

INDIANA FUNGI.

By J. M. VAN HOOK.

For many years fungous specimens have been collected at Indiana University and from time to time a few have been added to the herbarium. During the past four years, many more of these have been identified, while still others have been collected and determined. It occurred to the writer that a preliminary list of these might be of importance to certain members of the Indiana Academy of Science. It is our intention to add to this number as rapidly as possible, with the view of obtaining ultimately as complete a list for the State as possible. So far, previous lists have not been consulted. No species is included, which has not come under my personal observation. In a future paper, it is the writer's intention to revise and extend the list with dates of first mention in Indiana, or, the possible time and method of introduction into the State.

Practically all of the specimens have been collected in Monroe and Brown counties. The latter offers a fine field for mycological study, as some of the original forests still stand. A considerable number of specimens have been obtained in my home county—Clark. Its knobs with their deep hollows between, offer probably the best collecting ground in the State for fleshy fungi.

So far, about 1,500 specimens have been classified. These contain some 500 species distributed through approximately 175 genera. I am under obligation to Professor G. F. Atkinson, Dr. C. H. Peck and Dr. W. A. Merrill for identification or verification of some of the fleshy and woody forms.

No effort will be made to secure a long list of the rusts, as that work is already so thoroughly done by Dr. J. C. Arthur. The Myxomycetes will be studied in connection with the fungi.

In order to facilitate the work of a fungus survey of the State, we would kindly solicit specimens (especially of the Fungi Imperfecti group) accompanied with date, place of collection and host or substratum.

PHYCOMYCETES.

- Albugo bliti (Biv.) O. Kuntze.
 “ candida (Pers.) O. Kuntze.
 “ ipomœa panduranae (Schw.)
 Swingle.
 Mucor cucurbitarum B. & C.
 Phycomyces nitens (Ag.) Kze.
 Plasmopara cubensis (B. & C.) Hum-
 phrey.
 “ viticola (B. & C.) Berl.
 & De Toni.
 Rhizopus nigricans EhbG.
 Sporodinia grandis Link.
 Synchytrium decipiens Farl.

USTILABINEÆ.

- Doassansia sagittariae (Westend.)
 Fisch.
 Ustilago, levis Kell. & Swing.

UREDINEÆ.

- Æcidium dracontii Schw.
 Cœoma nitens Schw.
 Gymnosporangium macropus Link.
 Melampsora populina (Jacq.) Lev.
 Puccinia asparagi DC.
 “ coronata Cda.
 “ graminis Pers.
 “ helianthi Schw.
 “ malvacearum Mart.
 “ podophylli Schw.
 “ sorghi Schw.
 “ violaceae (Schum.) DC.
 “ xanthii Schw.
 Uromyces appendiculatus (Pers.)
 Link.
 “ caladii (Schw.) Farl.

- “ euphorbiae Cke. & Pk.
 “ howei Pk.
 “ trifolii (A. & S.) Wint.

AURICULARIINEÆ.

- Auricularia auricula-judae (L.)
 Schroet.

TREMELLINEÆ.

- Exidia glandulosa (Bull.) Fr.
 Guepinia spathularia Fr.
 Tremella albida Hud.
 “ mycetophila Pk

THELEPHORACEÆ.

- Aleurodiscus oakesii (B. & C.) Cke.
 Corticium coeruleum (Schrud.) Fr.
 “ scutellare B. & C.
 Craterellus cantharellus (Schw.) Fr.
 “ cornucopioides (L.) Pers.
 Hymenochaete ferruginea (Bull.)
 Mass.
 Peniophora cinerea (Fr.) Cke.
 Sebacina inerustans Tul.
 Stereum bicolor (Pers.) Fr.
 “ complicatum Fr.
 “ fasciatum Schw.
 “ frustulosum Fr.
 “ hirsutum Fr.
 “ sericium Schw.
 “ sowerbei Mass.
 “ versicolor (Schw.) Fr
 Thelephora palmata Fr.
 “ schweinitzii Pk.

CLAVARIACEÆ.

- Calocera cornea Fr.

Clavaria fusiformis Pers.
 " mucida Pers.
 " pistillaris Linn.
 " pyxidata Pers.
 Sparassis crispa (Wulf.) Fr.

HYDNACEÆ.

Grandinia granulosa Fr.
 Hydnum adustulum Banker.
 " adustum Schw.
 " arachnoideum Pk.
 " caput-medusæ Bull.
 " carbonarium Pk.
 " combinans Pk.
 " coralloides Scop.
 " erinaceus Bull.
 " laciniatum Leers.
 " mucidum Pers.
 " ochraceum Pers.
 " pulcherrimum Pk.
 " repandum L.
 " septentrionale Fr.
 " spongiosipes Pk.
 " zonatum Batsch.
 Irpex cinnamomeus Fr.
 " obliquus Fr.
 " tulipifera Schw.
 Phlebia radiata Fr.
 Radulum orbiculare Fr.
 Tremellodon gelatinosum (Scop.)
 Pers.

POLYPORACEÆ.

Boletinus porosus Berk.
 Boletus affinis Pk.
 " alveolatus B. & C.
 " auriporus Pk.
 " bicolor Pk.
 " castaneus Bull.

" conicus Rav.
 " edulis Bull.
 " felleus Bull.
 " frostii Russell.
 " indecisus Pk.
 " luridus Schaeff.
 " magnisporus Frost.
 " modestus Pk.
 " nigrellus Pk.
 " ornatipes Pk.
 " pallidus Frost.
 " purpureus Fr.
 " retipes B. & C.
 " scaber Fr.
 " separans Pk.
 " speciosus Pk.
 " subsanguineus Pk.
 " subtomentosus L.
 " subvelutipes Pk.
 " vermiculosus Pk.
 Dædalia ambigua Berk.
 " confragosa (Bolt.) Pers.
 " quercina (L.) Pers.
 " unicolor Fr.
 Favolus canadensis Kl.
 Fistulina hepatica Fr.
 Fomes applanatus (Pers.) Wallr.
 " conchatus (Pers.) Fr.
 " connatus (Pers.) Fr.
 " fomentarius Gill.
 " graveolens Cke.
 " igniarius Gill.
 " ribis (Fr.)
 Glæoporus conchoides Mont.
 Lenzites betulina (L.) Fr.
 " flaccida (Bull.) Fr.
 " sæpiaria Fr.
 " vialis Pk.

Merulius lacrymans (Jacq.) Fr.

“ *rubellus* Pk.

“ *tremellosus* Schrad.

Polyporus adustus (Willd.) Fr.

“ *areularius* (Batsch.) Fr.

“ *brumalis* (Pers.) Fr.

“ *cinnabarinus* Fr.

“ *dryadeus* Fr.

“ *fissus* Berk.

“ *flavovirens* Berk. & Rav.

“ *foecicola* B. & C.

“ *frondosus* Fr.

“ *fumosus* (Pers.) Fr.

“ *gilvus* (Schw.) Fr.

“ *perennis* Fr.

“ *perplexus* Pk.

“ *picipes* Fr.

“ *pilotæ* Schw.

“ *pubescens* Fr.

“ *radicatus* Schw.

“ *resinosus* (Schr.) Fr.

“ *spraguei* B. & C.

“ *sulphureus* Fr.

“ *unicolor* Schw.

Polystictus abietinus Fr.

“ *biformis* Klotzsch.

“ *cinnamomeus* Sacc.

“ *conchifer* Schw.

“ *hirsutus* Fr.

“ *pergamenus* Fr.

“ *versicolor* (L.) Quel.

Strobilomyces strobilaceus (Scop.)

Berk.

Trametes peckii Kalchbr.

AGARICACEÆ.

garicus campestris Schaeff.

“ *placomyces* Pk.

Amanita cothurnata Atk.

“ *floecoecephala* Atk.

“ *phalloides* Fr.

“ *rubescens* Fr.

“ *solitaria* Bull.

“ *strobiliformis* Vittad.

“ *verna* Bull.

Aminitopsis vaginata (Bull.) Roz.

“ “ “ *var. alba*.

Armillaria mellea Vahl.

Cantharellus aurantiacus Fr.

“ *cibarius* Fr.

“ *cinnabarinus* Schw.

“ *infundibuliformis* Fr.

“ *minor* Pk.

“ *wrightii* B. & C.

Claudopus nidulans (Pers.) Pk.

Clitocybe candida Bres.

“ *laceata* Scop.

“ *illudens* Schw.

“ *infundibuliformis* Schaeff.

“ *monadelpha* Morg.

“ *multiceps* Pk.

“ *ochropurpurea* Berk.

“ *odora* Bull.

Clitopilus abortivus B. & C.

Collybia atratoides Pk.

“ *confluens* Pers.

“ *dryophila* Bull.

“ *maculata* Alb. & Schw.

“ *platyphylla* Fr.

“ *radicata* Rehl.

“ *velutipes* Curt.

Coprinus atramentarius (Bull.) Fr.

“ *comatus* Fr.

“ *ebulbosus* Pk.

“ *micaceus* (Bull.) Fr.

- Cortinarius alboviolaceus* Pers. " *insulsus* Fr.
 " *obliquus* Pk. " *lignyotus* Fr.
Craterellus cantharellus (Schw.) Fr. " *piperatus* (Scop.) Fr.
 " *cornucopioides* Fr. " *plumbeus* (Bull.) Fr.
Crepidotus applanatus Pers. " *pyrogalus* (Bull.) Fr.
 " *calolepis* Fr. " *rufus* (Scop.) Fr.
 " *dorsalis* Pk. " *scrobiculatus* Fr.
 " *mollis* Schaeff. " *serifluus* (DC.) Fr.
 " *versutus* Pk. " *sordidus* Pk.
Entoloma griseum Pk. " *subdulcis* (Bull.) Fr.
 " *strictus* Pk. " *theiogalus* (Bull.) Fr.
 " *subcostatum* Atk. " *trivialis* Fr.
Flammula betulina Pk. " *uvidus* Fr.
Galera tenera Schaeff. " *vellerius* Fr.
Hygrophorus ceraceus (Wulf.) Fr. " *volemus* Fr.
 " *coccineus* (Schaeff.) Fr. *Lentinus lepideus* Fr.
 " *conicus* (Scop.) Fr. " *ursinus* Fr.
 " *eburneus* Bull. " *vulpinus* Fr.
 " *lauræ* Morg. *Lepiota angustana* Britz.
 " *psittacinus* (Schaeff.) Fr. " *americana* Pk.
 " *pudorinus* Fr. " *asperula* Atk.
 " *puniceus* Fr. " *cepæstipes* Sow.
 " *sordidus* Pk. " *granosa* Morg.
 " " *morgani* Pk.
Hypholoma appendiculatum Bull. " *naucinoides* Pk.
 " *lacrymabundum* Fr. " *procera* Scop.
 " *sublateritium* Schaeff. " *rubrotincta* Pk.
Inocybe fibrillosa Pk. *Marasmius candidus* (Bolt.) Fr.
 " *geophylla* (Sow.) Fr. *var.* " *cohærens* (Fr.) Bres.
 " *lilacina* Pk. " *rotula* Fr.
 " *rimosa* (Bull.) Fr. " *siccus* Schw.
Lactarius chrysorrheus Fr. *Mycena epipterygia* Scop.
 " *corrugis* Pk. " *galericulata* Scop.
 " *deceptivus* Pk. " *hæmotopa* Pers.
 " *deliciosus* Fr. " *leajana* Berk.
 " *distans* Pk. " *leptophylla* Pk.
 " *gerardii* Pk. " *pura* Pers.
 " *hygrophoroides* B. & C. *Naucoria semiorbicularis* Bull.

Nyctalis asterophora Frost.
Omphalia alboflava Moy.
 " *campanella* Batsch.
Paneolus campanulatus L.
 " *retirugis* Fr.
 " *solidipes* Pk.
Panus stipticus (Bull.) Fr.
 " *rudis* Fr.
Paxillus panuoides Fr.
Pholiota adiposa Fr.
 " *æruginosa* Pk.
 " *caperata* Pers.
 " *flammans* Fr.
 " *marginata* Batsch.
 " *squarrosoides* Pk.
 " *togularis* Bull.
 " *unicolor* Vahl.
Phylloporus rhodoxanthus (Schw.)
 Bres.
Pleurotus applicatus Batsch.
 " *abscondens* Pk.
 " *dryinus* Pers.
 " *ostreatus* Jacq.
 " *petaloides* Bull.
 " *sapidus* Kalchbr.
 " *serotinoideus* Pk.
 " *ulmarius* Bull.
Pluteus cervinus Schaeff.
 " *leoninus* Schaeff. *var. coc-*
 cineus Cke.
Russula alutacea Fr.
 " *basifurcata* Pk.
 " *compacta* Frost.
 " *crustosa* Pk.
 " *decolorans* Fr.
 " *densifolia* Secr.
 " *emetica* Fr.
 " *fætens* Fr.

 " *furcata* (Pers.) Fr.
 " *granulata* Pk.
 " *mariae* Pk.
 " *nigricans* Fr.
 " *pectinatoides* Pk.
 " *variata* Banning.
 " *veternosa* Fr.
 " *virescens* (Schaeff.) Fr.
Schizophyllum commune Fr.
Stropharia semiglobata Batsch.
 " *viridula* Schaeff.
Tricholoma equestre L.
 " *fumescens* Pk.
 " *personatum* Fr.
 " *russula* Schaeff.
 " *sejunetum* Sow.
Volvaria bombycina (Pers.) Fr.
 " *pūsilla* Pers.

PHALLINEÆ.

Dictyophora duplicata (Bosc.) Ed.
 Fisch.
 " *ravenelii* (B. & C.)
 Burt.
Mutinus caninus (Huds.) Fr.

LYCOPERDINEÆ.

Calvatia cœlata Bull.
 " *cyathiforme* (Bosc.)
 " *gigantea* (Schaeff.) Batsch.
Lycoperdon gemmatum Batsch.
 " *pyriforme* Schaeff.

NIDULARIINEÆ.

Crucibulum vulgare Tul.
Cyathus stercorius (Schr.) De Toni
 " *striatus* (Huds.) Hoffm.

PLECTOBASIDIINEÆ.

Scleroderma tenerum B. & C.
 “ *vulgare* Hornem.

ASCOMYCETES.

Anthostomella ostiolata Ell.
Bulgaria inquinans (Pers.) Fr.
Chlorosplenium æruginosum (Ed.) de Not.
Cordyceps herculea (Schw.) Sacc.
 “ *militaris* (L.) Link.
Daldinia concentrica (Bolt.) Ces. & de N.
Diatrype albopruinosa (Schw.) Cke.
 “ *stigma* (Hoffm.) Fr.
 “ *virescens* (Schw.) E. & E.
Diatrypella prominens Howe.
Dichæna ferruginea (Pers.) Fr.
Dimerosporium collinsii (Schw.) Thuem.
Erysiphe cichoracearum DC.
 “ *graminis* DC.
Exoascus deformans (Berk.) Fekl.
Glæoglossum gelatinosum (Pers.) Durand.
Gibberella saubinettii (Mont.) Sacc.
Glonium simulans Gerard.
Gyromitra gigas (Krombh.) Cke.
Helotium citrinum (Hedw.) Fr.
Hypomyces lactifluorum (Schw.) Tul.
 “ *rosellus* (Alb. & Schw.) Tul.
Hypoxyton annulatum Schw.
 “ *atropunctatum* (Schw.) Cke.
 “ *coccineum* Bull.
 “ *cohærens* (Pers.) Fr.
 “ *fuscum* (Pers.) Fr.

“ *howeanum* Pk.
 “ *investiens* (Schw.) Berk.
 “ *petersii* B. & C.
 “ *turbinulatum* Schw.
Hysteriographium gloniopsis (Ger.) E. & C.
Lachnea erinaceus Schw.
 “ *scutellata* L.
Læstadia bidwellii (Ell.) Viala & Ravaz.
Leotia lubrica (Scop.) Pers.
Microsphæraalni (DC.) Wint.
 “ *elevata* Burr.
Morchella conica Pers.
 “ *esculenta* (L.) Pers.
 “ *semilebra* DC.
Nectria cinnabarina (Tode) Fr.
 “ *ipomoeæ* Hals.
Nummularia bulliardi Tul.
 “ *discreta* (Schw.) Tul.
 “ *tinctor* (Berk.)
Otidea aurantia (Pers.) Mass.
Peziza repanda Wahl.
 “ *succosa* Berk.
 “ *vesiculosa* Bull.
Phyllachora graminis Pers.) Fekl.
Phyllactinia suffulta (Reb.) Sacc.
Plowrightia morbosa (Schw.) Sacc.
Podosphæra oxycanthe (DC.) De By.
Pseudopeziza medicaginis (Lib.) Sacc.
 “ *trifolii* (Pers.) Fekl.
Rhytisma andromadæ (Pers.) Fr.
Rosellinia aquila (Fr.) De N.
 “ *medullaris* Ces. & De N.
Sclerotinia fructigena Pers.
Scorias spongiosa (Schw.) Fr.
Sarcocypha coccinea (Jacq.) Cke.
Sphærella fragariæ (Tul.) Sacc.

Sphærographium fraxini (Pk.) Sacc.
 Sphærotheca pannosa (Wallr.) Lev.
 Tuber rufum Pico.
 Uncinula salicis (DC.) Wint.
 Urnula craterium (Schw.) Fr.
 Ustulina vulgaris Tul.
 Valsa leucostoma (Pers.) Fr.
 Venturia pomi (Fr.) Wint.
 Xylaria castorea Berk.
 " hypoxylon (L.) Grev.
 " polymorph (Pers.) Grev.

FUNGI IMPERFECTI.

Sphærospidales.

Actinonema rosæ (Lib.) Fr.
 Ascochyta pisi Lib.
 Cicinnobolus cesatii De By.
 Cytospora persicæ Schw.
 Diplodia zeæ (Schw.) Lev.
 Entomosporium maculatum (Cke.)
 Sacc.
 Darluca filum (Biv.) Cast.
 Leptothyrium pomi (Mont. & Fr.)
 Sacc.
 Phoma polygramma (Fr.) Sacc. var.
 Plantaginis. Sacc.
 Phyllosticta ampelopsidis Ell. &
 Mart.
 " prunicola (Op.) Sacc.
 Septoria graminum Desm.
 " lycopersici Spig.
 " piricola Desmz.
 " podophyllina Pk.
 " rubi West.
 " trillii Pk.
 Sphæronema fimbriatum (Ell. & Hals.)
 Sacc.

Sphæroopsis grandinea E. & E.
 " malorum Berk.
 Vermicularia circinans Berk.

Melanconiales.

Colletotrichum lindemuthianum
 (Sacc. & Magn.) Bri. & Cav.
 Cylindrosporium padi Karst.
 Marsonia brunneum E. & E.
 " ochroleuca B. & C.

Hyphomycetes.

Acrostalagmus cinnabarinus (Pers.)
 Cda.
 Alternaria brassicæ (Berk.) Sacc. var.
 macrospora. Sacc.
 " solani (E. & M.) Jones &
 Grant.
 Botrytis vulgaris Fr.
 Cephalothecium roseum Cda.
 Cercospora apii Fres.
 " beticola Sacc.
 " condensata Ell. & Kell.
 " viticola (Ces.) Sacc.
 Cladosporium carpophilum Thuem.
 Fumago vagans Pers.
 Helminthosporium carpophilum Lev.
 " inconspicuum C. &
 Ell.
 Piricularia grisea (Cke.) Sacc.
 Polythrincium trifolii B. & C.
 Streptothrix atra B. & C.
 Stysanus stemonites (Pers.) Cda.
 Tubercularia vulgaris Tode.
 Zygodemus fulvus Sacc.

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