Indiana Fungi-II.

J. M. VAN HOOK.

The collecting of fleshy fungi during the months of July and August was almost a total failure, due to the extreme dry weather. On the other hand, the continued rainfall during September and October was productive of a great many species common to the fall months. Many of these had not been met with during the four years previous to 1911. It is interesting to observe during such seasons how the rains will awaken apparently dormant mycelia which produce immense quantities of sporophores. Moreover these seem most abundant on dry exposed hillsides, which under ordinary conditions produce but few mushrooms.

One plant not previously observed was *Armillaria nardosmia* Ell. This species grew in abundance in several places in Brown and Monroe counties in October. It is one of our most attractive mushrooms (Fig. 1). In color and general appearance it reminds one of the soft feathers of our native pheasant.

Likewise specimens of *Lactarius sordidus* Pk, were abundant in situations commonly very dry. (Fig. 2.)

One of the most interesting things ever observed by the writer was a most splendid fairy ring formed by *Clavaria formosa* Pers. This ring was complete; about twenty feet in diameter and composed of "bunches" for the most part six or eight inches in height and two to four inches in diameter.

One species collected the year before and resembling in its manner of growth *Institute maxima*, which is occasionally found on the hymenium of the common *Fomes applanatus*, was found on the hymenium of a resupinate form of *Fomes conchatus*. Specimens of this were sent to Dr. Peck, who describes it in the New York State Museum Report for 1910 as a new species, *Sporotrichum chryseum* Pk. The following is his English description: "Hyphæ slender, 3-4 microns thick, continuous, long, intricate, hyaline, forming a soft, thin, subrosy separable membrane, golden yellow beneath; spores abundant, minute, globose, 2.5-3 microns in diameter."



Fig. 1. Armillaria nardosmia Ell



Fig. 2. Lactarius sordidus Pk.

"On the hymenium of a resupinate form of Fomes conchatus (Pers.) Fr., Bloomington, Indiana, J. M. Van Hook."

Most of the fungi collected during the year have as yet not been identified. The list for 1911 includes only species new to Indiana University herbarium and collected in the State.

The Myxomycetes, omitted from last year's list, are here included. All specimens not otherwise marked were determined by myself and collected in 1911.

USTILAGINEÆ.

Ustilago anomala J. Kunze. On Polygonum scandens. Coll. F. L. Pickett, Monroe County, October.

POLYPORACEÆ.

Boletus cyanescens Bull. Ground, rich leaf mold, wöods. Clark County, September 8, 1910. J. M. V.

Polyporus berkeleyi Fr. Growing from the ground but attached to the root of an oak stump. Monroe County, July 15. Cue.

AGARICACEÆ.

Agaricus abruptus Pk. Monroe County, October 4. Meier.

Amanita caesarea Scop. Ground, campus, September 27.

Armillaria nardosmia Ell. Ground, Monroe County, October 4. Det. Pk. (See Fig. 1.) J. M. V.

Collybia zonata Pk. Ground, Monroe County, October 4. J. M. V.

Cortinarius cylindripes Kauff. Ground, Monroe County, October 4. J. M. V.

Hygrophorus pratensis (Pers.) Fr. Ground, forming a fairy ring, Monroe County, October 10. Edmondson.

Lactarius camphoratus (Bull.) Fr. Ground, Monroe County, October 6. J. M. V.

Lepiota conspurcata (Willd.) Morg. Rich humus, campus, under trees, October 9. J. M. V.

Lepiota virescens (Speg.) Morg. Ground, campus, September 27. Meier.

Marasmius delectans Fr. On dead leaves, ground, campus, September 27. $\,$ J. M. V.

Pholiota augustipes Pk. Lawu, Monroe County, October 12. J. M. V. Russula lepida Fr. Woods, ground, July 12, Brown County, J. M. V. Russula sordida Pk. Low wet ground, beech woods, Brown County, July 12. J. M V

LYCOPERDINEÆ.

Lycoperdon cruciatum Rost. Ground, between cement blocks, Kosciusko County, September 28. Elder.

Tylostoma verrucosum Morg. On very rich leaf mold, campus, October 2. Woolery.

ASCOMYCETES.

Didymella lophospora Sacc. & Speg. On living leaves of Quercus rubra, Monroe County, November 3. Sutton.

Dothidella ulmea (Schw.) E. & E. On fallen leaves of Ulmus americana, campus, December. J. M. V.

Erysiphe graminis DC. On old wheat straw, Monroe County, August 9. Pickett.

Erysiphe polygoni DC. On Polygonum aviculare, campus, August 17. J. M. V.

Helvella lacunosa Afz. Ground, top of hill, Monroe County, October 21. J. M. V.

Hypoxylon atropurpureum Fr. On beech, Monroe County, November 12, 1910. Owens, Det. Pk.

Hypoxylon effusum Nitschke. On elm, Monroe County, January 7, 1910. Owens.

Hypoxylon marginatum (Schw.) Berk. On oak, Monroe County, November 25, 1910. Owens.

Hypoxylon multiforme Fr. On beech, Monroe County, November 12, 1910. Owens,

Hypoxylon perforatum (Schw.) Fr. On ash, Monroe County, January, 1910. Owens.

Hypoxylon rubiginosum (Pers.) Fr. On elm, Monroe County, January 28, 1910. Owens. Det. Pk.

Hypoxylon sassafras Schw. On sassafras, Monroe County, February 11, 1911. Owens.

Nummularia microplaca B. & C. On sassafras, Monroe County, January 28, 1911. Owens.

Nummularia repanda (Fr.) Nitsch. On elm, Monroe County, November 25, 1911. Owens.

Rhytisma acerinum (Pers.) Fr. On living leaves of Acer rubrum, Monroe County, October. Sutton.

Rosellinia subiculata (Schw.) Sacc. On stump of Liriodendron tulipifera, Clark County, November 2, 1908. J. M. V.

Valsaria exasperens (Ger.) Sacc. On beech bark, Monroe County, November 18. Owens. Det. Owens.

SPILÆROPSIDALES.

Phyllosticta cercidicola E. & E. On living leaves of Cercis canadensis, Monroe County, October. Sutton.

Phyllosticta cruenta (Fr.) Kickx. On living leaves of Smilax rotundifolia, Monroe County, August 17, 1909. Shekell & Culp.

Phyllosticta faginea Pk. On living leaves of Fagus ferruginea, Monroe County, August 17, 1909. Shekell & Culp.

Phyllosticta labruscae Thuem. On living leaves of Vitis cordifolia, August 17, 1909. Monroe County. Shekell & Culp.

Phyllosticta solitaria E. & E. On Maiden Blush apples, fall of 1909. Clark County. J. M. V.

Septoria erigerontis B. & C. On Erigeron sp., Monroe County, August 11, 1909. J. M. V. & Culp.

MELANCONIALES.

Colletotrichum trifolii Bain. On red clover, Monroe County, June 6, 1908. J. M. V.

Cylindrosporium toxicodendri (Curt.) E. & E. On living leaves of Rhus toxicodendron, Monroe County, fall of 1910. J. M. V.

Gloeosporium septorioides Sacc. On living leaves of Quereus rubra, Monroe County, August 17, 1909. Shekell & Culp. (Some spores appear one-septate. This is Marsonia quercina Wint.)

Marsonia martini Sacc. & Ell. On living leaves of oak, Monroe County, fall of 1910. J. M. V.

HYPHOMYCETES.

Cercospora cercidicola Ell. On living leaves of Cercis canadensis, Monroe County, fall of 1910. J. M. V.

Cercospora granuliformis Ell. & Hollw. On living leaves of Viola cucullata, Clark County, September 21, 1906. J. M. V. (Varies slightly from the description.)

Cercospora oculta Ell. & Kell. On living leaves of Vernonia noveboracensis, Monroe County, August 11, 1909. J. M. V.

Cercospora violae Sacc. On living leaves of Viola cucullata, campus, August 11, 1909. J. M. V. (Spores as much as 250 microns long. Conidiophores up to 150 long.)

Sporotrichum chryseum Pk. On the hymenium of a resupinate form of Fomes conchatus. In Monroe Connty or Brown County. Exact location not known. Data temporarily lost. Fall of 1909 or 1910. J. M. V.

MYXOMYCETES.

Areyria denndata (Linn.) Sheldon. October 28, 1901, Monroe County. Mutchler.

Dictydium cancellatum (Batsch.) Macbr. Mutchler.

Dianema depressum List. Mutchler.

Fuligo ovata (Schaeff.) Macbr. On bark of rotten hickory log, Monroe County, November 11, 1908. J. M. V.

Hemitrichia clavata (Pers.) Rost. Monroe County, October 29, 1901. Mutchler.

Hemitrichia leiocarpa (Cke.) Macbr. Monroe County, October 29, 1901. Mutchler.

Hemitrichia stipata (Schw.) Macbr. Monroe County, October 25, 1901. Mutchler.

Hemitrichia vesparum (Batsch.) Macbr. Monroe County, November 4, 1901. Mutchler.

Lamproderma scintillans (B. & Br.) List. On oak bark, Brown County, August 25, 1908. J. M. V.

Lycogola epidendrum (Buxb.) Fr. Montgomery County, November 3, 1908, Wood.

Oligonema nitens (Lib.) Rost. Monroe County, October 25, 1901. Mutchler.

Perichaena variabilis Rost. Monroe County, October 20, 1901. Mutchler.

Plasmodiophora brassicæ Wor. (No data as to county.)

Stemonitis ferruginea Ehrenb. Monroe County, October 25, 1901. Mutchler.

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Stemonitis fusca (Roth.) Rost. Brown County, October 22, 1908. On rotten log. J. M. V.

Stemonitis smithii Macbr. Winter 1897. Copeland. Monroe County. Trichia contorta Rost. Monroe County, October 25, 1901. Mutchler. Trichia decipiens (Pers.) Macbr. Monroe County, October 22, 1901. Mutchler.

Trichia favoginea (Batsch.) Pers. Monroe County, October 30, 1901. Mutchler.

Trichia persimilis Karst. Mouroe County, October 25, 1901. Mutchler.

Trichia scabra Rost. Monroe County, fall of 1908. J. M. V. Indiana University,
December 1, 1911.