North American Fungi

Volume 12, Number 3, Pages 1-4
Published March 2, 2017

Amphisphaerella whitmanensis, sp. nov. from Washington

J. D. Rogers

Department of Plant Pathology, Washington State University, Pullman, WA 99163-6430

Rogers, J. D. 2017 *Amphisphaerella whitmanensis, sp. nov.* from Washington. *North American Fungi* 12(3): 1-4.
http://dx.doi.org/10.2509/naf2017.012.003

Corresponding author J. D. Rogers, rogers@wsu.edu. Accepted for publication February 22, 2017.

Abstract: An undescribed species of *Amphisphaerella* is described herein as *A. whitmanensis* after Whitman Co., Washington, the location of all collections. It differs from described species in ascospore dimensions and location of ascospore pores. It inhabits dead bleached wood of *Lonicera* and other taxa.

Key words: pyrenomycetes, Xylariaceae

Introduction: In the process of collecting pyrenomycetes on the Snake River breaks (the steep rocky land that falls from the Whitman Co., WA plain to the Snake River) I collected what I believe to be a new species of *Amphisphaerella* (Sacc.) Kirschst. I made numerous attempts to germinate the ascospores, but failed. I did not publish the fungus as new because two different

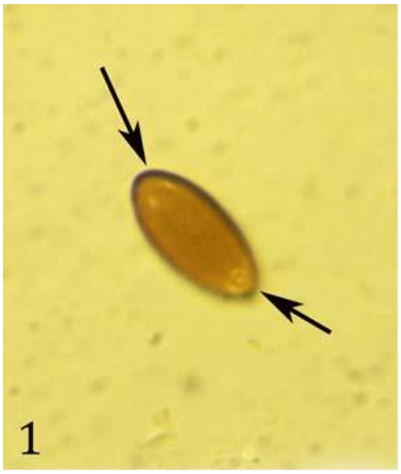
workers informed me that each of them intended to produce a monograph of the genus. I loaned each of them my material, but neither included it in a publication, as far as I know. I thus treat it herein as a new species.

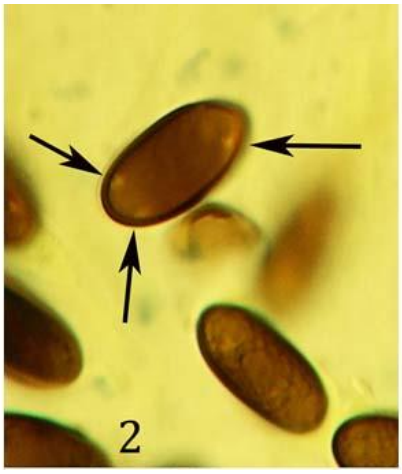
Amphisphaerella whitmanensis J. D Rogers, *sp. nov.*

Figs. 1-3
Mycobank No. MB 819820

Diagnosis: Differs from other species in ascospore dimensions and position of ascospore germ pores.

Etymology: Named for the location of collections, Whitman County, Washington.
Stromata bearing 1-16 perithecia, embedded in dried decorticated angiosperm wood, obvious only as blackened area resembling a *Eutypa*, 1-2 x 1-2 mm to 5 mm long x 4 mm wide, the enclosing wood set off by zone line. Ostioles obscure to inconspicuous pimples. Perithecia 0.2-0.5 mm diam., soft. Asci long-stipitate , 130-160 µm total length x ca. 10 µm wide. Ascus apical ring bluing in Melzer's iodine reagent, minute, often distorted. Ascospores golden brown to dark brown, ellipsoid to ellipsoid-inequilateral to more or less obovate, with 2-3 inconspicuous pores in each end and, occasionally, 1-2 pores toward the center of the spore, (12-)14-16(-18) x 7-9(-10) µm.
Specimens examined: USA, Washington, Whitman Co., Snake River breaks, on decorticated dry branches of *Lonicera* sp, leg. J. D. Rogers, 11.11.1976 (WSP72885, HOLOTYPE); as above, on decorticated angiosperm stems, leg. J. D. Rogers, 11.14.1976 (WSP 72886); as above, on decorticated wood (?*Ceanothus*), leg. J. D. Rogers, 11.28.1976 ((WSP 72887); as above, on decorticated angiosperm wood, leg. J. D. Rogers, 12.18.1976 (WSP 72888); as above, on decorticated wood (?Lonicera sp.) leg. J. D. Rogers, 11.14.1984 (WSP 72889).
Notes: Throughout, I have designated the ascospore pores as "germ pores," an unsupported assumption. Repeated attempts to induce germination of the ascospores failed. As far as I know, there are no reports in the literature of ascospore germination in any of the species.





Figs 1 and 2. Germ pores in the apices of ascospores (arrows). Bars = 4 µm. Fig. 3. Part of ascus showing 3 ascospores and ascus apical ring stained blue in Melzer's iodine reagent (arrow). Bar = 8 µm.

AMPHISPHAERELLA KEY*

1. Germ pores equatorial.....2

1. Germ pores not equatorial.....5

2. Ascospores 24-30 x (10-)12-15 µm. Germ pores 3-5. Asci J+.....*A. deceptiva* M. E. Barr

2. Ascospores smaller.....3

3. Ascospores 10-16 x 5.5- 6 µm. Germ pores several. Asci J+.....*A. petrakii V. G. Mhaiskar & V. G. Rao*

3. Ascospores larger.....4

4. Ascospores 15.3-21.5 x 7.5-10 µm. Germ pores 3-5. Asci J+.....*A. erikksonii Math.*

4. Ascospores 14-18 x 6-9 µm. Germ pores (4-)5-6. Asci J+..... *A. xylostei* (Pers.:Fr.) Munk

5. Ascospores 10-14 x 6-7.5. Germ pores (3-)4. Asci J-.....*A. vaga* (Niessl) O. E. Erikss.
5. Ascospores larger.....6

6. Ascospores (12)14-16-(18) x 7-9(-10) µm. Germ pores 2-3 near each apex, occasionally 1 or more not apical. Ascus J+.....*A. whitmanensis* J. D. Rogers

6. Ascospores 21-26 x 8-10 µm. Germ pores 3-4. Ascus J-..*A. dispersella* (Nyl.) O. E. Erikss.

*This key does not include every potential species.
**According to Lu & Hyde (2000) a species based on *Anthostoma alpigenum* Fuckel had not been published. A later citation indicated that it was published as *Amphisphaerella* as *A. alpigena* (Fuckel) Vasilyeva. I have not seen the description. Saccardo (1878) gives the ascospore dimensions of *Anthostoma alpigenum* as 20-25 x 12-13 µm.

Discussion: My concept of *Amphisphaerella* is based largely on the literature. I have examined *A. xylostei* material (Eriksson, 1966) and read descriptions of *A. dispersella* and *A. vaga* (Eriksson, 1966). *A. petrakii* was erected by Mhaiskar & Rao (1973), *A. erikssonii* by Mathiassen (1993) and *A. deceptiva* by Barr (1994). *Amphisphaerella* (Sacc. & Speg.) Kirschst. was based on *A. amphisphaerioides* (Kirschstein, 1934), which was considered by Eriksson (1966) to be synonym of *A. dispersella*. Lu & Hyde (2000) present a useful summary of *Amphisphaerella*. *Amphisphaerella* species are mostly cited as inhabitants of dead woody plants, most frequently on *Lonicera* spp

Acknowledgements: I thank Michael Adams, Dept. of Plant Pathology, Washington State University, for aid with photographs.

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