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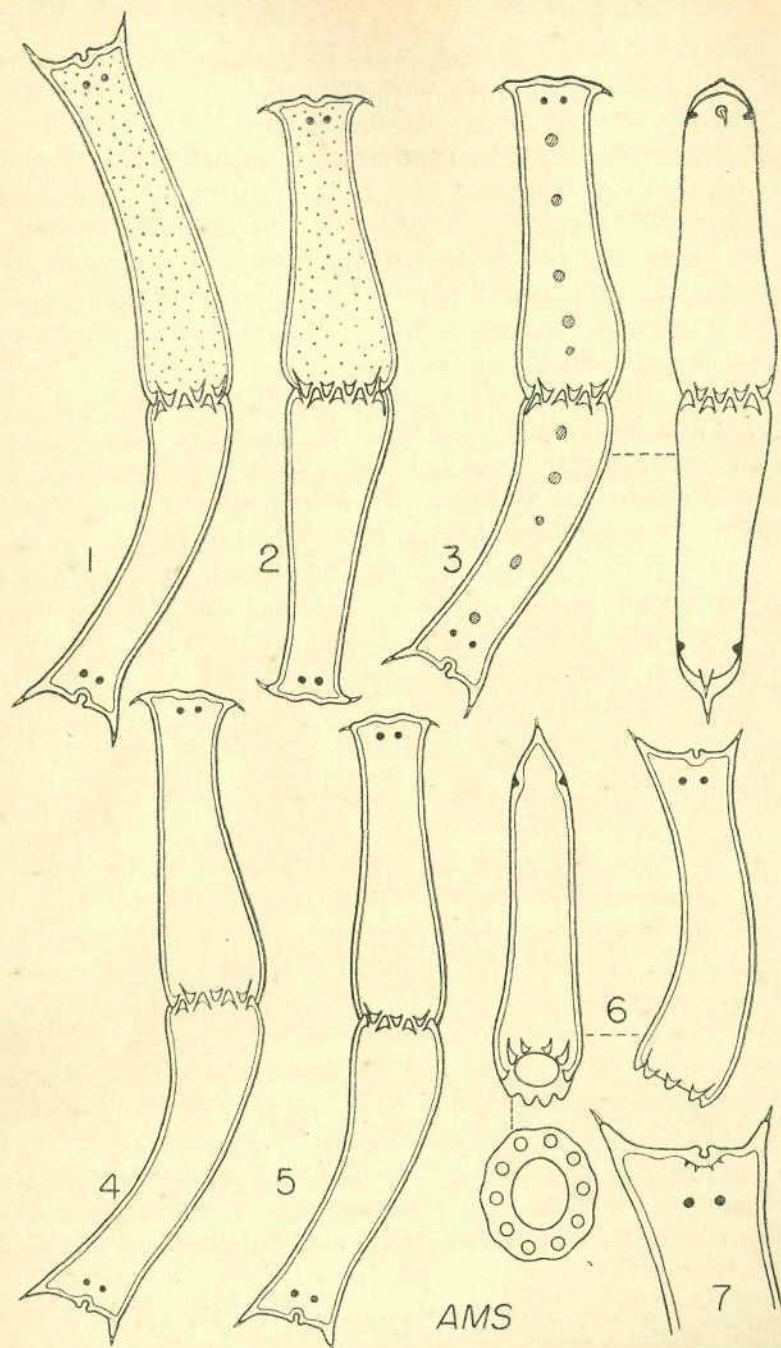


FIG 1. *Ichthyodontum sachlanii* Scott & Prescott, *gen. et sp. nov.*; 2. *Ichthyodontum sachlanii* var. *parorthium* Scott & Prescott var. *nov.*; 3-5. Dichotomous specimens combining the species and the variety; 6. 7. *sachlanii*. Front, side and basal views of a semicell; 7. *idem*. Larger detail of the polar structure.

THE GENERIC NAMES PROPOSED FOR HYMENOMYCETES—VI*

Brachybasidiaceae, Cryptobasidiaceae, Exobasidiaceae

M. A. DONK **

SUMMARY

1. In this continuation of the author's nomenclatorial enumeration not only the three families mentioned in the subtitle are taken into consideration: about ten generic names of fungi which at one time or another have been attributed to the Exobasidiaceae and which are now excluded from the Hymenomyces, are also dealt with.

2. The name 'Cryptobasidiaceae' is validly published.

INTRODUCTION.—This paper forms the sixth of a series planned to give an annotated nomenclatorial enumeration of all generic names proposed for Hymenomyces. For some introductory remarks to the series and the explanation of some nomenclatorial terms, see Part I (Donk *in Reinwardtia* 1:199-203. 1951).

The three families mentioned in the subtitle represent the strictly 'biophilous' element (strictly parasitic in herbaceous and often green portions of vascular host plants) of the holobasidious Hymenomyces. They have sometimes been considered related to the so-called Heterobasidiales, among which the Uredinales are reminiscent as regards their parasitism. Of the families dealt below, Brachybasidiaceae is monotypic. Another, Cryptobasidiaceae, has recently been delimited and surveyed by Malençon (*in Bull. Soc. mycol. France* 69: 77-100. 1953).

The basidiomycetous nature of this latter family has been doubted, and the information furnished by Malençon would seem insufficient to accept it as being basidiomycetous for the present. That author (*op. cit.* p. 96) called it "Cryptobasidiales," which is inadmissible as the required termination is '-aceae.' In addition he did not supply a Latin description. Since I accept the family taxonomically, its name is validly published herewith:

* Part I of the present series ("Cyphellaceae") was published *in Reinwardtia* 1: 199-220. 1951; Part II (Hymenolichenes), *in Reinwardtia* 2: 435-440. 1954; Part III ("Clayariaceae"), *in Reinwardtia* 2: 441-493. 1954; Part IV (Boletaceae), *in Reinwardtia* 3: 275-313. 1955; Part V ("Hydnaceae"), *in Taxon* 5: 69-80, 95-115. 1956.

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Cryptobasidiaceae Malençon ex Donk, *fam. nov.*¹. Type genus: *Cryptobasidium* Lendner, a synonym of *Botryoconis* H. & P. Syd.

Of a few genera, *Exobasidiellum* Donk and *Dicellomyces* L. S. Olive, the systematic position is as yet far from fixed. They are listed here as Exobasidiaceae because of their typically biophilous nature. Their inclusion in Dacrymycetaceae would spoil the character of an easily recognizable family!

ALPHABETICAL ENUMERATION

[*Aureobasidium* Viala & Boyer in Rev. gén. Bot. 3: 371. 1891. — TYPE SPECIES (only original species): *Aureobasidium vitis* Viala & Boyer. The authors regarded this as a basidiomycete and Prilleux & Delacroix (in C.R. Acad. Sci., Paris 119: 106. 1894) even included it in *Exobasidium* Woron. (Exobasidiaceae). It is now considered an imperfect fungus and non-basidiomycetous, and has been identified with '*Dematium pullulans* De Bary' (type species of *Pullularia* Berkh., 1923) = *Pullularia pullulans* (Bary) Berkh. = *Aureobasidium pullulans* (Bary) Arnaud. — *Chrysobasidium* Clem. [in Univ. Stud. Nebraska 3 (1): 71. 1902] is a grammatical 'correction' and apparently not validly published; it was introduced thus: "*Aureobasidium* = *Chrysobasidium*"—nothing else, not even an author's citation was given. — *Aureobasis* Clem. & Shear (Gen. Fungi 160, 197, 343, 381. 1931) is another name change, which the authors did not consider a new name ("*Aureobasis* Viala & Boyer Rev. Gen. Bot. 3: 369. *ill.* 1891; for *Aureobasidium*"). — Several other type species of generic names have been identified with, or are supposed to be closely related to, *Aureobasidium pullulans*.]

[*Aureobasis* Clem. & Shear.—See *Aureobasidium*.]

Botryoconis H. & P. Sydow in Ann. mycol. 4: 344. 1906. — ETYMOLOGY: *βότρυς*, -*νος*, bunch of grapes; *κονίς*, dust. Gender: f. — TYPE SPECIES (only original species): *Botryoconis saccardoii* H. & P. Syd. (Cryptobasidiaceae). — H. Sydow (in Ann. mycol. 24: 285-288. 1926, in a discussion appended to *Clinoconidium bullatum* H. Syd.), after the study of several collections, including Lendner's specimen of *Cryptobasidium ocoteae* Lendn., came to the conclusion that the latter species was synonymous with *Botryoconis saccardoii*, but he disagreed with another previous con-

¹ Biophilae, Exobasidiaceas simulantes, galligenae, stratum sporigenum erumpens, cellulis basidiiformis clavatis vel subcylindricis, non septatis, ad apicem sporas formantibus, sed sterigmatibus non evolutis sporisque non projectis. Sporae accumulantes, farinam conspicuam formantes, hyalinae vel subcoloratae.

clusion of Maublanc (in Bull. Soc. mycol. France 30: 446. 1915) that *Botryoconis saccardoii* was synonymous with *Clinoconidium farinosum* (P. Henn.) Pat.; cf. also Malençon (in Bull. Soc. mycol. France 69: 94 f. 9 A, B. 1953, as B. "*Saccardiana*"). — TYPONYM: *Cryptobasidium* Lendn. (1920).

Brachybasidium Gäum. in Ann. mycol. 20: 269. 1922. — ETYMOLOGY: *βραχύς*, short; basidium. Gender: n. — TYPE SPECIES (only original species): *Kordyana pinangae* Racib. (Brachybasidiaceae).

[*Chrysobasidium*.—See under *Aureobasidium*.]

Clinoconidium Pat. in Bull. Soc. mycol. France 14: 156. 1898. — ETYMOLOGY: *κλίση*, bed; conidium. Gender: n. — TYPE SPECIES (only original species): *Uredo farinosa* P. Henn. (Cryptobasidiaceae). — Linder (in Ann. Missouri bot. Gdn 16: 343 pl. 29 fs. 15-17. 1929) identified the present species with *Drepanoconis larvaeformis* (Speg.) Speg. (also including *Drepanoconis brasiliensis* J. Schroet. & P. Henn.); but Malençon (in Bull. Soc. mycol. France 69: 94-96. 1953) keeps *Clinoconidium* and *Drepanoconis* distinct, correctly so I would say.

Coniodictyum Har. & Pat. in Bull. Soc. mycol. France 25: 13. 1909. — ETYMOLOGY: *κονίς*, dust; *δίκτυον*, network. Gender: n. — TYPE SPECIES (only original species): *Coniodictyum chevalieri* Har. & Pat. (Cryptobasidiaceae).—For this species, see Malençon (in Bull. Soc. mycol. France 69: 77 fs. 1-8. 1953). — VARIANT SPELLING: "*Coniodyctium*": Maublanc in Bull. Soc. mycol. France 30: 447. 1915; Malençon in Bull. Soc. mycol. France 69: 92. 1953.—Consistently used. — TYPONYM: *Hyalodema* P. Magn. (1910).

Coniodyctium.—See *Coniodictyum*.

Cryptobasidium Lendn. in Bull. Soc. bot. Genève II 12: 127. 1920. — ETYMOLOGY: *κρύπτω*, I hide myself; basidium. Gender: n. — TYPE SPECIES (only original species): *Cryptobasidium ocoteae* Lendn.

Dicellomyces L. S. Olive in Mycologia 37: 544. 1945. — ETYMOLOGY: *δίκελλα*, a two-pronged fork; *μύκης*, fungus. Gender: m. — TYPE SPECIES (by original designation and only original species): *Dicellomyces gloeosporus* L. S. Olive (Exobasidiaceae?; referred by its author to Dacrymycetaceae).

Drepanoconis J. Schroet. & P. Henn. *apud* P. Henn. in Hedwigia 35: 211. 1896. — ETYMOLOGY: *δρέπανον*, sickle; *κονίς*, dust. Gender: f. — TYPE

of cytological investigations of the type species by Maire (*in* Rec. publié Occ. Jubil. Le Monnier 131-139. 1913) and Wolf (*in* J. Mitchell sci. Soc. 43: 97-100 *pl.* 4. 1927; 45: 130-136 *pl.* 6. 1929) proved, it would appear, that it is non-basidiomycetous and should be classed as an imperfect fungus, perhaps, as suggested by Maire, in Melanconiales (Deuteromycetes). — Clements & Shear (Gen. Fungi 343. 1931) suggested *Fusisporium album* as type species. This is of course not acceptable.]

[*Protocoronis* Clem. & Shear.—See *Protocoronospora*.]

[*Protocoronospora* Atk. & Edgert. *in* J. Mycol. 13: 185. Sept. 1907. — TYPE SPECIES (only original species): *Protocoronospora nigricans* Atk. & Edgert. Its authors did not assign it a place in the classification of fungi, but Saccardo (Syll. Fung. 21: 421. 1912) placed it near to *Exobasidium* Woron. (Exobasidiaceae); this disposition was, and has been, often accepted. However, after a careful morphological and cytological study, Wolf (*in* J. Mitchell sci. Soc. 36: 72-85. 1920) was able to demonstrate that it is an imperfect fungus. According to Karakulin (*in* Notul. syst. Inst. crypt. Hort. bot. petropol. 2: 101-108. 1923), *Protocoronospora* is congeneric with *Kabatiella* Bubák (*in* Hedwigia 46: 297. June 1907; type species, *Kabatiella microsticta* Bubák), *Exobasidiopsis* Karak. (1922), and *Pachybasidiella* Bubák & H. Syd. (1915). — *Protocoronis* Clem. & Shear (Gen. Fungi 344, 382. 1931) is an alteration of the name which the authors did not consider a name change: "*Protocoronis* Atkin. & Edgert. Jour. Myc. 13: 186. 1907 . . . for *Protocoronospora*." However, there is every reason to consider it an isonym.]

[*Urobasidium* Giesenh. *in* Flora 76: 139. 1893. — TYPE SPECIES (only original species): *Urobasidium rostratum* Giesenh. — The genus has been classed in Hymenomycetes, and, for instance, included in Exobasidiaceae, even in recent handbooks. However, there can be no doubt that it is an imperfect fungus, and Vuillemin (*in* Bull. Soc. sci. Nancy III 11: 158-169. 1910) did not hesitate to transfer it to his order of "Prophialidés" (Deuteromycetes); Mason (Annot. Acct Fungi rec'd I.M.I., List 2 (Fasc. 3): 143. 1941) included it in *Zygosporium* Mont., as *Z. rostratum* (Giesenh.) Bunting & Mason. For a recent account of the genus *Zygosporium*, see Hughes (*in* Commonw. mycol. Inst., Mycol. Pap. No. 44. 1951).]