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NEW REPORTS OF IOWA FUNGI. II

HORACE L. BARNETT

This article is based upon a study of the Basidiomycetes (except the Agaricaceae) and some groups of Ascomycetes in the mycological collection of the late Professor B. Shimek. It includes reports on fungi belonging to the families Clavariaceae, Thelephoraceae, Polyporaceae and Phyllachoraceae. A previous article (1) included reports on the Gasteromyceteae and Uredinales. I find no record of any of the species herein reported having been collected in Iowa and no Iowa collections (except *Phyllachora Boutelouae*, see below) of these species were included in the State University Mycological Herbarium. All of the collections mentioned in this report have now been placed in the herbarium.

CLAVARIACEAE

PTERULA PENICELLATA Lloyd

One collection, made by B. Shimek at Estherville, Iowa, on August 20, 1912, was labeled "*Pterula densissima*". Since a portion of this collection was destroyed by insects, it was somewhat difficult to determine the exact size and form of the fructifications. A comparison with Lloyd's (7) descriptions and photographs indicates that the Shimek collection is not *P. densissima*, but is nearest to *P. penicellata*, which, according to Lloyd, is the most common species of *Pterula* in the United States. Lloyd further states that this is the species collected in Ohio by Morgan who misreferred it to *P. densissima*, which is a much more compact species. There is little doubt but that the Shimek collection was determined before Lloyd's discussion of the genus was published.

A brief description of the microscopic details of the Shimek material is as follows: Main hyphae with thin or slightly thickened walls, straight or somewhat wavy to irregular, 3-4 μ wide, mostly parallel and unbranched, hyaline or slightly colored; septa distant; clamp connections frequent; basidia approximately 5 x 16 μ ; spores hyaline, elliptical or straight to depressed on one side, 2.5 - 3.5 x 6 - 7.5 μ .

The species is apparently quite rare. It has been collected in Ohio, Minnesota and Manitoba. Coker (5) reports only *P. plumosa* from North Carolina. I find no record of any species of *Pterula* having been collected in Iowa.

CLAVARIA BYSSISEDA Pers.

Two collections of this species were included in the Shimek material. They were made at McGregor Heights, Iowa, July 31, 1919, and Homestead, Iowa, July 13, 1928. The specimens were growing on a mixture of fallen oak and maple leaves. The habit of this species growing on dead twigs and leaves which are bound together by

numerous fine, white, rhizomorphic strands is quite characteristic. The branched basidiocarps arise from dense, white mycelial pads on the surface of leaves. According to Coker (5), it is a rather common species in the eastern states.

CLAVARIA KUENZII Fr.

This species is represented by one collection made by B. Shimek of a few basidiocarps, growing on the ground in woods near Postville, Iowa, Sept. 9, 1928. This material checks well with Coker's (5) description. It is characterized by its small size, delicate appearance, tomentose stems, and the small, nearly spherical, asperulate spores. Both Coker (5) and Burt (3) give the range as the eastern states, as far west as Michigan.

THELEPHORACEAE

SOLENIA POLYOROIDEA (Perk) Burt

There is one collection, which I believe to be this species, made by B. Shimek, west of Tama, Iowa, June 30, 1928, on decorticated bass-wood log. Burt (4) gives the size of the fructifications as $700 \times 200-300\mu$. I find the usual size of the Shimek material to be approximately $500 \times 150\mu$. The additional fact that no spores (which could be traced with certainty to this fungus) could be found, indicates that most of the fructifications are immature. The basidia were clearly visible. Burt's description of the fungus, "forming a more or less connected, reticulate layer with bare wood showing in many little areas $\frac{1}{2}$ - 1 mm. in diameter," the white color, the absence of a subiculum, and the presence of slender, weak, external "hairs" ($30 \times 1 \mu$), is in perfect agreement with the material in question. The fact that no spores are present casts doubt on its accurate determination, but it seems very probable that the Shimek material belongs to this species. Certainly, it could be none of the other species listed by Burt.

Burt lists but one collection (the type) of this species, made by Peck, on decorticated decaying wood of *Tsuga*, Adirondack Mountains, New York.

POLYPORACEAE

FOMES SUBROSEA (Weir) Overholts

This species is also known as *Trametes subrosea* Weir. One collection, made in the woods at Coon Grove, Winnebago County, Iowa, August 19, 1912, consisted of four well-formed fruit bodies, growing on deciduous wood. A second collection consisted of two poorly-formed fruit bodies, growing on a coniferous board at Wall Lake, Lake View, Iowa, August 28, 1928. The species is small and is commonly annual. It is recognized by its uniform pinkish color, both on the surface and in the context. It is widespread in the United States, common on coniferous wood but rare on deciduous wood.

PORIA PURPUREA (Fr.) Cooke

Two collections of this species are among the Shimek material; on decaying red oak log, Clear Lake, Iowa, Sept. 10, 1921, and on white birch, Eldora, Iowa, Oct. 24, 1927. The species is recognized by the lilac or reddish purple color of the dried specimens, the thinness of the fructification, the cylindric spores, and the thin layer of large incrustated hyphae, with septa but no clamps, next to the substrate. Although the species has a wide distribution, it seems to be uncommon.

PORIA UNDATA (Pers.) Bres.

One collection of this species was made by B. Shimek at Magill, Iowa, October 15, 1922, on decayed oak log. Dried specimens may be recognized by their strong tendency to curl and loosen from the substrate, the hard brittle texture, and the pale flesh color of the fructification with whitish or grayish mouths. The globose spores and the large thick-walled hyphae are also characteristic. This collection agrees well with both the description given by Overholts (9) and the European collections in the State University Mycological Herbarium. Overholts states that the species is rather rare in Pennsylvania but common southward. It is reported from Michigan by Baxter (2) and from Oregon by W. B. Cooke (6).

PORIA XANTHA (Fr.) Cooke

One collection of this species was made by B. Shimek, on red oak log, near Clear Lake, Iowa, Sept. 28, 1928. The collection agrees with the description given by Overholts (9). Dried specimens are characterized by the chalky friable texture, the pale yellow color, the small hyphae and the intensely bitter taste. The tissue exudes a cloudy substance when transferred from alcohol to water. The species is apparently common in the eastern states.

PHYLLACHORACEAE

PHYLLACHORA GRAMMINIS (Pers.) Fuckel on BROMUS PURGANS L. (?)

This collection, made on wooded bluff, 7 miles northeast of Postville, Iowa, in 1930, consisted of but a few leaves of the host, which was labeled "*Bromus Kalmii*." The host was checked by Dr. W. A. Anderson, who states that it is probably *B. purgans*. Orton (8) does not list *Phyllachora graminis* on any species of Bromus from Iowa. He reports it on *B. purgans* only from Pennsylvania.

PHYLLACHORA BOUTELOUAE Rehm. on BOUTELOUA CURTIPENDULA
(Michx) Torr.

One collection was made by B. Shimek at McGregor Heights, Iowa, October 12, 1928. The material was typical, but contained few ma-

ture asci and ascospores. Another Iowa collection of this species on the same host, made by M. L. Lohman at West Okoboji, on August 19, 1925, was found in the State University Mycological Herbarium under the name of *P. graminis*. Orton (8) does not report *Phyllachora Boutelouae* from Iowa on any host. The state lies within the known range of the fungus. It is reported from Wisconsin, Illinois and Texas.

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