INDIANA FUNGI, XII

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MYXOMYCETES

Clastoderma Debaryanum Blytt. On dead fallen limb, Cedar Cliff, Monroe County, July 14, 1929. L. B. Lockwood. I. U. 5212.

Fuligo septica (L.) Gmel. form *F. violacea* Pers. On stump, Brown County, June 30, 1929, Zetterberg. I. U. 5083. On live petioles of *Plantago* and *Viola*, University campus, July 11, 1929. Otho Shaw. 5097. On sawdust walk, campus, July 14, 1929. Stech. I. U. 5196.

Lycogala epidendrum (Buxb.) Fr. On rotten wood, Posey County, July 5, 1929. Shaw. I. U. 5090.

Stemonitis Morgani Pk. On decayed wood, Hamilton County, July 28, 1929. Groves. I. U. 5213.

PHYCOMYCETES

Pythium Debaryanum Hesse. On seedlings of *Lilium regale* Wils., I. U. conservatory, March 4, 1929. Mottier. I. U. 5012. (This fungus was the cause of severe "damping off" of seedlings. Stirring the soil and sprinkling it with sulphur proved effective.)

ASCOMYCETES

Bulgaria inquinans (Pers.) F. On buried sticks, Decatur County, July 5, 1929. Zetterberg. I. U. 5088.

Caryospora putaminum (Schw.) De Not. On old peach pits, Bedford, Lawrence County, June 1, 1929. Sears. I. U. 5028. More of these were collected August 4, 1929, when the fungus was found to be mature. I. U. 5210.

Chlorosplenium aeruginosum (Oud.) De Not. On rotting log of *Liriodendron tulipifera* L., Stephens Creek, Monroe County, April 20, 1929. Jackson. I. U. 5023. Apothecia numerous under the log. Although wood of oak and yellow poplar stained green by this fungus is very common throughout our area, the apothecia, which are of a verdigris-green color, often escape notice, as they seem to favor darkness. They are usually found under logs, beneath bark, etc. In England, this "green oak" is used in the making of Tunbridge ware. Wood is often stained quite evenly a beautiful mission green. Specimens of wood more or less exposed to light for some twenty years, still retain the color well.

Cordyceps palustris Berk. & Br. On small white grub, Stone Springs, Monroe County, April 20, 1929. Sears. (Conidial state.) I. U. 5026.

Exoascus mirabilis Atk. On developing buds of *Prunus hortulana* Bailey, Monroe County, July 4, 1927. I. U. 5254. This disease was observed each spring from 1915 to 1927 in a large thicket of these wild goose plums, where almost all developing buds were hypertrophied. The hypertrophied growth dies in June and is covered with a dark mold. Some axillary buds then develop. I have never seen any occurrence of this fungus on the fruits.

Hypoxylon coccineum Bull. On bark of dead *Fagus grandifolia* Ehrb., Montgomery County, summer of 1928. A. R. Bechtel. I. U. 5069.

Hypoxylon fuscum (Pers.) Fr. On *Acer saccharum* Marsh., July 27, 1929. Zetterberg. I. U. 5184.

Hypoxylon Morsei B. & C. On bark of living *Rhus vernix* L., in a cranberry bog, near Elmdale, Montgomery County, April 15, 1929. A. R. Bechtel. I. U. 5075. Probably not a pathogene, but occurring on an area already dead.

Hypoxylon serpens (Pers.) Fr. On a piece of driftwood (*Ulmus*), Sugar Creek, Montgomery County, April, 1929. Bechtel. I. U. 5074. This specimen corresponds extraordinarily well with published description. We have identified this species only once before. In 1913, it was collected by G. B. Ramsey in Boone County on red oak. It was never observed by Owens in his thorough study of the genus *Hypoxylon*.

Lachnea scutellata (L.) Gill. [*Patella scutellata* (L.) Morg.] Seaver, N. A. Cup-Fungi, p. 159. On rotting stump of *Acer saccharum* Marsh., campus, May 11, 1929. I. U. 5039. Collected again on this same host, October 10, 1929. I. U. 5241.

Microsphaera Alni (Wallr.) Wint. On *Evonymus atropurpureus* Jacq., Monroe County, September 20, 1920. I. U. 5221. Very common each year. The conidial stage coats the entire upper surface of the leaves.

Morchella esculenta (L.) Pers. On ground, Steuben County, May 24, 1929. I. U. 5047.

Phyllactinia corylea (Pers.) Karst. On leaves of *Quercus rubra* L., Brown County, October 30, 1927. Amidei. I. U. 4947. October 27, 1929. I. U. 5266.

Rhytisma punctatum (Pers.) Fr. On leaves of *Acer saccharum* Marsh., Borden, Clark County, October 12, 1929. I. U. 5247. Though occurring on older trees, this fungus did much injury to the foliage of hundreds of seedlings (two feet and under) in an old woods-pasture which had been abandoned for the first time. This is the first case of actual damage from Rhytisma observed by the author.

Rosellinia aquila (Fr.) De Not. On bark of decaying stick, Binford's woods, near Crawfordsville, Montgomery County, April 1929. A. R. Bechtel. I. U. 5072.

Sphaerotheca Humuli (DC.) Burr. On *Rosa*, Daviess County, July 5, 1929. Stech. I. U. 5093.

Valsa fulvella B. & Rav. On bark of *Platanus occidentalis* L., Ladoga, Montgomery County, September 16, 1913. G. B. Ramsey. I. U. 4994.

Xylaria Hypoxylon (L.) Grev. On old maple (*Acer saccharum* Marsh.) stump, campus, April 18, 1929. I. U. 5027.

BASIDIOMYCETES

USTILAGINEAE

Sorosporium Syntherismae (Pk.) Farl. On *Cenchrus caroliniana* Walt., Porter County, October 12, 1929. Weatherwax. I. U. 5251.

Sphacelotheca Sorghi (Lk.) Clinton. On kernels of *Sorghum vulgare* Pers. (var. Kaffir corn), university garden, October 10, 1929. I. U. 5246.

Urocystis Anemones (Pers.) Schroet. On leaves of *Hepatica acutiloba* DC., State Park at Turkey Run, Parke County, May 29, 1929. A. R. Bechtel. I. U. 5068.

Ustilago perennans Rostr. On spikelets of *Arrhenatherum elatius* (L.) Beauv., campus, August 2, 1929. Weatherwax. I. U. 5202. Clinton (Ustilaginales in N. A. F., p. 7, 1906), says: "Mycelium perennial in perennial parts of the host." Inasmuch as our plants were grown from seed from Colorado, the smutted parts must have originated from spores on the seed or from dormant mycelium in the seed-coat or embryo.

UREDINEAE

Dicaeoma canalicultum (Schw.) Ktze. On leaves of *Cyperus esculentus* L., Montgomery County, October 29, 1929, Haas. I. U. 5259. (Uredinia and telia.)

Dicaeoma Grossulariae (Schum.) Kern. Common on *Ribes*, La Grange County, May 24, 1929. I. U. 5049. Also in Steuben County.

Dicaeoma Impatientis (Schw.) Arth. On *Impatiens pallida* Nutt., Huckleberry Ravine, Monroe County, July 23, 1929. Lockwood. I. U. 5209.

Kuehneola obtusa (Strauss.) Arth. On *Potentilla canadensis* L., Washington County, March 23, 1929. Hamlin. I. U. 5016.

HYMENOMYCETINEAE

THELEPHORACEAE

Craterellus Cantharellus (Schw.) Fr. On ground, Clay County, July 13, 1929 Shaw. I. U., 5113; July 28, 1929, I. U., 5181.

Thelephora Schweinitzii Pk. On ground, Clay County, July 28, 1929. Shaw. I. U. 5182.

POLYPORACEAE

Boletinus porosus (Berk.) Pk. *Boletinellus merulioides* (Schw.) Murr. Mycologia, I, p. 7, 1909. Growing on a lawn, Goodland, Newton County, October 31, 1929. Beale. I. U. 5268.

Boletus bicolor Pk. Rep. 24, p. 78. *B. dichrous* Ell. Bull. Torr. Bot. Club, III, p. 109. *Ceriomyces bicolor* (Pk.) Murr. Monroe County, July 23, 1929. Zetterberg. I. U. 5170. These specimens exhibit characters of both *B. bicolor* and *B. dichrous*. The stem, like the cap, is red (vinaceous-rufous) as Peck has described for *B. bicolor*. Murrill has, correctly, made the two synonyms, but fails to state the red character of the stem which shows in our specimens. The pileus here is doubtfully viscid; spores ochraceous-brown, oblong, 10 to 17.5 by 4 to 5 microns (average about 14 by 5), bent at one end as Peck says for *B. dichrous*.

Boletus eximius Fr. On ground, Weimar's Lake, Monroe County, July 13, 1929. Lockwood. I. U. 5108.

Boletus subglabripes Pk. Monroe County, July 17, 1929. Lockwood. I. U. 5146.

Boletus subvelutipes Pk. On ground, Decatur County, July 21, 1929. Zetterberg. I. U. 5153.

Favolus canadensis Kl. On *Fraxinus americana* L., campus, in woods, on dead limbs attached and fallen. Very fine specimens. May 15, 1929. I. U. 5040.

Polyporus arcularius (Batsch.) Fr. On *Fraxinus*, Steuben County, May 24, 1929. I. U. 5046.

Polyporus cinnabarinus Fr. On log of *Quercus velutina* Lam., Clay County, June 23, 1929. Shaw. I. U. 5061. Laporte County, 4997.

Polyporus cinnamomeus Jacq. On ground in woods attached to underground roots, Decatur County, July 21, 1929. Zetterberg. I. U. 5151.

Polyporus conchifer Schw. On dead fallen limbs of *Ulmus americana* L., near Freedom, Owen County, November 5, 1929. I. U. 5273.

Polyporus cuticularis Bull. On dead tree of *Fagus grandifolia* Ehrb., Clark County, October 12, 1929. I. U. 5260. Spores oval, one-guttulate, yellowish-brown, smooth, 5 by 6 microns. This species was also collected on the same host in Brown County, October 27, 1929. I. U. 5267.

Polyporus gilvus Schw. On wood, Decatur County, July 21, 1929. Zetterberg. I. U. 5152.

Polyporus hirsutus Wulfen. On wood, Clay County, June 23, 1929. Shaw. I. U. 5066.

Polyporus hispidus Bull. On dying tree of *Acer rubrum* L., Bloomington, Monroe County, 1928 and 1929. Fruits abundantly, and apparently is hastening the death of the tree. I. U. 4953.

Polyporus lucidus Leyss. On wood, Posey County, July 5, 1929. Shaw. I. U. 5089.

Polyporus sulphureus (Bull.) Fr. var *Overholtsii* Rosen. On ground about four feet from a large tree (*Quercus rubra* L.), in an old woods, July 14, 1929, Clay County. Shaw. I. U. 5118. Composed of very many pileoli, the whole mass being about 40 cm. in longest diameter. This is certainly a beautiful specimen. Rosen's unusually fine description of this variety, reads as if written from our specimen (A Pink-colored form of Polyporus Sulphureus and Its Probable Relationship to Root-rot of Oaks. Mycologia, 19, p. 191, 1927.)

Strobilomyces strobilaceus (Scop.) Berk. On ground in woods, Clay County, July 28, 1929. Shaw. I. U. 5178.

AGARICACEAE

Amanita chlorinosma Pk. Campus, under trees, June 19, 1929. I. U. 5060. A second lot of specimens was collected on campus, growing in raw clay, July 29, 1929, by Gladys Jackson. I. U. 5176. These were unusually large plants. The odor of all these plants is very strong, resembling, however, that of strong turnips or horse-radish, rather than that of chlorine or chloride of lime. *A. solitatia* Fr., *A. strobiliformis* Vittad. and *A. chlorinosma* Pk. seem too closely allied. Yet, the odor is said to be the deciding character.

Amanita chlorinosma Pk. (*solitaria* form) Clay County, July 27, 1929. Shaw. I. U. 5175.

Amanita spissa Coker. Huckleberry Ravine, Monroe County, July 17, 1929. Zetterberg. I. U. 5137.

Claudopus nidulans (Pers.) Pk. On old log, Montgomery County, October 20, 1929. Haas. I. U. 5256.

Collybia dryophila Bull. Monroe County, July 15, 1929. I. U. 5052. This well knows species does not appear to be common in this locality.

Collybia platyphylla Fr. On stump, Clay County, June 23, 1929. Shaw. I. U. 5064.

Coprinus atramentarius (Bull.) Fr. On ground, gregarious, yard, in Bloomington, Monroe County, April 25, 1929. Campbell. I. U. 5031. One of our most delicious mushrooms. Common, but not heretofore reported from this locality.

Coprinus quadrifidus Pk. On old stump of *Acer saccharum* Marsh., campus' July 19, 1929. Jackson. I. U. 5149.

Lactarius affinis Pk. On ground, Clay County, July 14, 1929. Shaw. I. U. 5115.

Lactarius piperatus Fr. On ground in woods, Clay County, July 28, 1929. Shaw. I. U. 5179.

Lepiota americana Pk. On ground, Clay County, June 23, 1929. Shaw. I. U. 5063.

Lepiota naucina Fr. Field near Donalson's Cave, Lawrence County, September 21, 1929. Haas. I. U. 5222. Typical, but extra large. One specimen measured as follows: pileus, 12 cm., stipe, 14 mm. thick with bulbous base 2.5 cm. thick. The large size may have resulted from the location on heavily fertilized ground under young apple trees. Even larger ones were reported by the collector, Mrs. Haas.

Panus rudis Fr. On stump of *Acer saccharum* Marsh., Grass plot, Monroe County, April 25, 1929. I. U. 5032.

Paxillus panuoides Fr. On decaying stick in Mayfield Cave, August 3, 1929. Shaw. I. U. 5206.

Pholiota adiposa Fr. On old log, Montgomery County, October 20, 1929. Haas. I. U. 5257.

Pholiota cerasina (Pk.) Sacc. On old stump of *Fagus grandifolia* Ehrb., campus, April 25, 1929. Lockwood. I. U. 5019. Very caespitose. Determination verified by Kauffman.

Pholiota squarrosoides Pk. On old log, Montgomery County, October 20, 1929. Haas. I. U. 5258.

Pleurotus atropellitus Pk. On decorticated log on hill-top, city water-works, February 23, 1929. Lockwood. I. U. 5009.

Russula Mariae Pk. On ground, Clay County, July 14, 1929. Shaw. I. U. 5111.

GASTEROMYCETES

Calvatia maxima (Schaeff.) Morgan. *Calvatia gigantea* (Schaeff.) Batsch. In woods, lower hill-side, Griffey Creek, Monroe County, autumn of 1914. F. Donaghy. I. U. 5253. In Carroll County, where a photograph was made by Weatherwax showing a "fairy ring" some 35 feet in diameter. This species is also reported from Grant County by J. H. Ayres where it was growing in a ravine.

Crucibulum vulgare Tul. On corn-cob, near Cedar Cliff, Monroe County, July 14, 1928. Lockwood. I. U. 5170. On the same host, Owen County, November 5, 1929. Hughes. I. U. 5272.

Ithyphallus Ravenelii (B. & C.) E. Fischer. *Dictyophora Ravenelii* (B. & C.) Burt. On old decayed stump, Owen County, November 5, 1929. Hughes. Known by its membranous veil which seldom reaches below the cap. The entire corded mycelium is of a beautiful lilac tint. I. U. 5271.

FUNGI IMPERFECTI

SPHAEROPSIDALES

Ascochyta Pisi Lib. Conidial stage of *Mycosphaerella pinodes* (Berk. & Blox.) R. E. Stone. On pods of fresh *Pisum sativum* L., shipped from California. Market, in Bloomington, Monroe County, May 1, 1929. I. U. 5037.

Phoma glandicola (Schw.) Cke. On acorns of *Quercus alba* L., Turkey Run state park, Parke County, May 1, 1929. A. R. Bechtel. I. U. 5073.

Phyllosticta Asiminae Ell. & Kell. On *Asimina triloba* Dunal. Under pine, campus, August 7, 1929. I. U. 5215. An exceptionally interesting form of spots were present on these leaves. They occurred in rows near the secondary veins, coalescing to form lines one-eighth by two inches. These were evidently secondary spots formed by spores washing down the vein grooves on the upper leaf surface and germinating in the moisture there. It is common in this species, for leaves to be cut or lacerated by these spots in early summer. The spots then cease to spread, and fall out. The remaining part of the leaf (often cut entirely in two), is green until autumn. It is impossible to determine the original cause of the injury at this stage.

Phytlosticta Convallariae Pers. On leaves of *Smilax hispida* Muhl., Griffey Creek, Monroe County, July 23, 1929. Lockwood. I. U. 5194. The description in "N. A. Phyllostictas" by Seaver, corresponds weli. We find another spore on these spots. This may be another *Phyllosticta*. These spores are hyaline, long ovate to elongate, 15 to 25 by 5 to 7 microns. These are probably not young asci, such as those that have, in certain cases, been mistaken for large spores.

Phyllosticta indianensis Van Hook. Ind. Acad. Sci. 37, p. 132, 1928. Van Hook, J. M., Some New Species of Fungi. On leaves of *Rosa setigera* Michx., campus, October 1, 1917. I. U. 3855. The main distinguishing characters of this species are the small spots (which resemble those of the well-known Septoria Rubi West.), the few pycnidia, and the granular thick gelatinous coated spores.

Phyllosticta Labruscae Thuem. Conidial stage of *Guignardia Bidwellii* (Ell.) Viala & Ravaz. On leaves of *Vitis cordifolia* Michx., May 31, 1929. I. U. 5056, and on leaves of *Psedera quinquefolia* (L.) Greene, June 5, 1929, Posey County. Shaw. I. U. 5054. On leaves of *Vitis aestivalis* Michx., Brown County, June 30, 1929. Zetterberg. I. U. 5081.

Phyllosticta limitata Pk. On leaves of *Pyrus malus* L., Morgan County, October 19, 1924. Leaves covered with this fungus. On an old tree in hollow, surrounded by forest.

Phyllosticta Linderae E. & E. On leaves of *Benzoin aestivale* (L.) Nees. Huckleberry Hills, Monroe County, July 23, 1929. Typical of other local specimens, but spores show no guttulae. The spores are mostly 2 to 3 by 4 to 5 microns.

Phyllosticta liriodendrica Sacc. Conidial stage of *Sphaerella liriodendrica* Cke. On leaves of *Liriodendron tulipifera* L., Brown County, June 30, 1929. I. U. 5080. Zetterberg.

Phyllosticta melaleuca E. & E. On leaves of *Ulmus fulva* Michx., Posey County, July, 1928. I. U. 5156.

Phyllosticta Rosae-setigerae Van Hook. Rep. Ind. Acad. Sci. 37, p. 132, 1928. Van Hook, J. M., Some New Species of Fungi. On leaves of *Rosa setigera* Michx., Matlock's Woods, October 1916. I. U. 3714. On *Rosa*, Showers' farm, August 23, 1920. I. U. 3804.

Phyllosticta verbascicola Ell. & Kell. On living leaves of *Verbascum Thapsus* L., Monroe County, July 18, 1927. Lois Stump. I. U. 4769. This material is typical of description by the authors. This species was also collected by Lockwood in Monroe County, July 23, 1929. I. U. 5200. In this material, we find the pycnidia mostly epiphyllous, with definite pore about 15 microns

in diameter and spores apparently hyaline, but sub-hyaline in mass and irregularly guttulate.

Septoria Bromi Sacc. On *Bromus secalinus* L., Posey County, May 28, 1929. Shaw. I. U. 5158.

Septoria Convolvuli Desm. On *Convolvulus sepium* L., June 18 to 24, 1929, campus of I. U. 5154. Spots numerous, circular, light yellowish-brown with paler center, small at first, reaching a diameter of 3 to 4 mm., visible on both sides of the leaf; pycnidia yellowish-brown, becoming darker, thickly scattered over the spot, 75 to 100 microns, pore about 20 microns; spores rod-shaped, somewhat pointed on both ends, 2 to 3-septate, straight or sometimes curved, 1 to 2 by 25 to 53 microns, guttulate.

Septoria Erigerontis B. & C. On leaves of *Erigeron annuus* (L.) Pers., Posey County, June 1928. Shaw. I. U. 5058.

Septoria Helianthi Ell. On leaves of *Helianthus annuus* L., Posey County, May 28, 1929. Shaw. I. U. 5054.

Septoria incarnata E. & E. On leaves of *Asclepias syriaca* L., Posey County, June 1928. Shaw. I. U. 5159.

Septoria Lactucae Pass. On *Lactuca scariola* L., Posey County, June 1928. Shaw. I. U. 5162.

Septoria Oenotherae West. On *Oenothera laciniata* Hill., May 28, 1929, Posey County. Shaw. I. U.? 5059. The spores vary considerably in size here as is common in our Indiana material. According to Shaw, they are 35 to 70 microns long.

Septoria polygonorum Desm. On *Polygonum pennsylvanicum* L., Posey County, June 5, 1929. Shaw. I. U. 5160.

Septoria Verbenae Rob. & Desm. On leaves of *Verbena hastata* L., Posey County, June 1928. Shaw. I. U. 5155.

Sphaerographium Fraxini (Pk.) Sacc. On twigs of *Fraxinus*, Binford's woods, Montgomery County, April 1929. A. R. Bechtel. I. U. 5071.

Vermicularia Podophylli Ell. & Dear. On fruits of *Podophyllum peltatum* L., campus, Monroe County, July 16, 1929. I. U. 5134. Spots two, 1.5 cm. in diameter, center black (from the colored epidermis and setae on the pycnidia), with a brown border; pycnidia 100 to 200 microns, "conico-hemispherical," with very dark setae 50 to 275 by 4 to 9 microns (mostly about 5 wide), long tapering, pointed or rounded at tips where they are much paler, sometimes with spherical or irregular enlargements here and there. (The two line description in Saccardo, vol. 11, p. 504, is splendid for our specimens.)

MELANCONIALES

Colletotrichum Lindemuthianum (Sacc. & Magn.) Bri. & Cav. On string beans (*Phaseolus vulgaris* L.,) in market, shipped from California, May 11, 1929. (The conidial stage of *Glomerella Lindemuthiana* Shear.)

Cylindrosporium Padi Karst. Conidial stage of *Coccomyces hiemalis* Higgins. On *Prunus serotina* Ehrb., Gibson County, July 5, 1929. I. U. 5091. Lockwood. Also on cultivated *Prunus* (cherry), Montgomery County, June 29, 1929. Sidney Esten. I. U. 5078, 5079.

Gloeosporium Caryae Ell. & Dear. Conidial stage is *Gnomonia Caryae* Wolf. On *Carya* leaves, Clay County, July 28, 1928. I. U. 5183. Shaw.

Gloeosporium caulivorum L. Kirch. On leaf-petioles, flower-stalks, etc., of *Trifolium pratense* L., late spring of 1910, north of Bloomington, Monroe

County, causing much injury, but not noticed in later years. Causes leaves and flowers to bend down. I. U. 5013. Photographs. (See Zeit. 12, 281, 1902. Ind. Acad. Sci. 37, 1927.)

Marssonia Juglandis (Lib.) Sacc. The conidial stage of *Gnomonia leptostyla* (Fr.) Ces. & De Not. On leaves of *Juglans nigra* L., Posey County, May 31, 1929. Shaw. I. U. 5057.

Pestalozzia funerea Desm. On dead spot in leaf of *Sassafras variifolium* (Salisb.) Ktze., Clay County, July 28, 1929. I. U. 5180.

HYPHOMYCETES

Aspergillus flavus Link. On cotyledon of Lima bean seedling, I. U. conservatory, February 14, 1921. Andrews. I. U. 4999. Causing decayed spots. This material was submitted to Dr. C. Thom, who placed it in the *A. flavus* section and described it as follows: "yellow-green—a fairly light shade—with spores 4 to 6 microns in diameter, yellow-green in color, walls thin and pitted, has stalks ranging from 5 to 8 microns in diameter at base and 7 to 15 microns in diameter upward with walls uncolored and pitted."

Cercospora Cynoglossi Van Hook. Rep. Ind. Acad. Sci. 37, 1928, p. 131. Van Hook, J. M., Some New Species of Fungi. On living leaves of *Cynoglossum officinale* L., Deckard Creek, Monroe County, September 30, 1923. I. U. 3984. Found also on the Showers' farm, August 20, 1920. I. U. 3815.

Cercospora Kellermani Bubak. On leaves of Marshmallow, *Hibiscus Moscheutos* L. In yard north-west of Bloomington, October 5, 1929. I. U. 5230. Spots very small and numerous, about 1 mm. in diameter, brown with light centers. This host was also found to be attacked by the same fungus, in the university garden, October 7, 1929. I. U. 5232. Spores 4 to 6 by 30 to 200 microns, cells very short and 15 or more in number, tapering but often with enlarged places, some very long ones enlarged at tip; conidiophores mostly much elongated, often 225 microns in length and bearing spores quite regularly from base to tip, brown. The chief reason assigned by the author of this species, for making it a new one, is that it differed from *C. malvarum* Sacc. in its many celled conidia and from *C. altheina* Sacc. in having many celled conidia and longer conidiophores.

Cercospora Rosae-indianensis n. nom. In our publication, "Some New Species of Fungi," in Ind. Acad. Sci. 38, 1928, p. 131, we failed to note that *Cercospora Rosae* (Fuck.) v. Hoehn (Syn. *Exosporium Rosae* Fuck. Symb. p. 373, 1869), was in use. It has far shorter, hyphophyllous conidiophores, and gray-green, fewer septate spores than our species. Type, I. U. 2653.

Cercospora viridula E. & E. On *Ipomoea purpurea* (L.) Roth., Sherwood's, near Bedford, Lawrence County, August 4, 1929. I. U. 5208. Spots circular, or on account of the veins, angular, 1 to 2 cm., brown, slightly paler beneath, few (in 1929; in 1927, many spots coalesced covering the leaf); conidiophores short, tapering above, pale, somewhat colored at base, tufted or a few scattered, 3 to 5 by 20 to 25 microns, some curved below tips, usually bearing a single spore; spores hyaline, few to multi-septate, straight, curved, or variously bent, some tapering in lash-like fashion, 25 to 142 by 3 to 5 microns. (Agrees fairly well, except conidiophores are almost entirely epiphyllous, a reason often used as a basis for making a new species.)

Cercospora zebrina Pass. On petioles and stems of *Medicago lupulina* L., collected from July 1, to July 11, 1929, south of Biology hall. I. U. 5085, 5100.

On *Trifolium pratense* L., same location, July 11, 1929. I. U. 5101. On *Medicago*, notes as follows: spots on leaflets rectangular, limited by veins, or triangular at tips, distinct, becoming black, 4 to 5 mm. long, yellow around the spot, later causing the entire leaflet to dry up and fall; on the stems, the spots begin as elongated, discolored areas which extend indefinitely and coalesce with others to cover the entire stem, which is killed; the conidiophores are tufted, divergent at tips, amphigenous, brown at base, colorless at tips, 25 to 60 by 3 to 4 microns, variously bent at the apex, and bearing several spores; spores hyaline, straight or curved, long-tapering. 30 to 160 by 3 to 5 microns.

Fumago vagans Pers. On *Plantago Rugelii* Dene., campus, August 5, 1929. I. U. 5214.

Ovularia obliqua (Cke.) Oud. On *Rumex crispus* L., campus, April 16, 1929, Monroe County. I. U. 5020. On *Rumex obtusifolius* L., same location, May 1, 1929. I. U. 5044.

Polythrincium Trifolii Kze. Conidial stage of *Phyllachora Trifolii* (Pers.) Fckl. This was very abundant in July and caused considerable damage to clover south of Biology hall. Specimens collected July 1, 1929. I. U. 5084.

Tubercularia vulgaris Tode. Conidial stage of *Nectria cinnabarina* (Tode.) Fr. On dying twigs of *Koelreutaria paniculata* Laxm. (*Sapindus chinensis* L.), Bloomington, Monroe County, September 18, 1929. Andrews. I. U. 5219.