but now raised to specific rank. Jamesville, Onondaga co. Sevey, St Lawrence co. C. H. Peck. West Danby, Tompkins co. W. R. Dudley. Waverly, Tioga co. F. E. Fenno.

Lachnella flammea (A. & S.) Fr.

On decorticated maple wood. Lyndonville. C. E. Fairman.

Lactarius rimosellus Pk.

Wading River, Suffolk co. August. Edible. The description of this species will be found in the chapter on edible fungi.

Lentinus spretus n. sp.

Pileus thin, tough, convex becoming nearly plane, obtuse or unibonate, rimose squamulose, grayish brown or pale alutaceous, often more highly colored in the center than on the margin, flesh white; lamellae rather narrow, close, decurrent, whitish, lacerate serrate on the edge; stem usually rather long, equal or sometimes narrowed or sometimes thickened toward the base, substriate, solid, more or less squamose, often eccentric, whitish, sometimes brownish toward the base; spores white, oblong, .0003-.0004 of an inch long, .00016 broad.

Pileus 2-5 inches broad; stem 1-3 inches long, 3-6 lines thick. Decaying wood of pine. Horicon, Warren co. July. Railroad ties. Albia, Rensselaer co. September.

This species has probably been confused with *Lentinus lepidus*, from which it may be separated by its more slender habit, thinner pileus, smaller scales, more narrow decurrent lamellae without a sinus, and specially by its smaller spores. In our specimens there is no evidence of a veil.

Leptosphaeria substerilis n. sp.

Foliicolous; spots small, .5-1 line broad, numerous, suborbicular, often confluent, generally sterile, brown or blackish brown, surrounded by an elevated line; perithecia few, 1-6 on a spot, unequal, covered by the epidermis, black; asci subcylindric or clavate, slightly narrowed toward the base; spores crowded in the ascus, colored, triseptate, subfusiform, .001-.0012 of an inch long, .0003 broad.

Living leaves of peppermint, *Mentha piperita*. Lakeport, Madison co. July.

The diseased tissue shrinks below the level of the surrounding healthy tissue and eventually separates from it and falls away, leaving circular holes in the leaves.

***Marasmius longistriatus* n. sp.**

PLATE 5, FIG. 1-4

Pileus membranaceous, convex becoming plane with a central depression or sometimes broadly infundibuliform, moist when young and striate almost to the center, bay-brown when moist, reddish gray when dry; lamellae thin, narrow, close, adnate, unequal, whitish; stem equal, externally cartilaginous, stuffed or hollow, covered with a grayish downy pubescence which is sometimes longer at the base.

Pileus 3-6 lines broad; stem 8-12 lines long, .5 of a line thick. Under pine and hemlock trees. Bolton Landing. July.

This resembles *M. subnudus* in color but it is a much smaller plant with long fine striae on the pileus and with much closer lamellae. The central depression resembles that of *Coprinus plicatilis*.

***Melanogaster durissimus* Cke.**

Menands, Albany co. September 1904. A single specimen, somewhat smaller than the type form and without the strong odor attributed to that form, was found. Its hardness is remarkable and proves the appropriate character of the specific name. The type form was found in India, but specimens of the species have been reported from California by Dr H. W. Harkness. It is manifestly a species rarely found, but one having a wide range.

***Merulius pruni* n. sp.**

Effused, thin, separable from the matrix, soft, with a definite whitish or pallid scarcely byssin margin; folds forming angular or irregular pores with dentate or sometimes irpiciform dissepiments, ecru drab when fresh, darker or subcervine when dry.

Bark of wild red cherry, *Prunus pennsylvanica*. Horicon. July.

It forms patches several inches long and broad, but these appear as if formed by the confluence of many small orbicular patches, the hymenium being faintly marked by concentric ridges or elevated lines. The texture is soft and somewhat waxy yet slightly tenacious and the margin is nearly glabrous. The specimens are sterile.

Merulius ulmi n. sp.

Effused, thin, firm, suborbicular or by confluence, forming patches, the margin often free and narrowly reflexed, pubescent, sometimes concentrically sulcate, white; hymenium white or whitish when young, soon pale cervine, the folds forming orbicular or oblong shallow pores often beautifully and concentrically arranged; spores not seen.

Dead branches of elm, *Ulmus americana*. Vaughns, Washington co. November. S. H. Burnham.

Monarda mollis L.

Canadice, Ontario co. C. H. Peck. Frankfort, Herkimer co. July. J. V. Haberer. Formerly referred to *M. fistulosa* as a variety, but now regarded as a distinct species.

Oligonema nitens (Lib.) Rost.

Decaying wood. Lyndonville. C. E. Fairman. A beautiful species easily recognized by the swollen rings on the threads of the capillitium and by the bright shining yellow color of the heaps of peridia.

Panus fulvidus Bres.

Fence rails. Keene, Essex co. June. This is a beautiful species with the central stem squamulose and the bright tawny pileus adorned with erect or squarrose blackish scales and strongly sulcate striate margin. The edge of the lamellae in our specimens is slightly eroded or denticulate, thereby suggesting an approach to the genus *Lentinus*.

Perichaena quadrata Macb.

Decaying bark and dead leaves. Lyndonville. C. E. Fairman. This species may be distinguished from *P. depressa* by its smaller peridia.

Phyllosticta pallidior n. sp.

Spots elliptic or orbicular, 2-4 lines long, 1.5-3 lines broad, whitish or grayish white surrounded by a red or reddish margin; perithecia minute, epiphyllous, occupying the center of the spot, black; spores globose or broadly elliptic, .0004-.0006 of an inch long, .0003-.0004 broad.

Living leaves of star-flowered Solomon's seal, *Vagnera stellata*. Bergen swamp. July.

This species is closely allied to *P. eruenta*, from which it differs in the very narrow red or reddish margin of the spots and

in the shape of the spores which are nearly globose and not at all curved as in *P. cruenta*.

Physoderma menyanthis DeBy.

Living leaves of buck bean, *Menyanthes trifoliata*. Bonaparte swamp, Lewis co. June. This species has been found as far north as Alaska.

Pluteus grandis n. sp.

Pileus fleshy, firm, convex with the thin margin sometimes curved upward, silky fibrillose, white or whitish, flesh white, taste farinaceous; lamellae thin, close, free, denticulate on the edge, whitish becoming flesh-colored; stem rather long, equal, firm, solid, silky fibrillose, white; spores subglobose, angular, uninucleate, .0003 of an inch broad.

Pileus about 4 inches broad; stem 4 inches long, 10 lines thick. Among fallen leaves in woods. Bolton Landing. July.

This is a fine large species, separable from *Entoloma sinuatum* by its free lamellae, and from white forms of *Pluteus cervinus* by the angular character of the spores and by its farinaceous taste.

Polyporus underwoodii n. sp. Murr.

Pileus varying from convex to deeply concave, 12-25 cm in diameter, averaging .5 cm in thickness; surface obscurely concentrically zonate, milk-white, pruinose, cremeous on drying, the center depressed and avellaneous; margin irregularly undulate lobed, either deflexed or recurved, very thin, not ciliate; context white, fleshy, tough, homogeneous, 2-5 mm thick; tubes milk-white, 2-3 mm long, five to six to a mm, cylindric, edges thin, entire to lacerate; spores ellipsoidal, hyaline, smooth, $3 \times 6-7 \mu$; stipe short, central, solid, woody, equal or tapering downward, smooth, pruinose, white above, fuliginous below, 3 cm long, 2-3 cm thick.

The type of this species was collected by L. M. Underwood on buried decaying roots beneath birch trees at Cornwall Ct., August 1890. Specimens were also collected in Connecticut in 1902 by C. C. Hamner. Fine specimens were again collected by H. C. Banker on the roots of a fallen, but living willow at Schaghticoke N. Y. in August, 1904. Plants were sent by Mr Banker to the State Museum at Albany and to the New York Botanical Garden. The nearest relative of this species in our flora is probably *Polyporus fissus* Berk. The specimen contributed to the State Museum has the stem wholly fuliginous.

Psathyra vestita n. sp.

Pileus thin, submembranaceous, ovate, conic or subcampanulate, obtuse, at first covered with white floccose fibrils, usually with a rufescent tint, soon paler or white and silky fibrillose, sometimes slightly striate on the margin; lamellae thin, narrow, close, adnate, white when young, becoming blackish brown; stem equal, hollow, flexuous, floccose fibrillose, becoming silky fibrillose, mealy and often striate at the top, white; spores purplish brown, elliptic, .0003-.0004 of an inch long, .0002-.00024 broad.

Pileus 4-8 lines broad; stem 1-1.5 inches long, 1-1.5 lines thick. Fallen leaves and grass. North Ella. September.

This species differs from *P. semivestita* in its color and in being wholly clothed when young with white floccose fibrils.

Russula subsordida Pk.

Horicon. July. Edible. A description of this species may be found in the chapter on edible fungi.

Russula viridella Pk.

Under hemlock trees in woods. Horicon. July. Edible.

A description of the species may be found in the chapter on edible fungi.

Sparganium fluctuans (Morong) Robins.

Deep water of lakes and ponds. Sand lake, Rensselaer co. and Big Moose lake, Herkimer co. July and August. This was formerly considered a variety of *S. androcladum* but it has now been raised to specific rank.

Sporotrichum anthophilum n. sp.

Hyphae creeping, interwoven, branched, continuous or sparingly septate, variable in thickness, .00008-.00024 of an inch in diameter, hyaline, forming a loose cottony stratum; spores globose or broadly ovate, .00016-.0003 of an inch long, borne on the tips of short branchlets which are usually narrowed toward the apex and pointed.

Parasitic on the filaments and petals of carnation pinks, discoloring them, destroying their vitality and spoiling the flowers. Bayside, Queens co. Collected by William Bell; contributed by F. C. Stewart.

Stropharia melasperma (Bull.) Fr.

Grassy ground. Observatory grounds. Albany. July. W. B. Varnum and S. H. Burnham.

Symphoricarpos pauciflorus (Robbins) Britton

This was reported as a variety of *S. racemosus* but it is now deemed worthy of specific rank.

Thelephora intybacea Pers.

Ground. East Schaghticoke, Rensselaer co. H. J. Banker.

Tilmadoche compacta Wing.

Much decayed wood of poplar. Loudonville, Albany co. August.

Tricholoma paeonium Fr.

Grassy places. Syracuse. August. "Growing after heavy rains," a habit which Professor Fries also ascribes to the European fungus. Mrs F. C. Sherman.

Tricholoma unifactum Pk.

Under hemlock trees. Horicon. July. Edible. For a description of the species see chapter on edible fungi.

Triosteum aurantiacum Bickn.

Along West Canada creek near East Herkimer and in bogs at Cedar lake. June and July. J. V. Haberer. A species separated from *T. perfoliatum* because of its orange-colored fruit and leaves not connate at the base.

Uredinopsis atkinsoni Magnus

Fronds of *Dryopteris thelypteris*. Ithaca flats. August. G. F. Atkinson.

Uredinopsis osmundae Magnus

Fronds of the cinnamon fern, *Osmunda cinnamomea*. Malloryville moor, Tompkins co. August. G. F. Atkinson.

Verbascum phlomoides L.

Near the railroad station. Wading River. August. The clasping leaved mullein is an introduced species. It resembles our common mullein but it has larger flowers, shorter and broader upper leaves of a greener hue and clasping at the base, but scarcely decurrent.

Veronica chamaedrys L.

Woods and steep banks along West Canada creek at Trenton falls, Oneida and Herkimer counties. June. J. V. Haberer.

Zygodemus pallidofulvus n. sp.

Thinly effused, pale tawny; hyphae irregularly branched, the branches often short, suberect; spores globose, echinulate, .0004-.0005 of an inch in diameter.

Decaying wood. Lyndonville. August. C. E. Fairman.

REMARKS AND OBSERVATIONS

Agaricus arvensis purpurascens Cke.

Lawns. Fishers Island, Suffolk co. C. C. Hammer.

Alsine graminea lanceolata Fenzl.

Rocky places. Little Falls. July. J. V. Haber.

Amanita russuloides Pk.

Among fallen leaves in woods. Bolton Landing. July. This is larger than the typical form, having the pileus 4-6 inches broad, the stem 5-8 inches long and 5-12 lines thick. The annulus has a thick floccose edge which is sometimes grooved. The volva is definitely circumscissile, adnate to the bulb and furnished above with a short obtuse free margin. A smaller specimen, entirely white, was found at Wading River in August. The species is apparently a rare one. It was founded on specimens collected in Greenbush, and published in 1873, in *New York State Museum Report* 25, page 72. Since then it had not been observed by me, though extralimital specimens have occasionally been received from correspondents.

Asplenium ebeneum hortonae Dav.

Crevices of rocks. Little Falls. September. Mrs M. S. De-Coster. This is a rare variety. It has not yet been found fertile so far as I know.

Asplenium ebeneum incisum Howe

Hartford, Washington co. October. S. H. Burnham. This variety is included by Professor Eaton in *Ferns of North America* in his description of the species, and most botanists have followed him in this conception of the species. The difference between this form of the fern and the much more common form with narrower fronds and obscurely crenulate serrate pinnae is so strongly marked, that to one accustomed to notice the very fine distinctions now made by authors in describing plants, it seems more satisfactory

