

OHIO FUNGI EXSICCATI.

(With Reprint of Original Descriptions.)

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It is proposed to distribute exsiccata of the Ohio species of Fungi, issuing small fascicles from time to time as material may be available.

The original descriptions of all the species, or that given in connection with the first use of the binomial or technical designation, will be printed on the labels in addition to the data usually given. Complete synonymy will not be attempted.

The number of copies will be limited, but it is hoped that all mycologists who might be especially interested in the specimens, and those wishing to exchange, may be furnished with the fascicles as they appear.

Fascicle I, containing Nos. 1 to 16, issued November 20, 1901, represents the following species :

1. *Aecidium impatientis* Schw., on *Impatiens biflora* Walt.
2. *Aecidium porosum* Peck, on *Vicia americana* Muhl.
3. *Aecidium sambuci* Schw., on *Sambucus canadensis* L.
4. *Cintractia sorghi* (Link), on cultivated *Sorghum* (*S. vulgare* Pers.)
5. *Cintractia sorghi* (Link), obtained by inoculation.
6. *Cintractia sorghi* (Link), on Broom Corn (*S. vulgare* Pers.)
7. *Cintractia sorghi* (Link), obtained by inoculation.
8. *Peronospora arthuri* Farl., on *Onagra biennis* (L.) Scop.
9. *Phyllosticta asiminae* E. & K., on *Asimina triloba* (L.) Dun.
10. *Puccinia helianthi* Schw., on *Helianthus divaricatus* L.
11. *Puccinia helianthi* Schw., on *Helianthus mollis* Lam.
12. *Puccinia marie-wilsoni* Clinton, on *Claytonia virginica* L.
13. *Puccinia podophylli* Schw., on *Podophyllum peltatum* L.
14. *Puccinia smilacis* Schw., on *Smilax glauca* Walt.
15. *Septoria podophyllina* Peck, on *Podophyllum peltatum* L.
16. *Ustilago zeae* (Beckm.) Ung., on *Zea mays* L.

Thanks are extended to the mycologists who have rendered advice and assistance, especially to Messrs J. B. Ellis, J. C. Arthur, A. P. Morgan, and C. G. Lloyd. Acknowledgment for assistance in collecting will be found on the labels accompanying the several specimens.

The labels to the sixteen specimens of the first Fascicle are here reproduced.

1. *Aecidium impatientis* Schw.

On *Impatiens biflora* Walt.

Columbus, Ohio.

June 1, 1901.

Coll. W. A. Kellerman.

"*Aecidium impatientis* Sz. V. effusum magnum expallescens, peridiis in centro sparsis, crenatis, sporidiis majoribus luteo-fuscis simplicibus.

Frequens Maio in foliis *Impatientis* maculatae. Folia bullata reddit, et macula lata lutescente, in centro obscuriore inquinat." L. de Schweinitz, *Synopsis Fungorum Carolinae Superioris* (excerpta), p. 41. No. 442. (1822).

2. *Aecidium porosum* Peck.

On *Vicia americana* Muhl.

Lakeside, Ottawa Co., O.

May 17, 1901.

Coll. W. A. Kellerman.

"*Aecidium porosum*, Pk. Spots none; cups crowded, deep-seated, broad, wide-mouthed, occupying the whole lower surface of the leaf to which they give a porous appearance; spores orange-colored, subangular, .0008-.001 inch in length." *Botanical Gazette*, 3:34. April, 1878.

3. *Aecidium sambuci* Schw.

On *Sambucus canadensis* L.

Columbus, Ohio.

June 24, 1901.

Coll. W. A. Kellerman.

"*Aecidium sambuci* Sz. V. maculaeforme magnum crassum folia contorquens aurantium exalbicans, peridiis minutis, sporidiisque simplicibus pallidis.

"In foliis imprimis ad venas majores et in petiolis *Sambuci* *Canadensis*. Folia contorquet. Color aurantio-croceus; peridia sparsa pulvere pallido, lutescente-albo." L. de Schweinitz, *Synopsis Fungorum Carolinae Superioris* (excerpta), p. 41. No. 441. (1822).

"Diagnosis ulterior sequens [sub nom. *Caeoma*, subgen. *Aecidium*, *sambuciatum*]. C. maculis intumescensibus saepe maximis (i. e. 2 uncialibus) in petiolis, pallescentibus. Pseudoperidiis magnis, crebris elevatis, aurantiacis aut pallidis, margine fusco. Sporidiis aurantiofulvis, decolorantibus. In foliis omnia multo minora—pseudoperidiis densim aggregatis." L. de Schweinitz, *Synopsis Fungorum in America Boreali media degentium*, p. 294. No. 2897. (1834).

4. *Cintractia sorghi* (Link)

Sporisorium sorghi Link. *Ustilago sorghi* (Lk.) Pass.

On cultivated Sorghum (*Sorghum vulgare* Pers.)

Columbus, Ohio. September 15, 1900.

Coll. F. J. Tyler and O. E. Jennings.

"*Sporisorium sorghi*. Sp. acervis ovalibus, sporidiis globosis nigris germinum.

"Diagn. Substantia farinosa germinum Sorghi vulgaris primum rimis variis separatur ita ut semina hient. Tum sporidia oriuntur, usque dum tota compages interior germinis in sporidia dilapsa sit. Excrescunt quoque glumae in apicibus ramulorum paniculae, sporidia et partes floris mutilas continentes. Sub microscopio composito acervi compacti conspiciuntur, aqua adfusa non diffuentes, e quibus flocci simplices aut semel ramosi exeunt tenues septati, pauci tantum e singulo acervo. Sporidia compressis acervis in conspectum prodeunt exacte globosa sat magna, minora majoribus intermixta." H. F. Link in Linné Species Plantarum, 6²:86.

5. *Cintractia sorghi* (Link)

Sporisorium sorghi Link. *Ustilago sorghi* (Lk.) Pass.

On cultivated Sorghum (*Sorghum vulgare* Pers.)

Columbus, Ohio. November 10, 1900.

Coll. W. A. Kellerman.

Supplement to No. 4.

Obtained by inoculating the Sorghum seed with smut spores.

6. *Cintractia sorghi* (Link)

Sporisorium sorghi Link. *Ustilago sorghi* (Lk.) Pass.

On cultivated Broom Corn (*Sorghum vulgare* Pers.)

Columbus, Ohio. November 21, 1901.

Coll. W. A. Kellerman.

Supplement to No. 4.

7. *Cintractia sorghi* (Link)

Sporisorium sorghi Link. *Ustilago sorghi* (Lk.) Pass.

On cultivated Broom Corn (*Sorghum vulgare* Pers.)

Columbus, Ohio. November 21, 1901.

Supplement to No. 4.

Obtained by inoculating the Broom Corn seed with the Sorghum smut.

8. *Peronospora arthuri* Farl.

Conidial stage.

On *Onagra biennis* (L.) Scop.

Columbus, Ohio.

June 5, 1901.

Coll. W. A. Kellerman.

"*P. arthuri* n. sp. Conidiophores rather short and rigid, several times dichotomous. Tips rather short and rigid. Conidia broadly ellipsoidal, obtuse, 22-26 mmm. by 19 mmm., slightly violet-colored. Oospores large, dark brown, 34-42 mmm. in diameter, exospore covered with short, blunt papillae." W. G. Farlow, *Botanical Gazette*, **8**:315. October, 1883.

9. *Phyllosticta asiminae* E. & K.On *Asimina triloba* (L.) Dunal.

West Alexandria, Preble Co., Ohio. July 4, 1901.

Coll. W. A. Kellerman.

"*Phyllosticta asiminae* E. & K. Spots pale brownish, of irregular shape ($\frac{1}{2}$ -1cm.), bordered by a distinct, dark raised line; perithecia subglobose, deeply immersed, their apices barely visible on the upper surface of the leaf, scattered, 100-120 mmm. diam.; spores yellowish with a slightly greenish tinge, obovate, 7-9 x 5-6 mmm." *The American Naturalist*, **17**: 1165. November, 1883.

10. *Puccinia helianthi* Schw.On *Helianthus divaricatus* L.

Columbus, Ohio.

October 10, 1901.

Coll. W. A. Kellerman and F. J. Tyler.

"*Puccinia helianthi* Sz. *P. minor orbicularis aggregata nigra*, sporidiis globoso-ovalibus bilocularibus longissime pedicellatis.

"In plurimum *Helianthis vulgaris*. Sporidia fusco-lutea, pedicello albo, pellucido." L. de Schweinitz, *Synopsis Fungorum Carolinae Superioris* (excerpta), p. 47. No. 495. (1822).

11. *Puccinia helianthi* Schw.On *Helianthus mollis* Lam.

Sandusky, Erie Co., Ohio. September 17, 1901.

Coll. W. A. Kellerman.

12. Puccinia marie-wilsoni Clinton.

Aecidial stage.

Caeoma [*Aecidium*] *claytoniatum* Schw.

On *Claytonia virginica* L.

Arlington, Hancock Co., Ohio. May 1, 1901.

Coll. W. A. Kellerman.

"*C. A. Claytoniatum*, L. v. S. C. fere simplex et sine macula, occupans tota folia. Pseudoperidiis latis sparsis. Sporidiis aurantiacis." L. de Schweinitz, *Synopsis Fungorum in America Boreali media degentium*, p. 294. No. 2892. (1834).

13. Puccinia podophylli Schw.

Aecidial stage.

Aecidium podophylli Schw.

On *Podophyllum peltatum* L.

New Plymouth, Vinton Co., Ohio. May 10, 1901.

Coll. W. A. Kellerman.

"*Aecidium podophylli* Sz. A. maximum orbiculare demum effusum flavo-aureum crassissimum, sporidiis subelevatis bilocularibus.

"Folia et caules *Podophylli* saepe ingenti clade late longeque tegit, colore pulchro oculos alliciens." L. de Schweinitz, *Synopsis Fungorum Carolinae Superioris (excerpta)*, p. 40. No. 435. (1822).

14. Puccinia smilacis Schw.

Teleutospores only.

On *Smilax glauca* Walt.

Mineral Springs, Adams Co., Ohio. Oct. 30, 1900.

Coll. W. A. Kellerman.

"*Puccinia smilacis* Sz. P. major confluens difformis et stellata nigro-fusca.

"In *Smilace rotundifolia* omnia folia subexsiccata occupat." L. de Schweinitz, *Synopsis Fungorum Carolinae Superioris (excerpta)*, p. 46. No. 494. (1822).

15. Septoria podophyllina Peck.

On *Podophyllum peltatum* L.

Columbus, Ohio. June 9, 1901.

Coll. W. A. Kellerman.

"*Septoria podophyllina*. Spots large, indefinite, reddish-brown; perithecia epiphyllous, few, clustered on or near the center of the spot, pallid or blackish, slightly prominent, collapsing when dry; spores filiform, variable in length, straight or slightly curved, .0008-.0015 of an inch long." Chas. H. Peck. *Botanical Gazette*, 4: 170. June, 1879.

16. Ustilago zeae (Beckm.) Unger.

Lycoperdon zeae Beckm.

On *Zea mays* L.

Columbus, Ohio. September 30, 1901.

Coll. O. E. Jennings.

For full account of the synonymy with citations and notes, see J. C. Arthur, *Botanical Gazette*, **23**: 46, from which the following is taken:

To the translation by Johann Beckmann of Tillet's account of the species contained in the Royal Academy of Paris, 1776, where it is stated that, "Son dernier effet consiste à convertir cette excroissance en une poussière noirâtre et assez semblable à celle qui sort du lycoperdon ou vesse de loupe."—a foot note is added by the translator proposing the binomial designation, as follows:

"Meiner Meynung nach, ist das hier beschriebene Gewaechs allerdings ein Staubschwamm (*Lycoperdon*) und zwar eine Species parasitica, deren in Lin. Syst. Nat. schon drey befindlich sind, unter welchen also dieser Art, etwa unter dem Namen *Lycoper. zeae* ein Platz anzuweisen waere." J. B., *Hannoverisches Magazin*, **6**: 1330.
