New Genera of Fungi X. – Pachylepyrium

By Rolf Singer (Ann Arbor, Mich., USA.) [1])

When writing up our Prodromo (1952), we (Singer & Digilio) decided not to enter the question of the generic position of one of the most characteristic Chaco agarics, and described it in a known genus, *Phaeomarasmius,* as *P. fulvidula* Sing. in Sing. & Digilio. Later on when publishing a survey of the species of *Phaeomarasmius* (1956), I stated that *P. fulvidula* is not related to any of the known species of *Phaeomarasmius.*

In 1957, A. H. Smith published the diagnosis of *Kuhneromyces carbonicola* Smith and discussed the affinity of this rather extraordinary species (as far as its position in *Kuhneromyces* is concerned), saying that „for a time I (Smith) considered erecting a new genus for this species on the basis of spore characters ..."

A year later, working together on *Nivatogastrium nubigenum* (Harkness) Sing. & Smith (*Secotiaceae*), we both agreed that *Phaeomarasmius fulvidula* and *Kuhneromyces carbonicola* were congeneric as was proved by specimens of both species put side by side at the Herbarium of the University of Michigan.

I am of the opinion that these species are acutually closer to the genus *Pleuroflammula* than to either *Phaeomarasmius* or *Kuhneromyces.* Expressing it roughly, one may say that they have approximately the same spore type as *Pleuroflammula* but are quite different in habit. *P. fulvidula* has, as may be expected, more characters in common with *Phaeomarasmius* than with *Kuhneromcyes,* and *K. carbonicola* has more in common with *Kuhneromyces* than with *Phaeomarasmius.* But, undoubtedly, they have the majority of their characters in common with *Pleuroflammula.* The distinction between *Pleuroflammula* and the two species mentioned can be based on the flammuloid-naucorioid (collybioid) appearance of the latter white *Pleuroflammula* is always strictly pleurotoid, and usually much smaller, especially as far as the measurements of the stipe are concerned. The Pleuroflammulas also have a different distribution preferring the rainier parts of the world. In other words, the relation

[1]) Earlier parts of this series have been published as follows: I. Mycologia **38**: 358—368. 1944. — II. Lloydia **8**: 139—144. 1945. — III. Mycologia **39**: 77—89. 1947. — IV. Mycologia **40**: 262—264. 1948. — V. Mycologia **43**: 598—604. 1951. — VI. Lilloa **32**: 255—258. 1951. — VII. Mycologia **48**: 719—727. 1956. — VIII. and IX. (in press).

between these two species and *Pleuroflammula* is the same as the relation between *Gymnopilus* and *Pyrrhoglossum*.

It is here proposed to add one more genus to the family *Strophariaceae*, and call it *Pachylepyrium* [2]), to be placed next to the genus *Pleuroflammula*: *Pachylepyrium* Sing. gen. nov.

Pachylepyrium Sing. gen. nov.

Habitu flammuloideo vel naucorioideo (collybioideo); pileo hygrophano vel sicco et tunc pallescente aetate; stipite velato sed annulo haud bene formato; pileo centraliter stipitato stipite longo, haud curvato et interdum partim in terra immerso et pseudorhiza praedito. — Sporis admodum intense pigmentatis, haud ornamentatis, admodum crasse tunicatis, interdum angulari-rutiformibus, vel teretiellipsoideis, poro germinativo praesente aut lato truncato aut angusto haud truncato, zona suprahilari haud depressa, longitudine media. Basidiis clavatis, numero variabili sterigmatum notato; hymenophoro regulari; cystidiis nullis, sed cheilocystidiis paullum manifestis admodumque variabilibus praesentibus; hyphis fibuligeris; epicute pilei e cute efformata sed nonnullis hyphis ascendentibus praecipue prope marginem semper observatis; incrustatione pigmenti debili vel conspicua in pileo.

Species typica: **P. fulvidula** (Sing. in Sing. & Digilio) Sing. comb. nov. (= *Phaeomarasmius fulvidula* Sing. in Sing. & Digilio, Prodromo Fl. Agar. Argent., Lilloa **25**: 390. 1952).

Species altera: **P. carbonicola** (A. H. Smith) Sing. comb. nov. (= *Kuhneromyces carbonicola* A. H. Smith, Sydowia, Beiheft I: 53. 1957.)

This new genus is somewhat similar in appearance and comparable in the entirity of characters with another species classified as *Kuhneromyces* by A. H. Smith (1957) and proposed as a new species of that genus, viz. *K. alpinus* (l. c., p. 52). This species belongs in another group, closely related to one European, one Argentine, and another Western North American species, all referable to the genus *Melanomphalia* Christiansen [3]). *Melanomphalia* is very strongly reminiscent, on the agaric level, of the secotiaceous genus *Physoperidium* Sing. & Smith (formerly *Secotium tenuipes* Setchel and *Secotium aurantiacum* Zeller).

---

[2]) An allusion to the thick spore wall.

[3]) In this genus, as redescribed by Singer (1955) belongs: *M. nigrescens* Ch. (Denmark), *M. platensis* (Speg.) Sing. (1955) = *Inocybe platensis* Speg., An. Mus. Nac. B.A. **6**: 124 1899, Argentina), *M. alpina* (A. H. Smith) Sing. comb. nov. (*Kuhneromyces alpinus* A. H. Smith, Sydowia, Beiheft I: 52. 1957, U.S.A.), and one additional species which differs from the preceding one in the presence of a fibrillose veil, also from, Wyoming, U.S.A., *M. smithii* Sing. ined.

Literature cited.

Singer, R. & A. P. L. Digilio (1952) Prodromo de la Flora Agaricina Argentina. Lilloa **25**: 5—462.

Singer, R. (1955). Le Genre *Melanomphalia* Christiansen. Rev. Mycol. **20**: 12—17.

Singer, R. (1956). Versuch einer Zusammenstellung der Arten der Gattung *Phaeomarasmius*. Schweizerische Zeitschr. Pilzk. **34**: 52—65.

Smith, A. H. (1957). Additional new or unusual North American Agarics, Sydowia, Beiheft I, pp. 46—61.