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Published by HERBARIUM BOGORIENSE KEBUN RAYA INDONESIA Wamiocora Tomaselli *in* Archivio bot., Forli 26 (2)- 8 (reprint pagination). 1950; *in* Rev. bryol. lichen. II 20: 213. 1961.-ETYMOLOGY • K Au. Wamio (Vainio); the genus *Cora*. Gender: f. — TYPE SPECIES (only original species): *Wainiocora ciferrii* Tomaselli.-Dr. R. Santesson (oral communication) thinks this might well be a synonym of *Cora pavonia* (Sw.) Fr. = *C. montana* (Sw.) Santesson.

## THE GENERIC NAMES PROPOSED FOR HYMENOMYCETES—III \*

" Clavariaceae"

## M. A. DONK \*\*

#### SUMMARY

1. This third part deals with "Clavariaceae," a family designation used in a traditional and descriptive, rather than a taxonomic, sanse.

2. Two of the author's previously published proposals for the conservation of certain names are replaced by slightly altered ones. They aim at the safeguarding of the names *Clavulinopsis* Overeem, *Lachnocladium*. Lev., and *Ramaria* (Pr.) Bonord. A proposal to conserve *Pterula* Fr. in its current sense is withdrawn as superfluous.

3. Some forgotten or neglected names are listed, e.g. *Scleroglossum* Pers. and *Xyloglossum* Pers. These two names are typified by a species that makes them synonyms of *Acrospermum* Tode ex Fr. (Ascomycetes).

4. The following typifications, among others, deserve attention: *Dendrocladium* Lloyd by *Lachnocladium giganteum* Pat., *Holocoryne* (Fr.) Bonord. by *Clavaria falcata* Pers. ex Fr., and *Ramaria* S. F. Gray by *Clavaria pratensis* Pers.

5. One new combination is made: *Pistilliva typhae* (Höhn.) Donk (basinym, *Dacryopsis typhae* Höhn.).

INTRODUCTION.—This paper forms the third part of a series planned to give an annotated nomenclatorial enumeration of all generic names proposed for Hymenomycetes.

DEFINITION.—"Clavariaceae" as understood in the present paper covers all fungi belonging to the homobasidious Hymenomycetes that have a mostly erect, either simple and more or less club-shaped to cylindrical, or branched fruit-body, with the amphigenous hymenium smooth or somewhat rugose, the top of the fruit-body becoming fertile or remaining sterile, being pointed or truncate, in the latter case without marginal growth. Those basidiomycetes which look strikingly like "Clavariaceae," but are sterile (Deuteromycetes), are left out of account. All names based on Heterobasidiae of clavarioid appearance, too, are not considered (but cf. *Polyozus*). Thus defined, "Clavariaceae" do not include *Cantharellus*-like plants. Some genera here included are clavarioid in appearance, but may have their hymenium more or less unilateral rather than completely

<sup>\*</sup> Part I of the present series ("Cyphellaceae") was published *in* Reinwardtia 1: 199-220. 1951; Part II (Hymenolichenes), *in* Reinwardtia 2: 435-440. 1954. \*\* Keeper of Herbarium Bogoriense, Kebun Raya Indonesia.

amphigenous: Lachnocladium, Merisma Pers. ex S. F. Gray, Scytinopogon, and Sparassis (= Massecola).

I emphatically do not regard the clavarias as a natural family but use the term in a purely descriptive meaning.

On the conservation of certain names.—The publication of Corner's invaluable "A monograph of Clavaria and allied genera" (1950) has undoubtedly started a new epoch in the study of these fungi. It is an indispensable guide and will stimulate further research along the new lines expounded by him, and will dominate the scene for many years to come. Every previous proposal for the conservation of generic names given to "Clavariaceae" should be seriously reconsidered and tested in its light, and new ones might be induced by it.

The genera adopted by Corner in his monograph are 27 in number. Among these, there are 8, each with thirty or more species (inclusive of insufficiently known ones). Of these 8 at least 3 are likely to be considered by some authors as not bearing the correct names, so that the names as used by Corner may be replaced in the near future by different ones if no special action be taken. These names are:

- (i) Clavulinopsis Overeem.—Endangered by Ramaria S. F. Gray; and by the eventual typification of Cladaria Ritgen, which, if of the species hitherto proposed Clavaria corniculata Schaeff, were accepted, would become an earlier typonym. The rejection of Ramaria S. F. Gray against Ramaria (Fr.) Bonord., already proposed in another connection; and the fixation of Clavaria botrytis Pers. as the type species of Cladaria, by listing that generic name as a nomen rejiciendum in the proposal for conservation of Ramaria (Fr.) Bonord., would clear this situation.
- (ii) Lachnocladium Lév.—Endangered by its basinym, Eriocladus Lév., which is the correct name, Conservation of the currently used name is indicated in this case.
- (iii) Ramaria (Fr.) Bonord.—This is by far the largest genus and its name endangered by the earlier homonym Ramaria S. F. Gray, which for technical reasons cannot be typified in such a manner as to become a metonym. If Cladaria Ritgen (see also above) were to be typified by Clavaria botrytis Pers., this name would turn into an earlier typonym. By registering both Ramaria S. F. Gray and Cladaria as nomina rejicienda, the name Ramaria (Fr.) Bonord. could be saved in its predominant use (also adopted by Corner) and Clavalinopsis Overeem, too, would remain undisturbed.

Rejection of the two proposals tabulated below would lead to the following intolerable situation:

Clavulinopsis would become Ramaria S. F. Gray,
Lachnocladium would become Eriocladus, and
Ramaria (Fr.) Bonord. might become Cladaria, or else
would become Clavariella P. Karst.

I hope that in the "Alphabetical enumeration" below I have succeeded in setting forth with sufficient clarity the arguments of others and myself why certain typifications should not be accepted. Rejection of these typifications will undoubtedly contribute to a greater nomenclatorial stability. They are those of Holocoryne (Fr.) Bonord, by Clavaria rugosa Bull, ex Fr., defended by Doty; of Lachnocladium Lév. by Clavaria furcellata Fr., previously defended by Donk; of Pterula Fr. by Clavaria penicillata Bull, ex Fr., defended by Doty, Donk (who has changed his mind), and Rogers; and of Ramaria S. F. Gray by Clavaria rugosa Bull, ex Fr., defended by Doty. The considerable disturbances that these typifications would cause, if accepted, are reviewed in connection with the generic names in question farther on in the present paper.

I have not yet made up my mind as to the typification of *Pistillaria*Fr. There are two rivals here to select from, *Pistillaria micans* (Pers.) ex
Fr. and P. quisquiliaris (Fr.) ex Fr. An impartial decision, based if possible on considerations acceptable to all, is much wanted in this case.

#### PROPOSALS.

## Nomina conservanda

Lacknoeladium Lév. in Diet. univ. Hist. nat. 8: 487. 1845; Consid. mycol. 108. 1846. — T.: Eriocladus brasiliensis Lév.<sup>1</sup>

Ramaria (Fr.) Bonord., Handb. Mykol. 166, 1851. — T.: Clavaria botrytis Pers. ex Fr.

# Nomina rejicienda

Eviceladus Lév. in Ann. Sci. nat., Bot. III 5: 158, 1846. — T.: Eviceladus brasiliensis Lév.<sup>1</sup>

Romaria S. F. Gray, Nat. Arrang. Brit. Pl. 1: 655, 1821. — T.: Clavaria pratensis Pers.

Cladaria Ritgen in Schr. Ges. Beförd. Naturw. Marburg 2: 94. 1831.<sup>2</sup> — T.: Clavaria botrytis Pers.<sup>3</sup>

## ALPHABETICAL ENUMERATION

Allantula Corner in Ann. of Bot. II 16: 270, 1952.—ETYMOLOGY: dilās, - āvvos, sausage; -ula, suffix forming diminutives. Gender: f. — Type species (by original designation and only original species): Allantula diffusa Corner.

<sup>&</sup>lt;sup>1</sup> A previously published proposal (rejected) specified Clavaria furcellata Fr.

<sup>&</sup>lt;sup>2</sup> Rogers stated that the date should be 1828.
<sup>3</sup> A previously published proposal (rejected) suggested Clavaria corniculata Schaeff.

Aphelaria Corner, Monogr. Clav. (in Ann. of Bot. Mem. 1:) 180, 690. 1950. — ETYMOLOGY: âquitis, plain. Gender: f. — Type species (by original designation): Clavaria dendroides Jungh. — Scope. Introduced with 12 species.

Araeocoryne Corner, Monogr. Clav. (in Ann. of Bot. Mem. 1:) 194, 690. 1950. — Ετγμοιος : ἀραιός, slender; κορόνη, club. Gender: f. — ΤΥΡΕ SPECIES (only original species, and by original designation on p. 689): Araeocoryne elegans Corner.

Baumaniella.—See Baumanniella.

Baumanniella P. Henn. in Bot. Jb. 23: 543. 1897. — ETYMOLOGY: G. Baumann. Gender: f. — Type species (only original species): Baumanniella togoensis P. Henn.—This is now sometimes regarded, probably correctly, as a member of Physalacria Peck; Hennings himself thought it related to that genus. If this were true, Hennings's description must be wrong in several points; see also Von Höhnel (in Ann. mycol. 9:.174. 1911). Corner (1950: 468) transferred this species to Physalacria. — VARIANT SPELLING: "Baumaniella": Theissen in Brotéria, Sér. bot. 10: 16. 1912; J. Rick in Egatea 16: 204. 1931, etc.—An error.

Capitoclavaria "McGinty": Lloyd, Mycol. Writ. 7: 1107. 1922 (not validy published); see also, Stevenson & Cash in Bull. Lloyd Libr. No. 35: 61. 1936. — A not validly published name: not definitely accepted by the publishing author and at the same time rather a nomen provisorium. For some general considerations on the McGinty names, see Part I of the present series (in Reinwardtia 1: 205. 1951). — Doty (1948: 126) accepted Capitoclavaria as validly published and legitimate (i.e. priorable), an inadmissible conclusion. This is how Lloyd (in a note to Clavaria capitata Lloyd) introduced the name:

"The idea, however, of a Clavaria not having the hymenium over stems or branches, but confined to terminal heads is a new one, I think, in Clavarias, hence could be made a 'new genus' (Capitaelavaria capitata, McGinty) . . .."—Lloyd (l.c.).

The species was redescribed by S. G. M. Fawcett [in Proc. roy. Soc. Victoria II 51: 276 f. 1N; pl. 17 fs. 1-3, 6; pl. 20 f. 3. 1939, as Clavaria capitata Lloyd; see also Corner, 1950: 565, as Ramaria capitata (Lloyd) Corner].

Caripia O.K .- See "Thelephoraceae."

Ceratella Pat., Hym. d'Eur. 157. 1887. — ETYMOLOGY: ceratellum, small horn. Gender: f. — TYPE SPECIES (selected): Pistillaria queletii Pat.

 Score. Patouillard made the pointed, sterile tip of the fruit-body the leading feature of his genus and mentioned as examples, "C. Queletii, C. acuminata, C. aculina, etc." - TYPIFICATION. The genus was called "Ceratella (Quél.)." which indicated that Patouillard had Clavaria sect. Ceratella Quél. (Ench. Fung. 222, 1886) in mind as basinym. This latter name originally covered seven species, the first of which is Clavaria uncialis Grev. ex Fr., the second, Cl. mucida (Pers.) ex Fr., and the third, Cl. aculina Quél. The only species of this group retained by Patouillard was Cl. aculina; it is hardly acceptable as the type of the 'basinym.' Quélet's description merely reads "Simplices, minutae. Lignatiles." The original description of Cl. acidina (Quélet, C.R. Ass. franc. Avanc. Sci. 9: 670 pl. 8 f. 11. 1880) states that it was found "Sur les jones pourrissants des marais," which conflicts with one of the three words of the sectional description. Subsequent authors who retained an infrageneric taxon Cerutella (and at the same time accepted Patouillard's genus) excluded this fungus from Quélet's taxon. This was done, for instance, by Bourdot & Galzin (Hym. de France 122, 1928), who made Quélet's taxon a subgenus of Clavaria Fr. and emended it in such a manner that it is rather obvious that they framed their group around another of Quélet's species, Cl. mucida, which growns on wood; that species is here selected as the type of Clavaria sect. Ceratella Quél. Because Cl. mucida was not admitted among the original species of the genus Ceratella, the 'basinym' is to be rejected as such and the author's citation of the generic name should become 'Pat.' rather than '(Quél.) Pat.' - Afterwards Patouillard (Essai taxon. Hym. 49, 1900) left Cl. aculina out as an example and listed, "C. aculeata Pat., C. Queleti Pat., C. Helenae Pat., C. macrospora Pat., C. acuminata (Fckl.), etc." When Konrad & Maublanc renamed the genus, they indicated Pistillaria queletii Pat. = Ceratella queletii (Pat.) Pat. as the type species of Ceratellopsis Konr. & Maubl., q.v. It is one of the two species that figure among the examples listed by Patouillard both in 1887 and 1900, the other one being Pistillaria acuminata Fuck. This choice is accepted here for Ceratella Pat. - Homonym: Ceratella Hook. f. (1845: Compositae). - Isonym: Ceratellopsis Konr. & Maubl. (1937), q.v. -STATUS. Impriorable on account of the earlier homonym.

Ceratellopsis Konr. & Maubl., Icon. select. Fung 6: 502. 1937. — ETYMOLOGY: (Clavaria sect.) Ceratella; δφις, appearance. Gender: f. — TYPE SPECIES (by original designation): Pistillaria queletii Pat. — BASINYM: Ceratella Pat. (1887), q.v. — SCOPE. That of the genus Ceratella Pat. as treated by Bourdot & Galzin (Hym. de France 140. 1928),

with "2 espèces." Ceratella queletii (Pat.) Pat. and Ceratella helenae (Pat.) Pat., Pistillaria aculeata Pat. not being definitely included. However, as a mere name change of Ceratella, the original scope of Ceratellopsis is technically that of the generic basinym. - Valid publication. Ceratellopsis was introduced as a "nov. nom." for Ceratella Pat., with a short French (and no Latin) description. There is a reference, "Ceratella (Quélet, p.p.), Patouillard (1887)." This is to Patouillard's description rather than to Quélet's, since 'Quélet, p.p.' stands evidently for 'Quélet, with the exclusion of the typical part,' because the authors maintained Clavaria sect. Ceratella Quél. as the correct name for a quite different group of fungi (also in Bourdot & Galzin's circumscription). The work in which Ceratellopsis was published contains an extensive bibliography which supplements the reference "Ceratella . . . Patouillard (1887)." There is no doubt that the authors introduced a new name for Patoiuillard's group. The reason for so doing seems to have been that they regarded the use of the section epithet 'Ceratella' misapplied in generic rank as inadmissible. The authors were apparently unaware of the existence of an earlier homonym. - REMARK. By indicating P. queletii as the type species of the isonym, Konrad & Maublanc indirectly selected it as the type of the basinym, too. It is difficult to exchange that species for another one. Corner (1950: 35, 36, 198, 689) preferred such a substitution and selected Pistillaria aculeata:

"If [Ceratellopsis Queletii] has the same structure as C. aculcuta there will be no difficulty, but if it is a Pterula, then Ceratellopsis will become merely a synonym of Pterula and a new generic name will have to be made for C. aculcuta. Thus I consider it preferable to change the lecto-type of Ceratellopsis so that the name can be used with certainty."—Corner (1956: 36).

This selection—unluckily—seems hardly permissible in view of the original designation of *P. queletii*; moreover *Pistillaria aculeuta* Pat. is neither among the examples listed by Patouillard when he introduced his genus *Ceratella*, nor is it one of the species definitely admitted by Konrad & Maublanc. (It is not one of the original species of *Clavaria* sect. *Ceratella* Quél. either.)

It is Patouillard's first example in 1900; see under Caratelia.

Chaetotyphula Corner, Monogr. Clav. (in Ann. of Bot. Mem. 1:) 207, 690. 1950. — ETYMOLOGY: zaín, hair; the genus Typhula. Gender: f. — Type species (by original designation): Typhula hyalina Jungh. — Scope. Introduced with two species.

Cladaria Ritgen. in Schr. Ges. Beförd. Naturw. Marburg 2: 94. 1831.\*

— ETYMOLOGY: ½âôoz, branch. Gender: f. — Type species (selected):

Clavaria botrytis Pers. (in connection with a proposal for rejection) or

Clavaria corniculate Schaeff.

VALID PUBLICATION. The description to which this generic name owes it valid publication runs:

"Die astigen Clavarien müssen abgetheilt werden von der einfachkeulenförmigen, welches unter dem Namen Ciadaria geschehn kann (150-158)."—Ritgen (i.e.).

This has not been contested as yet as ensuring the valid publication of the name.

Scope. Ritgen based his review of the fungi almost exclusively on Nees's "Das System der Pilze und Schwämme" (1817); like in other instances the numbers at the end of the sentence quoted above denote illustrations in that work and it must be assumed that Cladaria is a name introduced for the branched species of Clavaria as treated by Nees (op. cit. pp. 168 et sqq. & "Ueberblick" pp. 42-43). This makes the inadmissible denomination "Astschwämme, Clavarias ramulosae" (Nees, op. cit. p. 168) 'basinym' of Cladaria."

Nees (op. cit. "Ueberblick" pp. 42-43) divided these branched species into a subdivision "Traubenstengler. Botryoideae," and another one, "Zweigstengler. Ramalinae." These two groups correspond to Persoon's already previously introduced two subdivisions of "A. Coralloideae: clavulis ramosis. (RAMARIA Holmsk.)," viz., Nees's first group with "Caule crassissimo," and his second with "Caule tenui s, ramis omnibus simul sumtis tenuior" (Syn. Fung. 585, 588, 1801).

Nees's examples of his 'Botryoideae' are "Clavaria pomacea," "noch unbeschrieben," followed by Clavaria botrytis Pers. Of his 'Ramalinae,' he remarked, "Die reinste und edelste Form des Astschwammes stellen die Familiengenossen der Clavaria pratensis, amethystina, corniculata Pers.

7 "Astschwämme, Clavariae ramulosae, . . . Zweyte Cattung. Stengelschwamm.

(Stengler) Clavaria."-Noes (op. cit. p. 168).

<sup>4 &</sup>quot;Nous avons récolté . . . une petite espèce répondant bien exactement aux descriptions de C. acaménata Pat. . . . et de C. acateata Pat. . . . . — Petites clavules . . . avec pointe sterile . . . . — A la même place, le lendenain et jours suivants, les clavules étaient bien plus nombreuses; . . la plupart étaient obtuses au sommet, sans prolongement d'hyphes stériles . . . Il est probable que diverses espèces de Typhala peuvent présenter les caractères du genre Ceratella dans leur jeunesse . . . — Bourdot & Galzin (l.e.).

Rogers (1956: 33) concluded that the date is unquestionable 1828. From his remarks one would deduce that Ritgen's paper in question and another one by the same author were issued at this earlier date as a separate installment of the volume of which it forms part; and that these papers bear their own pagination (Cladaria, p. 54). The copy I had access to (British Museum, Nat. Hist.) consisted of the volume issued as a whole; both the original cover and the title-page were dated 1831.

&c., mit schönerem Verhältnisse des Stamms und der oft regelmässig sich spaltende Aeste, dar"; follow the treatment with the specific descriptions (all names ascribed to Persoon), in this order, of Clavaria amethystina, C. palmata, C. corniculata, and, for instance, C. cornea, the latter already making up part of Nees's undivided species.

Nees's illustrations (as far as those cited by Ritgen are concerned) represent Clavaria botrytis Pers. (Nees, pl. 16.f. 150; copied from Schaeffer, Fung. Ic. pl. 176); C. amethystina (Holmsk.) "Pers." (Nees, f. 151; copied from Holmskjold, Beata rur. pl. 28, as Ramaria amethystina Holmsk. = Clavaria "amathystea . . . Holmsk. coryph. p. 110 cum ic. eleganti," of Persoon, Syn. Fung. 590); C. palmata "Pers." [Nees, f. 151B; copied from Holmskjold, op. cit. pl. 27, Ramaria palmata (Scop.) Holmsk., a different fungus from C. palmata Pers.]; C. corniculata Schaeff. (Nees, f. 152; copied from Schaeffer, op. cit. pl. 173); and C. cornea Batsch (Nees, f. 158).

Typification. Corner (1958: 290) correctly remarked that, Cladaria "was made merely for branched species of Clavaria . . .. As such it is a superfluous name for Ramaria Holmsk, [non S. F. Gray], and I regard it as a clear synonym. Indeed the content of the genus, as evidenced by the illustrations cited by Ritgen, is that of Holmskjold." Since Nees divided his 'Clavariae ramulosae' (which group became Ritgen's Cladaria) into two subdivisions, 'Botryoideae' and 'Ramalinae,' it follows that the most eligible species to the type are two, one representative of each of the groups. These are for 'Botryoideae' undisputable Clavaria botrytis (which, for instance, inspired the name of the group in which it was placed!) and for 'Ramalinae' rather C. corniculata (see below)."

The first author to select a type species for Cladaria was Doty (1948: 126), who proposed "Clavaria amethystina Fries." Some years afterwards Doty (1950: 12) suggested that his selection be recognized and about simultaneously Rogers (1950: 33) expressed as his opinion that Doty's lectotype was acceptable and "valid," and that there was no place for the substitution of an other by a subsequent author. The species in question is not an original one: Ritgen did not refer back to Fries's fungus. What Doty must have had in mind is Nees's Clavaria amethystina "Pers." (= C. amathystea Pers., a name change for Ramaria amethystina Holmsk.), which by Nees's description and his illustration copied from Holmskjold, is to be interpreted in accordance to Holmskjold and quite certainly not in

accordance to Fries, the author to which Doty ascribed the name. Rather than suggesting that Doty proposed a non-original species (and thus did not really typify Cladaria), I prefer to assume that he broadly interpreted Fries's Clavaria amethystina, inclusive of Ramaria amethystina Holmsk., the latter species thus being indirectly indicated by an incorrect name." Even if thus corrected, Doty's choice is not at all readily acceptable and, moreover, a very embarrassing one. Nees (op. cit. p. 169) regarded C. amethystina intermediate between his two subdivisions, reason why he mentioned it as the first example of his 'Ramalinae'; "Macht der Uebergang zu den einfachern, dünnstämmigen Arten ['Ramalinae']," This remark shows that this fungus is not eligible for any of Nees's two subdivisional names and should, therefore, not be ranked among the species most eligible as the type of Cladaria. Nees's German name for the 'Ramalinae' is Zweigstengler (in contrast with Traubenstengler for the 'Botryoideae'), which shows that he had in mind species with slender stems and slender branches. Holmsjold's illustration of Ramaria amethystina could hardly have acted as godmother. In addition, Doty had ignored that it was (and is as yet) not quite certain what either Holmskjold's or Fries's fungus really represents. Doty (cf. 1950: 12) interpreted the species he selected in agreement with Coker, that is, as being the fungus now currently called Clavaria zollingeri Lév. (Corner, 1950: 258-262 fs. 95-98, pl. 1 fs. 1, 2). According to Corner (1953; 290-291), "Ramaria amethysting, as illustrated and described by Holmskield [and Nees], is probably Clavaria zollingeri, if one can judge from its brittle texture and manner of branching." As to Clavaria amethystina Fr., Corner is convinced that that name should be retained for a species of Clavulina J. Schroet., thus as belonging to a quite different genus, Retention of Ramaria amethystina Holmsk, would make Cladaria a potential source of much confusion. If Cladaria were to be typified by Doty's choice I would most likely treat it as a nomen dubium.

Donk (1949: 106), when still unaware of Doty's preference, selected Clavaria corniculata "Pers." = C. corniculata Schaeff. This was not done without care, one of the objects being, for instance, to avoid the trap laid by Ramaria amethystina; the selection of that species would "make Cladaria virtually a nomen dubium, and a hotly debated one" (Donk, 1950:

<sup>&</sup>lt;sup>8</sup> It will be demonstrated under Ramaria S. F. Gray [non (Fr.) Bonord.] that Gray raised the 'Ramalizae,' to the rank of a genus; he apparently intended to do the same for the 'Botryoideas,' but this second genus was not included in his book.

Rogers (1850: 83) apparently recognized this point, too, for he stated that "Doty (p. 126) had earlier selected Clav. amethystina (Ness's no. 151)," which, of course, was not merely a statement of bare facts.

<sup>&</sup>lt;sup>10</sup> I would have preferred Clavaria pratonsis Pers.; this species Nees mentioned by name, but in contrast with Clavaria corniculate it was not separately described and illustrated. The two are currently regarded as conspecific.

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10). The reason why Clavaria botrytis was not selected was because he thought himself bound to select from the species that Nees mentioned as representing "die reinste und edelste Form des Astschwammes." After a careful restudy of Nees's treatment I now feel that undue emphasis was laid on this taxonomic (or what we would now call, phylogenetic) rather than nomenclatorial remark, and that the less noble form of C. botrytis did not necessarily exclude it from being nomenclaturally eligible. Shortly afterwards, when Corner's monograph (1950) was published, it appeared that Cladaria, if typified by Clavaria corniculata, would become the correct name of Clavalinopsis Overcem as emended by Corner, a very regrettable situation. In the meantime Clavaria corniculata has been made the type of a new genus, Donkella Doty, q.v.; however, compare Corner (1953: 291-292) for some taxonomic remarks on this genus.

In conclusion of this review of the typification of the name Cladaria, I would suggest that Clavaria botrytis be selected as the type species (see below). If this were not done the earlier selected Clavaria corniculata would doubtlessly be accepted at least by some mycologists in preference of the still earlier selected, but less eligible, Ramaria amethystina.

HONONYM. Presumably Claderia Rafin. (1838; Rutaceae) is not to be regarded as a homonym.

Typonyms. With Clavaria botrytis as the type, Ramaria (Fr.) Bonord. (1851; proposed for conservation) and Corallium Hahn (1883) would become typonyms; with Clavaria corniculata, Ramaria S. F. Gray (1821; proposed for rejection), Cornicularia Bonord. (1951; preoccupied), and Donkella Doty, q.v.

Nomen residence (proposed). Originally, before knowing how it might be typified, Donk (1941: 158, 178) proposed Cladaria for rejection against Ramaria (Fr.) Bonord., q.v., and later on proposed it again for rejection, along with Ramaria S. F. Gray, q.v., as another nomen rejiciendum, this time specifying C. corniculata as the suggested type species (Donk, 1949: 106). Rogers (1949: 473) thought that the proposal, in its original formulation of 1941, should be rejected, and afterwards confirmed his opinion in regard to the revised proposal (Rogers, 1950: 33). The Special Committee for Fungi rejected it by ballot (cf. in Taxon 2: 31, 1953; in Mycologia 45: 320, 1953).

Nevertheless I herewith once more move that Cladaria be rejected against Ramaria (Fr.) Bonord., q.v., this time with Clavaria botrytis Pers. as the type species. This would dispose of Cladaria as a priorable name altogether by making it a typonym of a conserved name, which is precisely what it deserves as a superfluous name published in ignorance of the

pre-existence of Ramaria Holmsk. Introduced for exactly the same idea. Moreover, the resemblance between Cladaria and Clavaria, as names within one family, might lead to considerable confusion. As the taxonomic situation is at present, Cladaria, if typified by Clavaria botrytis, would endanger Ramaria (Fr.) Bonord., and if typified by Clavaria corniculata, Clavalinopsis, the latter genus as monographed by Corner another extensive genus of no less than 63 species (combination all made!). (Doty's typification is thought to be less tenable and confusing.) Taking into consideration that Cladaria has as yet never been taken up and redefined (Doty has formally made one, the first and only, combination with that name without redefining the genus), there are no obstacles to reach a goal that would considerably contribute to greater stability in the nomenclature of the clavarias.

[Cladosterigma Pat. apud Pat. & Lagerh. in Bull. Soc. mycol. France 8: 138. 1892. — Type species (only original species): Cladosterigma fusispora Pat.—Placed by its author in Deuteromycetes (Tuberculariaceae). Von Höhnel (in Oester. bot. Z. 57: 323. 1907; apud H. & P. Sydow in Ann. mycol, 5: 352. 1907) assigned it to Dacryomycetineae, and it has also been referred by the same author (Von Höhnel in S.B. Akad. Wiss. Wien, Math.-naturw. Kl. 128 I: 535. 1919) to Clavaria; he identified it (in 1919) with Microcera clavariella Speg. Afterwards Petch (in Trans. Brit. mycol. Soc. 8: 212. 1923) identified it accordingly but denied its basidiomycetous nature; he classed it among "Stilbaceae."]

Clavaria L .- See under Clavaria Fr.

Clavaria Fr., Syst. mycol. 1: 465. 1821. — ETYMOLOGY: clava, club. Gender: f. — Type species (selected): Clavaria fragilis Pers. ex Fr.—This is now often considered conspecific with Clavaria vermicularis Fr.; see, for instance, Corner (1950: 252). — Protonym: Clavaria Vaill., Bot. paris. 39. 1727.—A name introduced in the Tournefortian system of nomenclature for three species, (i) Clavaria militans, crocea Vaill. (pl. 7 f. 4) = Cordyceps militaris (L. ex Fr.) Link, (ii) C. alba, pistilliforme Vaill. (pl. 7 f. 5), and (iii) C. ophioglossoides, nigra Vaill. (pl. 7 f. 13) = Geoglossum sp., thus all undivided species, the branched ones being placed in a different genus, Corallo-Fungus Vaill. Clavaria was accepted by Micheli (Nov. Pl. Gen. 208, 1729) and already before 1753 by Linnaeus (Gen. Pl. 327, 1737). — Devalidated name: Clavaria L., Sp. Pl. 2: 1182, 1753.—In his "Genera Plantarum," Linnaeus cited Vaillant as the author of the name; he extended the genus so as to include also branched species; and in-

corporated Vaillant's three species in Clavaria group Indivisae. Vaillant's first species was the basis of C. militaris L., his second was cited under C. pistillaris L., and his third was the basis of C. ophioglossoides L. -Scope. Fries, who, too, ascribed his genus Clavaria to Vaillant, also included undivided as well as branched species; of Vaillant's species he retained one, the second, citing it as a synonym of his Clavaria fragilis var. b. cylindrica (Bull.) ex Fr. - Typification. Donk (1933: 74-75) selected Clavaria fragilis as the type species; he was followed by Doty (1948: 126) and Corner (1950: 36, 215, 689; "Donk has chosen C. vermicularis"). - An earlier selection, of "Clavaria botrytis Pers." as the type species of "Clavaria (Vaill.) L. . . . 1753," by Clements & Shear (Gen. of Fungi 345, 1931) is to be rejected (Donk, 1949: 116). That species was neither one of Vaillant's nor one of Linnacus's. Moreover, it is branched, and historical considerations (for instance, excluded from Clavaria with the introduction of Cladaria Ritgen, q.v.) in combination with the meaning of the generic name require preferably an unbranched species. Further, this choice would make Clavaria the correct name of Ramaria (Fr.) Bonord, emend. Donk and would necessitate adoption of another name for the present, restricted, genus Clavaria. - Homonym: Clavaria Stackhouse, Nereis brit., Ed. 2, x. 1816 (Gelidiaceae, Rhodophyta; starting-point date, 1753). - "Clavaria" of Steudel (Nomencl. Pl. phaner, 204. 1821) is an error for Calvaria Gaertn. as indicated by Steudel himself (Nomencl, Pl. univ. 262, 378, 1840). — Nomen conservandum, Donk (1988; 74, footnote) drew attention to the existence of the earlier homonym and later on proposed it more explicitly for rejection (Donk, 1949: 115-117). The same proposal was moved by Doty (1948: 127), and Rogers (1949: 436) recommended its adoption. It has been approved by ballot by the Special Committee for Fungi (cf. Code 77, 1952; in Mycologia 45: 315. 1953).11

REINWARDTIA

Clavariachaeta "McGinty": Lloyd, Mycol. Writ. 7: 1111. 1922 (not validly published); see also, Stevenson & Cash in Bull. Lloyd Libr. No. 35: 62. 1936. — A not validly published name: not definitely accepted by the publishing author. For some general considerations on the McGinty names, see Part I of the present series (in Reinwardtia I: 205. 1951). Doty (1948: 127) accepted the name as "legitimate." When so doing he neither provided for its valid publication, nor made it clear that he definitely accepted the name as a correct one. Thus it would appear that this name has not yet been validly published. — Clavariachaeta was coined for Dendrocladium peckholtii Lloyd (l.c.): "A new genus could be based on it and my friend McGinty proposes Clavariachaeta." The type of this species is in Lloyd's herbarium. According to Killermann (after Bresadola; in Engl. & Pr., Nat. PflFam., 2. Aufl., 6: 150. 1928) D. peckholtii would perhaps be Lachnocladium brasiliense (Lév.) Berk. &. C.; the two are widely different however. — See also under Dendrocladium. — Clavariachaete Corner, q.v., includes the type species of the present name, but was validly published as the name of a new genus and based on a different species.

Clavariachaete Corner, Monogr. Clav. (in Ann. of Bot. Mem. 1:) 268, 691. 1950. — ETYMOLOGY: the genus Clavaria; zain, hair. Gender: f.; names ending in -chaete are often treated as neuter. — Type species (by original designation on p. 689): Lachnocladium rubiginosum Cooke. — Scope. Introduced with two species, the type and Dendrocladium peckholtii Lloyd. — Remark. This is to be interpreted as a different, though perhaps homonymous, name from the not validly published Clavariachaeta Lloyd, q.v.

Clavariadelphus Donk, Rev. niederl. Homob.-Aphyll. 2: 72 1933 (in Meded. Nederl. mycol. Ver. 22 & in Meded. bot. Mus. Herb. Univ. Utrecht No. 9). — Etymology: the genus Clavaria; ààalpas, brother. Gender: m. — Type species (by original designation): Clavaria pistillaris Fr. — Scope. Three species were included.

Clavariella P. Karst, in Rev. mycol. 3 (No. 9): 21. 1881. — ETYMOLOGY: diminutive of Clavaria. Gender: f. — Type species (selected): Clavaria apiculata Fr. — Scope. Introduced (with 15 species mentioned) for a part of Clavaria Fr., the species whether or not branched and "receptaculum tenax. Sporae ochracese (aromnium?)." Clavaria flava Schaeff. ex Fr. and Clavaria botrytis Pers. ex Fr., considered by Fries (1874: 666) and Karsten as leucosporous, were not included. Clavaria pistillaris Fr., Clavaria ligula Schaeff. ex Fr., Clavaria paradoxa P. Karst., and Clavaria fistulosa Holmsk. ex Fr. are among the examples and represent the unbranched element; they are the last four mentioned. Thus Clavariella

<sup>11</sup> Clavaria Stackh, was also preposed for rejection against Gelidium Lamaur. 1813 (Papenfuss in Madroño 9: 12, 1947). Doty (1948: 127) was in error when in connection with this proposal he indicated, and stated that Papenfuss proposed, as the lectotype of Clavaria Stackh., Gelidium cornoum (Huds.) Lamaur. Papenfuss adopted that species for Gelidium Lamour. in agreement with Schmitz; for Clavaria Stackh. na type species was indicated by him. The correct type species is Fucus caespitosus Stackh. = Colidium pasillum (Stackh.) Le Jolis: see Donk (1949: 117) and Papenfuss (in Hydrobiologia 2: 191, 1950). This species is also synonymous with Fucus clavatus Lamour., which name is less correctly mentioned for the type species in the proposal as edited by Rogers.

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was clearly instituted for Clavaria trib. Ramaria B. Ochrosporae Fr. (Fries, 1874: 670) and the first part of Clavaria trib. Holocoryne Fr. (group, "Colore mutabili, obscurato"; Fries, 1874: 676). "Ochrosporae" constitute the principal part (11 examples enumerated by Karsten). First species, Clavaria aurea, Schaeff. ex Fr. In the following year Karsten himself (in Bidr. Känn. Finl. Nat. Folk 37: xvii, 184. 1882) excluded the unbranched species, i.e. the "Holocoryne" element. — Typification. Doty (1948: 127) proposed Clavaria apiculata Fr. as the type species — Remark. See also Ramaria S. F. Gray under "Nomen rejiciendum (proposed)."

Clavicorona Doty in Lloydia 10: 38. 1947. — ETYMOLOGY: clava, club; corona, whorl. Gender: f. — Type species (by original designation); Craterellus taxophila Thom ("taxophilus"). — Scope. Four species were assigned to the genus.

Clavulina J. Schroet, in Cohn, Krypt.-Fl. Schles. 3 (1): 442, 1888. -ETYMOLOGY: clavula, small club. Gender: f. - Type species (selected): Clavaria cristata (Holmsk.) ex Fr. - Scope. Introduced with five species, the first of which is Clavaria rugosa Bull. ex Fr. - Typification. The species indicated above was chosen by Donk (1933: 16), also proposed by Doty (1948: 129), and accepted by Corner (1950: 295, 689). - REMARK. Doty has shown a pronounced, and in my opinion very regrettable, aversion to Clavulina, one of the generic names that are currently used by the few contemporary mycologists who divide Clavaria into quite a number of smaller genera. Thus, he proposed species of this genus as the types of some earlier generic names which included members of Clavulina among their original contents, even when the species chosen were rather ineligible. For the earlier name Ramaria S. F. Gray, q.v., (instituted for branched species, as is also plainly shown by the name) he chose the least branched, and therefore about the least eligible one, Clavulina rugosa (Bull. ex Fr.) J. Schroet. ! Normally this plant often has simple fruit-bodies! Compare also in this connection Corner (1953: 288-289). For Holocoryne Bonord., q.v., he again proposed the same species although in the original description it was mentioned clearly as an example of a somewhat aberrant group among the original ones! For Stichoramaria Ulbrich, too, the least branched species was proposed as lectotype, again Clavulina rugosa. For Cladaria Ritgen, q.v., he proposed a most diversely interpreted one, "Clavaria amethystina Fries." It would seem that in this case he meant Ramaria amethystina Holmsk. (Clavaria amathystea Pers.). which might rather be the same as Clavaria zollingeri Lév., but on the other hand might after all still belong to Clavalina. Nevertheless. I think that Clavulina has survived this incomprehensible attack and still stands as the correct name for those who recognize the genus, Doty's selections for Ramaria S. F. Gray and Holocoryna being unacceptable and the one he proposed for Cladaria (if it has to be maintained) making the latter generic name rather a nomen dubjum, if not a metonym of Clavaria Fr. emend. Corner. — Typonym: Stichoramaria Ulbrich (1928), and compare Ramaria Holmsk. (1790; devalidated name).

Clavulinopsis Overeem in Bull. Jard. bot. Buitenzorg III 5: 278. 1923.

— ETYMOLOGY: the genus Clavulina; δψες, appearance. Gender: f. — Type species (only original species): Clavulinopsis sulcata Overeem.—Corner (1950: 75, 379) reduced this name to the synonymy of Clavulinopsis miniata (Berk.) Corner (Clavaria miniata Berk.). — Remark. If one follows Corner (1950: 74, 342) in his emendation of the genus (which made it a substantial group with 63 species, inclusive of Clavaria corniculata Schaeff. ex Fr.), the generic name is endangered by both Ramaria S. F. Gray (1821), q.v., and Cladaria Ritgen (1828), q.v. The proposal to conserve Ramaria (Fr.) Bonord. (see pp. 443, 478), if accepted, would dispose of both these names!

Cnazonaria Corda in Sturm, Deutschl. Fl., Pilze Hft. 7: 55, 1829.— ETYMOLOGY: \*\*råtor, pin, needle. Gender: f. — Type species (only original species): Clavaria setipes Grev.—This species is also known as Typhula grevillei Fr. and T. candida Fr.

Corallium Hahn, Pilzsammler 72, 1883; 3. Aufl., 150, 1903. — ETYMOLOGY: corallium, coral. Gender: n. — Type species (selected): Clavaria botrytis Pers. ex Fr. — Scope. Introduced for the branched members of Clavaria Fr.; eight species were treated, seven of which were illustrated. The majority belong to Ramaria (Fr.) Bonord. emend. Donk; the first species is "Clavaria flava." — Typification. In selecting the type species, I carefully avoid the first species (dropped in the third edition): and adopt Clavaria botrytis Pers. ex Fr. (first species in the third edition). It seems especially suitable for the type, it being an unmistakable, very well known and favourite fungus from the mycophagist's point of view, particularly emphasized in this popular booklet. Hahn's plate and description are unmistakable, too. — Typonym: Ramaria (Fr.) Bonord. (1851), and compare Cladaria Ritgen.

Corallo-Fungus Vaill., Bot. paris. 41. 1727 (no generic description); Mich., Nov. Pl. Gen. 208. 1729. — Introduced for nine species of which

<sup>12</sup> When writing this I do not have the second edition at hand.

four where depicted; two of these are branched clavarias; one (pl. 8 f. 1) is a sterile, effused mycelium on which Kordera Adans. (Deuteromycetes), q.v., is based; and one (pl. 8 f. 3) has been identified with Clavaria penicillata Bull. (for which see under Penicillaria Chev. and Pterula Fr.) and is presumably also a sterile, but erect, mycelium. The two clavarias are recognizable as Clavalina rugosa (Bull. ex Fr.) J. Schroet. (pl. 8 f. 2) and Clavalinopsis corniculata (Schaeff. ex Fr.) Corner (pl. 8 f. 4). — Sometimes cited as "Corallofungus."

Coralloidea Roussel, Fl. Calvados, 2e Ed., 49. 1806 (devalidated name). — Introduced for the branched species of Clavaria L. ("Ramaria Holmskj." cited as a synonym), with the description: "tige charnue, rameuse, rameaux terminé en massettes." Ten original species mentioned: e.g. Clavaria formosa Pers. (first species), C. cinera Bull., C. pyxidata Pers. ("pixidata"), C. muscoides "Fl. dan." Clearly the same group as Clavaria A. Coralloideae Pers. (Syn. Fung. 585, 1801) as can be seen from the species cited and their order. — I abstain from indicating a type for this devalidated name. The preferable choice, in view of its being the same taxon as Persoon's Clavaria A. Coralloideae (see under Cladaria), would be Clavaria botrytis Pers., but that species was not mentioned. One might perhaps choose in its place Clavaria formosa Pers. — Not validly re-published.

Corolloides Tourn., Elem. de Bot. 442 pl. 332. 1694; Inst. 1: 564 pl. 332. 1700; Mich., Nov. Pl. Gen. 209 pl. 88. 1729. — Introduced for a wide variety of plants; the two depicted by De Tournefort represented branched clavarias. — Apparently never validly re-published after 1753. G. F. Hoffmann (Pl. lichen. 2: pl. 31 f. 2, pl. 33 f. 3. 1794) described two species of lichens under this generic name, but gave no generic description.

Cornicularia Bonord., Handb. Mykol. 166. 1851. — ETYMOLOGY: corniculum, small horn. Gender: f. — Type species (selected): Clavaria corniculata Schaeff. ex Fr. — Scope & typification. Under the caption "G[enus] Clavaria Vaill. / Fries Epicrisis p. 571," Bonorden divided Fries's genus into three smaller ones: Holocoryne (Fr.) Bonord., "Cornicularia Fr.," and Ramaria (Fr.) Bonord. The citation of Fries after the name Cornicularia I am unable to explain. Bonorden does not cite any species for Cornicularia, so a guess has to be made as to these. The poor generic description, the name coined, and the fact that other branched species were included in Ramaria, all make it probable that at least Clavaria corniculata Schaeff. ex Fr. was intended as a member of this

genus. I selected it as the type species, hoping my assumptions to be correct, Corner (1950: 74, 689) adopted this choice. — Homonym: Cornicularia Achar. (1794; Parmeliaceae, Lichenes). — Typonym: Ramaria S. F. Gray (1821), and compare Cladaria Ritgen. — STATUS. Impriorable on account of the earlier homonym.

Corynoides S. F. Gray.—See Dacrymycetaceae.

[Crinula Fr., Syst. mycol. 1: 493. 1821. — Type species (only original species): Crinula caliciiformis Fr.—This is the conidial state of Holwaya Sacc. (Helotiaceae, Discomycetes) according to Von Höhnel (in Z. Gärungsphysiol. 1: 219. 1912). It is entered here because Fries (1874: 681) in his last work still mentioned it among his Clavariei. — Originally called Crinium Fr., Novit. Fl. succ., Partic. V, Contin. 79. 1819 (n.v.).]

Dacryopsella Höhn. in S. B. Akad. Wiss. Wien, Math.-nat. Kl. 124 I: 50. 1915. — ETYMOLOGY: diminutive of Dacryopsis. Gender: f. — Type species (by original designation): Dacryopsis typhae Höhn.—I already pointed out before (Donk, 1933: 101-102) that this is not a dacrymycetaceous fungus as Von Höhnel thought; compare also Martin & Fisher [in Univ. Iowa Stud. nat. Hist. 15 (1): 13. 1933], Nannfeldt (in Svensk bot. Tidskr. 41: 335. 1947), and Rogers (apud Doty, 1948: 130). It belongs to or near Pistillina Quél. and may be called Pistillina typhae (Höhn.) Donk, comb. nov. (basinym, Dacryopsis typhae Höhn. in S. B. Akad. Wiss. Wien, Math.-nat. Kl. 118 I: 290. 1909). — Scope. Introduced with two species.

Deflexula Corner, Monogr. Clav. (in Ann. of Bot. Mem. 1:) 394, 695.

1950. — ETYMOLOGY: deflecto, I bend downward. Gender: f. — Type

SPECIES (by original designation): Pterula fascicularis Bres. & Pat. —

SCOPE. Introduced with five species.

Dendrocladium (Pat.) Lloyd, Mycol. Writ. 5: 870. 1919. — ΕΤΥΜΟΙΟ-GY: δίνδου, tree; κλάδος, branch. Gender: n. — ΤΥΡΕ SPECIES (selected): Lachnocladium giganteum Pat.—Corner (1950: 568) has provisionally placed this name as a synonym under Ramaria cyanocephala (Berk. & C.) Corner (Clavaria cyanocephala Berk. & C.), with the annotation "an Ramaria Zippelii?"

BASINYM: Lachnocladium sect. Dendrocladium Pat. in J. Bot. (ed. Morot) 3: 33, 1889; Essai taxon. Hym. 44, 1900.—Patouillard introduced his section with eight species. (A few more species were mentioned casually, after the enumeration of these eight representatives.) Numbers

1—3 were already previously described species; of these a few notes were given concerning the spores of each of them. Numbers 4—8 were new species and for that reason were more fully described. Lachnocladium giganteum Pat. (no. 6) is the one most fully illustrated; L. insigne Pat. (no. 7) comes next in this respect; while of L. guyanense Pat. (no. 8), L. guadalupense (Lév.) Pat. (no. 2), and L. tubulosum (Fr.) Sacc. (no. 1) only spores were drawn. First species, L. tubulosum.

Scope. The following quotation is Lloyd's note in which he raised Patouillard's section to generic rank:

"There occurs in the tropics a group of Clavariaceae corresponding to Pterula and Lacknocladium, but having colored spores. It was called Lacknocladium by Patouillard, but for me that is a perversion of the name both as to meaning and application and does not include the original species on which it was based. It includes Phacopterula of Hennings. As a usual thing I hardly uphold separating genera on spore color alone in the small groups, but some of these plants are so different from Pterula and Lacknocladium in general features that there should be a genus to include them leaving out of consideration the spores. We adopt a name [Dendrocladium] proposed by Patouillard as a section [of Lacknocladium]. The following Pterula of Saccardo enter into this group.

"Pterula kirsuta, Java. Not found by me. Spores recorded as elliptical, 4 × 6—8 µ, probably smooth.

"Phaeopterula jurnensis belongs here and also most of the species included in Patouillard's synopsis as Lacknocladium."—Lloyd (l.c.).

As can easily be seen from this quotation, Dendrocladium is a genus introduced for species with coloured spores, regardless of the fact whether they were smooth or roughened (as is also shown by Lloyd's later determinations). It thus matches exactly Lachnocladium sect. Coniocladium Pat. plus Lachnocladium sect. Dendrocladium; the first has its "spores ocracées pâles, lisses" (Patoiuillard, I.c., 1889), or ". . . brunes . . ., lisses" (1900), and the second, "spores brunes, échinées ou verruqueuses" (1889) or ". . . échinulées" (1900). The conclusion that Dendrocladium Lloyd covers these two of Patouillard's three sections is underlined by Lloyd's own statements: ". . . belongs here and also most of the species included in Patonillard's synopsis [of 1889] as Lachnocladium" (italics are mine) and "it was called Lachnocladium by Patouillard . . .. " Patouillard's third section (Lachnocladium sect. Lachnocladium Pat.) comprised only two species [one of these is L. braziliense (Lév.) Berk. & C.] of which the spores were unknown; this seems the group to which Lloyd restricted the name Lachnocladium Lév. Most of the white-spored species of Lachnocladium were placed by Lloyd in Patouillard's 'emendation' of Thelephora Ehrh. ex Fr. Conclusion: Dendrocladium Lloyd must be considered an isonym of Lachnocladium sect. Dendrocladium, the scope of which was extended to cover also section Coniocladium.

Typipication. Stevenson & Cash (in Bull. Lloyd Libr. No. 35: 62 1936) indicated "D. hirsutum (P. Henn.) Lloyd" as the type species of the generic name. Doty (1948: 130) proposed the same species. I can't agree to this for various reasons. Lloyd's species are "most of the species included in Patouillard's synopsis as Lachnocladium," plus Pterula hirsuta P. Henn. and Phaeopterula juruensis P. Henn. (see quotation above). These latter two species were especially mentioned by name because they were not found in Patouillard's enumeration (being described afterwards), and also because they were taken from genera other than Lachnocladium: they were purely supplementary examples and not, to Lloyd, the most prominent members of his genus. These were Patouillard's, indicated collectively. Moreover, Pterula hirsuta was evidently not known to Lloyd except from its description. He certainly knew several other species which he did not list by name. The gist of the preceding remarks was already published by Corner (1950: 83) with whom I discussed these questions.

Killermann (in Engl. & Pr., Nat. PflFam., 2. Aufl., 6: 150. 1926) restricted "Dendrocladium Pat." to a single species, Dendrocladium peckholtii Lloyd, described 33 years after the introduction of Patouillard's section, and some years after it was raised to generic rank. In addition, Lloyd himself did not regard it as quite typical, otherwise he would not have proposed for it, under his nom de plume McGinty, the generic name Clavariachaeta, q.v. Clements & Shear (Gen. of Fungi 345, 1931) suggested it as the type species of Dendrocladium.

I think that, we are fully justified (or rather, obliged) to look for the type species among the true kernel of the genus: Patouillard's species of the basinym, Lachnocladium sect. Dendrocladium itself. Among these there is one in particular which stands out, and which played at least an important rôle to the author of the avowed basinym. It is the one most fully illustrated: L. giganteum. The type of this name has been preserved.

Dimorphocystis Corner, Monogr. Clav. (in Ann. of Bot. Mem. 1:) 400, 695. 1950. — ETYMOLOGY: δίς, twice; μορρή, shape; κύσις, bladder, Gender: f. — Type species (by original designation): Dimorphocystis laevis Corner. — Score. Introduced with three species.

Donkella Doty in Lloydia 13: 14, 1950. — ETYMOLOGY: M. A. Donk. Gender: f. — Type species (by original designation and only species mentioned): Clavaria corniculata [Schaeff, ex] Fr. — Typonyms: Ramaria

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S. F. Gray (1821; proposed for rejection), Cornicularia Bonord. (1851; preoccupied), and compare Cladaria Ritgen.

Eoagaricus L. C. C. Krieger in Bull. Maryland Acad. Sci. 3: 8. 1923.

— ETYMOLOGY: ἡώς, dawn; the genus Agaricus. Gender: m. — Type species (same as of basinym): Physalaeria inflata Peck. — Basinym: Physalaeria Peck (1882), q.v.:

"... I find it necessary to transfer this much-transferred plant from its present position, in the Clavariaceae, into the Agaricaceae... Its generic name I change from Physalacria to Ecagaricus,"—Krieger (i.e.).

REMARK. A superfluous name.

Eriocladus Lév. in Ann. Sci. nat., Bot. III 5: 158. 1846. — ETYMOLOGY: ἔρων, wool; κλάδος, branch. Gender: m. — Type species (selected): Eriocladus brasiliensis Lév.—Better known under its current name Lachnocladium brasiliense (Lév.) Berk. & C. — Scope. The genus was published with seven species when Léveillé had to list specimens of only two species in a regional enumeration. These two are Clavaria "fistulosa Fr." (no. 1; an error for C. tubulosa Fr.) and Eriocladus brasiliensis Lév., a new species (no. 7). Corner (1953: 292-295) has reviewed the original species and given important information as to their identity. — Typification. Clements & Shear (Gen. of Fungi 345. 1931) were the first to suggest a type; they selected Clavaria furcellata Fr. Donk (1941: 173; 1949: 100) felt bound to adhere to it, not only because this was the first selection, but also because he believed that Léveillé took up an originally nameless and provisional unit of Fries's, afterwards called Clavaria trib. Ramaria sect. Velutinae Fr. (Epicr. 576. 1838). Léveillé's observation runs:

"Comme les Merisma [Pers.], ces Champignons sont rameux, de consistance coriace, et à surface complètement tomenteuse. Ce caractère, qui été déja saisi par le professeur Fries, le portait à croire qu'on pourrait l'employer pour en former un genre particulier, s'il se présentait, disait-il, sur plusieurs espèces."—Léveillé (l.c.).

Now Fries added the following comment to his description of Clavaria furcellata, the second species enumerated by Léveillé.

"Clavariae tropicae, quarum vero paucae innotuerunt, ab Europaels hymenio velutino recedunt, quoad momentum, si in pluribus detegendis confirmetur, eas in peculiarem seriem collegit."—Fries (in Linnaea 5: 531, 1820).

This pre-existing taxon was originally instituted for *C. furcellata*; in 1838 Clavaria tubulosa was definitely added by Fries. Both are among Léveillé's original species; *C. tubulosa* was misinterpreted by him (Corner, 1953: 292-293) and *C. furcellata* he had apparently not seen. The choice

of C. furcellata proved to be very unfortunate. Corner (1953: 293) reported that of Fries's three syntypes the only collection in the Friesian herbarium is labelled "Beyrich (Brazil, in truncis arb. putr. Octobro) Clavaria furcellata Roxb." Presumably, therefore, Roxburgh's collection from Guiana should be taken as the selected type specimen of C. furcellata, and of this, the first of the syntypes cited by Fries, its whereabouts, as well as those of the second syntype (Bourbon, Bory), are unknown. It is by no means sure that these collections are conspecific, Fries himself noting discrepancies. Corner (in Nature 168: 1031, 1951; 1953: 293) identified Beyrich's specimen with Clavaria surculus Berk, = Lentaria surculus (Berk.) Corner. In view of our incomplete knowledge, C. furcellata not only must be held to be a nomen dubium, but also a nomen ambiguum because of its having been extensively and erroneously applied to various fungi. Fortunately Corner (see below) has pointed out that this species is not really illegible. - Singer (in Mycologia 36: 553, 1944) suggested another species: "The name Lachnocladium should be reserved for fungi of the type of L. brasiliense, and the latter be made the type of the genus." No reasons were given for this selection. It has been adopted by Doty (1948: 130-131) and, recently, by Corner, who defended it thus:

"Why did Léveillé make the genus? This is really the significant point. He had previously described three of the species [of Eriscladus = Lacknocladium] as Thelephoro, and left three more in Clavaria where Fries and Berkeley had placed them. Then he came upon a new species which had characteristically tomentose sterile surfaces. It was this species, Eriscladus brazilienvis, which impressed him (for he had not himself seen another Lacknocladium sensu mihi), and which he straightaway placed in the new genus. On this species he made the generic character, and found support, as he imagined, in the opinion of Fries, one of whose species turns out to be congeneric. This is the reason why I consider, a priori, Eriscladus braziliensis to be the nomenclatural type of the genus: it reflects the author's procedure."—Corner (1853: 295).

Type material of E. brasiliensis is available at Kew and in Paris (Corner in Nature 168: 1031, 1951); it proves that the genus has been correctly interpreted by Corner. — Nomen conservandum (proposed). Donk (11. cc) proposed Lacknocladium Lév. for conservation in order to avoid the resurrection of the priorable basinym Eriocladus, rejected by Léveillé himself in the same year of its publication and never used again by anybody. It is suspected that Léveillé abandoned Eriocladus on account of the earlier name Eriocladium Lind., which according to the Code is not to be considered a homonym. This proposal, indicating Clavaria furcellata as the type species, was rejected by ballot of the Special Committee for Fungi (cf. in Taxon 2: 31, 1935; in Mycologia 45: 320, 1953). Acceptance would have made Eriocladus and Lachnocladium nomina dubia or

ambigua (see above) to many mycologists. Although the theoretical possibility still remains open that the probable type specimen (Roxburgh) of C. furcellata might represent Lachnocladium brasiliense or a closely related form, some authors would perhaps assume its identity with Clavaria surculus and thus arrive at an earlier generic name for Lentaria Corner, or if that species were transferred to Ramaria (Fr.) Bonord. emend. Donk, at an earlier name for the latter genus! This all would be very deplorable. — A new proposal is herewith moved, this time with Eriocladus brasiliensis as the type species, but otherwise unaltered. — I know of no valid arguments against the conservation of Lachnocladium having been published. Doty was not in favour of the original proposal.

"Since [the retention of Eriocladus] requires no new combinations [sic] and affects insofar as known only one species [sis], there seems to be no need to conserve Lachnocladium. As the other species [than L. brasilionse] now listed under Lachnocladium are seemingly for the most part Ptorula species, synonyms of E. brasilionsis, or species belonging to other genera, actually, unless the sense of the genus were greatly broadened [sic] with little emphasis being placed on the nature of the spores and the hymenial composition, because of the many Lachnocladium combinations that must be discarded, the name Lachnocladium will become confusing [sic]."—Doty (in Lloydia 11: 131, 1948).

It looks as if Doty had in mind a monotypic genus (Eriocladus brasiliensis) entirely his own, not yet clearly taxonomically outlined by him,18 which he thought acceptable to everybody. Every statement in the quoted anthology of incorrect information, including the strictly personal generic concept, must be called misleading. First, "unless the sense of the genus were greatly broadened," must be altered into the statement that the original concept has given rise to a very large genus, every restriction of which (apart from Doty's) left a still very considerable residue. The most drastic restriction thus far published and taking into account all described species is Corner's (1950): it resulted in a taxon consisting of 19 species plus 17 species incertae sedis. Even for this strongly reduced group conservation appears very much indicated! Secondly, after the introduction of Eriocladus no new names or recombinations have been published under this generic name as far as I am aware; the number of species published in combination with the name Lacknocladium is far in excess of the seven original combinations with Eriocladus. Of the two generic names, only Lachnocladium has been taken up. Thirdly, the replacement of that name by Eriocladus will give rise to more confusion than its retention would. Lachnocladium has been proposed for conservation in the first place for the benifit of mycologists

Compare also under Stelligera.
 Doty's conclusion was adopted by Rogers (1939: 453; 1950: 27).

with a preference for a broad generic concept, but those who do not maintain the genus in Léveillé's and Saccardo's inclusive circumscription, too, will certainly appreciate the retention of that name for the emendations. The point is, what would happen if to the Saccardoan genus the name Eriocladus were restored (Donk, 1950: 9), or even to Corner's very much restricted genus. The answer is: many new combinations under Eriocladus (i) for the numerous species placed in the genus after the few ones originally included by Léveillé and still retained in it, and (ii) for the many doubtful species that would have to be transferred to Eriocladus because they are not yet referable to other genera. This would be a senseless creation of new combinations. Lastly, Doty's last argument also conflicts with the spirit of the Code, which emphatically forbids the rejection of names of much restricted genera like Agaricus and Polyporus.

Gliocoryne Maire apud Guinier & Maire in Bull. Soc. bot. France 55: exxi. 1909. — Ετγμοιος: γλοιός, sticky substance; κορύνη, club. Gender: f. — Type species (by original designation and only original species): Clavaria uncialis Grev. ex Fr.—It seems likely that Maire interpreted Greville's and Fries's fungus correctly.

Hericium Fr. 1825, not Hericium Pers. ex S. F. Gray 1821, type species, Hydnum hystrix (Pers.) ex Fr., with fruit-bodies supposed to be erect, will be treated with "Hydnaceae."

Heringia Schw.-See "Thelephoraceae."

[Hirsutella Pat. in Rev. mycol, 14: 67. 1892 (original description reproduced by Speare in Mycologia 12: 62, 1950). — Type species: Hirsutella entomophila Pat. — This genus is not a basidiomycetous one; it belongs to those Deuteromycetes (Moniliales) that represent imperfect Ascomycetes; compare Speare (op. cit. pp. 62-76). Often classed, even to-day among "Clavariaceae."]

Holocoryne (Fr.) Bonord., Handb. Mykol. 166. 1851. — ΕΤΥΜΟΙΟΘΥ: δίος, entirely; κορόνη, club. — ΤΥΡΕ SPECIES (selected): Clavaria falcata Pers. ex Fr. 6—Often called Clavaria acuta Fr. — BASINYM: Clavaria sect. Holocoryne Fr., Epicr. 573. 1838.—Bonorden indicated explicitly that the "G[enus] Clavaria Vaill. / Fries Epicrisis p. 571" was divided by him into three smaller genera: Holocoryne (Fr.) Bonord., "Cornicularia. Fr.," and Ramaria (Fr.) Bonord. — SCOPE. Bonorden did not list species for

<sup>15</sup> And compare in Grevilles 21: 47. 1892.

<sup>&</sup>lt;sup>10</sup> As to this species, compare also Malençon (in Bull. Soc. mycol. France 68: 304, 1953).

these genera and one has to turn to the cited work of Fries for them. There is one exception. Of Holocoryne one species was mentioned: "Holocoryne. Fr. / Clavaria im engern Sinne; hat ein keuliges, selten ästiges Stroma . . .. Einzelne Arten haben ein ästiges Stroma, hier sind die Aeste aber stets keulenförmig, z.B. Clavaria rugosa." — Typification. It is evident that C. rugosa Bull. ex Fr. was mentioned as an example of an aberrant group within the genus, rather than as a typical representative of it! Though it is the only species mentioned, it is here left out of further consideration. The remark (Doty 1948: 129, sub Clavulina) that "Bonorden even listed Clavaria rugosa as typical species" is obviously not doing justice to the facts. It is now often included in Clavulina J. Schroet. [Holocoryne was listed before (Donk, 1933: 74) as a synonym of Clavaria Fr. and not of Clavulina.] - As delimited in the description by Bonorden, his genus Holocoryne represents "Clavaria im engern Sinne," that is, the unbranched species in general. It equals Clavaria sect. Holocoryne plus Clavaria sect. Syncoryne Fr. So the attention is drawn at once to the type species of Clavaria, C. fragilis Fr. That species, however, belongs to section Syncoryne which is not the name-bringing one. It is, therefore, passed over here and a species of section Holocoryne is selected (also as the type of Clavaria sect. Holocoryne Fr.). In choosing Clavaria falcata Pers. ex Fr., Fries's first few species were carefully avoided. These were excluded by Karsten [in Rev. mycol. 3 (No. 9); 21, 1881] and transferred to Clavariella P. Karst., q.v. They are now often considered members of Clavariadelphus Donk. Corner (1950: 36, 39, 689) adopted this choice, calling the species Clavaria acuta Fr. of which C. falcata is regarded as a synonym. - Typonym. Clavaria falcata Pers. ex Fr. sensu Juel, the type species of Stichoramaria Ulbrich, q.v., is a different species from C. falcata as currently interpreted.

REINWARDTIA

Hormomitaria Corner, Monogr. Clav. (in Ann. of Bot. Mem. 1:) 410, 696. 1950. — ΕΤΥΜΟΙΟΘΥ: δομος, necklace; μίτος, thread, Gender: f. — TYPE SPECIES (only original species, and by original designation on p. 689): Hormomitaria sulphurea Corner.

Hypolyssus "Berk."-See "Thelephoraceae."

Lachnoeladium Lév. in Orb., Diet. univ. Hist. nat. 8: 487, 184611; Consid. mycol. 108. 1846. — ETYMOLOGY: lagrós, sheep's wool; zládos,

branch, Gender: n. — Type species (same as of basinym): Eriocladus brusiliensis Lév. — Basinym: Eriocladus Lév. (1846), q.v. — Valid MIRLICATION, Lacknocladium was introduced in the most summary manner acceptable: "Lachnocladium, Lév. = Eriocladus, Lév." Compare Donk (1949: 100). — REMARK. Streinz (Nomencl. Fung. 265, 346, 1862) listed "Lachnobolus brasiliensis Lév. in sched." as a synonym of Eriocladus heasilieusis Lév., at the same time ascribing the generic name Lachnobolus to Fries: the latter generic name has nothing to do with Clavariaceae. Moreover, Streinz (op. cit. p. 346) did not enumerate Léveillé's generic isonym itself, but in place of it he listed "Lachnocladium Berk." with a single species, L. hookeri Berk. — NOMEN CONSERVANDUM (proposed). See under Eriocladus,

Donk: Generic names ("Clavariaceae")

Lentaria Corner, Monogr. Clay. (in Ann. of Bot. Mem. 1:) 437, 696. 1950. — ETYMOLOGY: lentus, pliant, Gender: f. — Type species (by original designation); Clavaria survulus Berk. — Scope. Introduced with 12 species.

Maning Adaps., Fam. des Pl. 2: 5, 1763 (devalidated name). — Type species (selected): Coralloides sp. Mich. pl. 88 f. 2.—For this plant Persoon coined the name Clavaria ignea Pers.; it might belong to Ramaria (Fr.) Bonord, emend. Donk. - As has been remarked:

"Adanson published the name citing in connection herewith 'coralloider Micheli Pl. 85, f. 2 and 6.1 [18] Micheli's genus as shown both by his description and figures was undoubtedly the branched forms of our modern genus Clavavia. Adanson's genus, therefore, . . . would properly belong to the family of the Clavariaceae . . .."-Banker (in Mycologia 4: 271, 1912).

The original species presumably represent members of Clavulinopsis Overeem, Ramaria, Clavulina J. Schroet., and Gumnosporangium Hedw. f. ex Lam. & DC. The first species cited by Adanson (Mich., pl. 88 fig 2) is here quite arbitrarily designated as the type species. For none of the indicated species Micheli reported an Italian name that might have been the source of Adanson's generic name ("Manina, Ital."). - Although Adanson did not adopt Linnaeus's binomial system of nomenclature, his generic names for fungi would have been regarded as validly published, if the starting-point date for these plants had remained 1753 (devalidated name). The name has not been validly re-published in its original sense. -- Manina Banker (1912), q.v., is a genus of "Hydnaceae."

Martela Adans.—See Martella Adans, ex O.K.

<sup>17</sup> One often finds 1846 cited as the date; Pfeiffer gives 1849. The copy from Wageningsn I recently consulted bears both 1846 and 1847, the first date being the one given on the title-page, the second, on the cardboard cover.

<sup>18</sup> Correctly: "Corniloides Mich. t. 88, f. 2 à 6,"

Martella Endl. 1836, not Martella Adans ex O.K. 1898, type species, Martella echinus Scop. = Hydnum echinus (Scop.) ex Fr., with fruitbodies supposed to be erect, will be treated with "Hydnacese."

Martella Adans. ex O.K. 1898, not Martella Endl. 1836, type species, Agaricum sp. Mich. pl. 64 f. 1 = Hericium hystrix Pers., with fruit-bodies supposed to be erect, will be treated with "Hydnaceae."

Massecola O.K., Rev. Gen. Pl. 2: 859. 1891. — ETYMOLOGY: G. E. Massec. Gender: f. — Type species (only original species of basinym): Sparassis crispa (Wulf.) ex Fr. — Basinym: Sparassis Fr., q.v., which is by some authors considered to be preoccupied by Sparasis Ker-Gawl. — Valid Publication. Massecola owes its valid publication to a reference: "Sparassis Fries 1819 . . .. Die Arten sind nach Saccardo syll. VI 690/1 von Sparassis übertragen." The date "1819" refers to Fries's "Novitatiae," cited under Sparassis in the present paper. The application of Massecola by Donk (1933: 70) is accompanied by a description.

[Matruchotia Boul. in Rev. gén. Bot. 5: 401. 1893. — Type species (only original species): Matruchotia varians Boul.—There can be little doubt that this is an imperfect fungus of somewhat clavarioid appearance (just as Hirsutella Pat. with which it has been combined). Burt (in Ann. Missouri bot. Gdn 11: 27. 1924) "is disposed to regard Matruchotia as a genus of the 'Stilbaceae.' "Some years later Gäumann (Vergl. Morph. Pilze 506. 1926) placed Hirsutella, inclusive of Matruchotia, in Corticiaceae; and J. Rick (in Brotéria, Sér. Ci. nat. 3: 77. 1934) treated Matruchotia as a member of Thelephoraceae.]

Merisma Hill .- See under Merisma Pers. ex S. F. Gray.

Merisma Pers. ex S. F. Gray, Nat. Arrang. Brit. Pl. 1: 653. 1821. — ETYMOLOGY: μερίς, portion, part. Gender: f. — Type species (selected): Merisma foetidum Pers. = Thelephora palmata (Scop.) ex Fr., according to Persoon himself (Mycol. europ. 1: 155. 1822). — Protonym: Merisma Hill, Gener. nat. Hist. 2: 60. 1751.—It is likely that Persoon borrowed the name from J. Hill, who coined it for the branched clavarias (and other fungi of similar appearance) in general. However, Persoon gave it a new meaning; the true branched clavarias he included in Clavaria Vaill. ex L.; he did not refer to Hill. — Devalidated name: Merisma Pers., Tent. 74. 1797; Comm. Fung. clavaef. 92. 1797; Syn. Fung. 582. 1801.—In the first publication cited Persoon did not mention any species, In the next one ten species were definitely included, among which were Merisma foetidum Pers. (first species) and M. cristatum Pers. — Scope.

When Gray re-published this generic name, his species were the two just mentioned by name, Merisma cristatum coming first. — TYPIPICATION. I fully underline the following quotation:

Since the first of Gray's species "is probably the same as Schaeina incrustans (Pers. ex Fr.) Tul. (cf. Burt, Missouri Bot, Gard, Ann. 2: 752, 1915; Bourd, & Galz., Hym. Fr. 231, [1928]), to adopt it as the type would make necessary either discarding the generic name Schaeina Tul. or conserving Schaeina, [1871], against Merisma. Therefore M. footidum is hereby designated as the lectotype of Merisma Pers. ex Gray. . . M. footidum is probably the same as Thelephara palmata [Scop.] Fr. . . . To avoid possible nomenclatorial complexities that might arise from the existence of Thelephara trib. Merisma [Pers.] Fr., Syst. Myc. 1: 432, 1821, T. palmata [Scop.] Fr. is hereby designated the lectotype of that Friesian tribe."—Rogers (in Mycologia 36: 77, 1944). The square brackets are as in the original.

Doty (1948: 132), too, proposed Merisma foetidum as the type species. It may be remarked in this connection that Karsten [in Rev. mycol 3 (No. 9): 23. 1881] emended and restricted Merisma Pers. to the branched, Clavaria-like species of Thelephora Ehrh. ex Fr. (the latter genus in the present current delimitation); one of his three examples is Th. palmata.—Remarks. Shortly after Gray the name was also re-published by Persoon himself (Mycol. europ. 1: 155. 1822), — Merisma was temporarily taken up by Léveillé (in Ann. Sci. nat., Bot. III 5: 157. 1846) in a circumscription rather closely agreeing with that of Pterula Fr. — Homonym: Merisma (Fr.) Gill. (1878; "Polyporaceae").

[Microcera Desm. in Ann. Sci. nat., Bot. III 10: 359. 1848. — Type species (only original species): Microcera coccophila Desm. — This genus is non-basidiomycetous and belongs to Deuteromycetes (Tuberculariaceae). It is mentioned here because Fries (1874: 689) listed it among his Clavariei.]

Mucronella Fr.-See "Hydnaceae."

Mucronia Fr.-See "Hydnaceae."

Myxomycidium Mass. in Kew Bull. 1899: 179. 71901. — ΕΤΥΜΟΙΟΘΥ: μόξα, mucus; μυκίδιον, small fungus. Gender: n. — ΤΥΡΕ SPECIES (only original species): Myxomycidium pendulum Mass.

Parapterulicium Corner in Ann. of Bot. II 16: 285. 1952. — ETYMO-LOGY; napá, next to; the genus Pterulicium. Gender: n. — TYPE SPECIES (by original designation): Parapterulicium subarbusculum Corner. — Scope. Introduced with two species.

[Penicillaria Chev., Fl. Paris 1: 111. 1826. — Type species (only original species): Clavaria penicillata Bull.—This species has dropped

out of current literature; it is doubtful whether it represents a (perfect state of a) basidiomycete at all, It may well be based on a sterile mycelium (Deuteromycetes), and in this case *Penicillaria* would be a nomen anamorphosis. See also under *Ptsrula!* Corner (1950: 689), evidently by error, listed *Pterula multifida* Fr. as the type species of *Penicillaria*. — Typonym: *Pterula* Fr. (1821; nomen provisorium; not *Pterula* Fr. 1825), q.v. — Homonym: *Penicillaria* Willd. (1809; Gramineae). — Impriorable on account of the earlier homonym.]

Perona "Fr."-See "Thelephoraceae."

Phacorhiza Pers., Mycol. europ. 1: 192. 1822. — ETYMOLOGY: queos, lentil; &a, root. Gender: f. — Type species (only original species): Phacorhiza sclerotioides Pers. = Typhula sclerotioides (Pers.) Fr.—The author emphatically stated that this was not Clavaria sclerotioides DC. = Pistillaria sclerotioides (DC.) ex Fr. — Variant spelling: "Phacorrhiza": Brongn. in Dict. Sci. nat. 33: 575. 1824; Fr., Elench. 1: 236. 1828 (in synonymy); Ainsworth & Bisby, Dict. Fungi, 2d Ed., 235. 1945; etc. — Phacoriza Grev., Scot. crypt. Fl. 1: pl. 43. 1823.—A misprint occurring once, the name in other instances being spelled Phacorhiza.

Phaeoaphelaria Corner in Ann. of Bot. II 17: 357. 1953. — ETYMOLOGY: φαιός, dusky; the genus Aphelaria. Gender: f. — TYPE SPECIES (by original designation and only original species): Phaeoaphelaria australiensis Corner.

Phasocoryne Clem .- See Phasoclavulina.

Phaioclavulina.—See Phaeoclavulina.

Phaeoclavulina W. Brinkm. in Jber. westfäl. ProvVer. Wiss. Kunst, Bot. Sect. 25: 197. 1897. — ETYMOLOGY: quois, dusky; the genus Clavulina. Gender: f. — Type species: (only original species): Phaeoclavulina macrospora W. Brinkm. — Remark. In an "attempt to anchor the genus to a well-known species that seems to preserve the original author's conception of the genus," Doty (1948: 132) proposed Clavaria broomei Cotton & Wakef. as the type species. Such a procedure seems unwarranted. Clavaria broomei has been identified with Clavaria nigrescens W. Brinkm. (name not validly published by Brinkmann). — Isonym & Variant spelling: Phaeocoryme Clem. in Univ. Stud. Nebraska 3 (1): 72, 1902.—

A name change introduced for linguistic reasons as follows: "Phaioclavulina = Phaeocoryne (\$\psi a\pi\sigma\sigma\$, dusky, \$\pi\opi\sigma\eta\eta\$, club)." This isonym is apparently not validly published as not even the author's citation of the basinym was given. One might perhaps consider the new name to be accompanied by a valid description represented by the etymological explanation, but I refuse to confuse the etymology of a name with a description." — Note the error in the spelling of the basinym.

Phaeopterula (P. Henn.) Sacc. & D. Sacc. in Sacc., Syll. 17: 201, 1905. - ETYMOLOGY: gamés, dusky; the genus Pterula. Gender: f. - TYPE species (only original species of basinym): Pterula hirauta P. Henn. -BASINYM: Pterule subgen, Phaeopterula P. Henn. in Warb., Monsunia 1: 9, 1899.—This subgenus was introduced for one species, Pterula hirsuta P. Henn., which, therefore, is the type of the subgeneric name: "Pterula Fries. . . . Bezüglich der hell-bräunlichen Sporen und Pubescenz stellt [Pt. (Phaeopterula) hirsuta P. Henn.] eine neue Untergattung, Phaeopterula, dar."-Hennings (l.c.). - Valid Publication & scope, Hennings himself never validly published the generic name. A few years after the introduction of the subgeneric name, the same author (Hennings in Hedwigia 43: 175, 1904) described a second species, this time under the specific name Phaeopterula juruensis P. Henn., and only casually mentioning the earlier species ("Von Ph. hirsuta P. Henn. ist die Art ganz verschieden . . ."). No generic caption or description and not even a reference to the already published subgeneric name and description were given. The generic name was not properly established until Saccardo & D. Saccardo (l.c.) furnished a description when adopting Phaeopterula as a genus, including both species already mentioned; author's citation, "P. Hennings." I don't see why Saccardo should be credited with having "inadvertently" validly published Phaeopterula, as has been remarked by Doty (1948: 133). — TYPIFICATION. As the type species of the generic isonym that of its basinym. Pterula hirsula, must be appointed; it was already suggested for "Phacopterula Henn. . . . 1904" by Clements & Shear (Gen. of Fungi 345, 1931) and also proposed by Doty (l.c.).

Phacotyphula P. Henn. in Bot. Jb. 28: 320, 1901 (provisional name). — This name was introduced as a provisional one (and hence not validly published) in an observation under Typhula phacosperma P. Henn.:

"Die Sporen sind braun, so dass die Art mit keiner der beschriebenen Arten übereinstimmt, vielleicht besser als eine Gattung Phacotyphula abzutrennen sein dürfte."—Hennings (l.c.).

<sup>&</sup>lt;sup>29</sup> In Bresadola's herbarium (now at Stockholm) is a collection from Westphalia marked Clausia nigrescens Brinkmann. Coker (Clav. U.S. and Can. 187, 1923) identified it with Clausia broomei. I made the slip in calling the fungus "Ramaria nigrescens (Brinkm.) Donk comb. nov. (= Clausia Broomei Cotton et Wakef.)" (Donk 1933: 194). Coker ascribed four-spored basidis to Clausia broomei, while Phaeoclausian was introduced for two-spored species, as the brown-spored counterpart of Clausina J. Schroet.

<sup>29</sup> See also under Podostrombium Kunze ("Thelephoraceae") for a discussion on a similar case.

I do not know of a valid publication of it.

Physalacria Peck in Bull Torrey bot. Cl. 9: 2. 1882 (reproduction of description and figure in Rev. mycol. 4: 127 pl. 26 f. 13. 1882). — ETY-MOLOGY: qvoallic, bladder; āzga, top. Gender: f. — TYPE SPECIES (only original species): Physalacria inflata Peck.—This species was published as a new one. Therefore, Mitrula inflata Schw. should not be taken as its basinym although it is usually considered conspecific. — ISONYM: Eoagaricus L. C. C. Krieger, q.v., a superfluous name.

Pistillaria Fr., Syst. mycol. 1: 496. 1821. — ETYMOLOGY: pistillum, pestle, Gender: f. — Type species (selected): Pistillaria micans (Pers.) ex Fr. or P. quisquiliaris (Fr.) ex Fr. - Scope, Introduced with seven species. Of these the author indicated to have seen freshly collected specimens of Pistillaria micans (Pers.) ex Fr. (first species), P. quisquiliaris, and P. pusilla Pers. ex Fr.; of the other ones he saw dried specimens of P. ovata (Pers.) ex Fr., P. muscicola (Pers.) ex Fr. (genus Eocronartium Atk., Auriculariaceae), and P. diaphana (Schum.) ex Fr.; P. sclerotioides (DC.) ex Fr. he knew only from its description. - Typification. Several years ago now Donk (1933: 101-102) emended Pistillaria rather drastically, retaining in it, of the original species, only P. quisquiliaris (selected as the type; reasons stated). Perhaps, a restatement of the facts may be useful. The principal argument lies in the emphasis on the nature of the context given in the generic description of the genus from 1835 onwards by the author himself. Compare: "ceraceo-corneus homogeneus" (Fries, Fl. scan. 340. 1835); ". . . ceraceo-corneus, induratis . . . substantia primo molli, subcarnosa" (Fries, Epicr. 586, 1838); "Pistillaria quasi Tremellina indurata" (Fries, Epicr. 588); "Fungi e ceraceo cornei. rigentes" (Fries, 1874: 13), ". . . sicca indurata . . ." (Fries, 1874: 686). The only original species known to Fries from material when establishing the genus that really meets these requirements is Pistillaria quisquiliaris. Compare Donk (l.c.; translated): "The fruit-bodies are membranous when fresh with soft contents; after drying, however, the nucleus is cartilagineous and remains tough even after prolonged soaking," Pistillaria quisquiliuris was the first of the species described by Fries (Obs. mycol. 2: 294, 1818, under Clavaria). Doty (1948: 133) proposed the same species. It may be pointed out that shortly after the publication of Pistillaria. Greville excluded in a general manner all sclerotia-producing species from Pistillaria (and Typhula Fr. as well), referring them to Phacorhiza Pers.:

". . . Proceeding upon the above grounds, I have extended Persoon's new genus [Phacorhica], and included all those Clavariae which have so singular a character as

the radicular tuber,—surely a more striking distinction than a slight variation in the form of the hymenium. The fructification is similar in the whole.

Donk: Generic names ("Clavariaceae")

"Fries has formed several genera of Clavaria, on which future observations will be made. His Typkula and Piatillaria contain plants which I consider as coming more naturally under Phacorhiza."—Greville (Scot. crypt. Fl. 1: text to pl. 43, 1823).

Since no sclerotia of P. quisquiliaris had been reported at that time (they are hidden in the fern-stalks), one may conclude that Greville did not exclude it from Pistillaria. Of course, this argument may also be used the other way round. - Attention has to be drawn to an earlier selection. Clements & Shear (Gen. of Fungi 345, 1931) suggested Pistillaria micans, which does not become really typically horny upon drying (transferred by Donk to Cnazonaria Corda). Perhaps, this fungus contributed the words "Sporidia emergentia" of the original generic description. Corner (1950: 99) is not in favour of P. quisquiliaris because he does not like the consequences; he transferred it to Typhula Fr., in view of its sclerotium, and shrinks back from the acceptance of the name Cnazonaria Corda for what he continues to call Pistillaria (a step already taken by Donk), His choice would rather be: "Lecto-type: P. musilla or P. micans . . . " (op. cit. p. 473) and, of these two species, he evidently preferred P. micans (op. cit. p. 689), Compare also Corner (in Nature 168: 1031, 1951). I find it difficult to make up my mind in this matter. — Typonym. Compare Scleromitra Corda (1829), based on a species (Pistillaria coccinea Fr.) which is now currently identified with Pistillaria micans.

Pistillina Quél. in C.R. Ass. franç. Avanc. Sci. (Reims) 9: 671. 1880 (reprint: '10e Suppl., p. 11. 1880). — ETYMOLOGY: pistillum, pestle. Gender: f. — Type species (only original species): Pistillina hyalina Quél.

Podostrombium Kunze.—See "Thelephoraccac." Podostromium.—See Podostrombium.

Podostrumbium.—See Podostrombium.

Polyorus.—See Polyozus.

Polyozus P. Karst. in Rev. mycol. 3 (No. 9): 22. 1881 (as Polyorus).

— ETYMOLOGY: moids, many; #\$\colon contorta\$ P. Karst. — Type species (only original species): Thelephora contorta P. Karst. = Merisma tuberosum Grev. (Scot. crypt. Fl. 3: text to pl. 178, 1825) ex Fr. (Elench. 1: 167, 1828). — Remark. Polyozus is included in this enumeration because only holobasidia have been reported for several collections of its type species.

que" (4: 64, 1882) mentions Quelét's paper in its issue of January 1, 1882. It reproduces the original description.

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and the plant has been classified accordingly. In the European collections studied by me the basidia shade-in varying degree-into basidia which are rather similar to those of Tremellaceae (the variation occurring in the hymenium of one fruit-body); this remarkable phenomenon was first recorded by Bourdot & Galzin (Hym. France 82, 1928, as Thelephora contorta P. Karst.). Apart from the plasticity of the basidia, this species is, I believe, also reminescent of Tremellodendron in some other features. - STANDARD SPELLING. The original spelling "Polyorus" is doubtlessly an unintentional (typographical) error as becomes clear from Karsten's subsequent use of the name. - Homonym: Polyosus Lour. (1790; Rubiaceae), also spelled Polyozus (by Willdenow and Wittstein). - Status. Impriorable on account of the earlier homonym.

REINWARDTIA

Pseudotyphula Corner in Ann. of Bot. II 17: 366, 1953. - ETYMOLO-GY: wwwdig, false; the genus Typhula. Gender: f. - Type species (by original designation): Pseudotyphula ochracea Corner. - Scope. Introduced with two species.

Pteridium Clem.-See Pterula.

Pterula 1821 (nomen provisorium) .- See Pterula Fr. 1825.

Pterula Fr., Syst. Orb. veg. 90, 1825; in Linnaea 5: 531, 1830. -ETYMOLOGY; ατερόν, feather. Gender: f. — Type species (selected) : Clavaria plumosa Schw. - Scope. When Pterula was validly published in 1825 Fries indicated the contents of the genus as "S. M. I, p. 496 in obs. -Speciebus adde: Pter. plumosam Schw. Car. n. 1089, sub Clav." The reference to his "Systema" covers Clavaria penicillata Bull. ["(Altera species C. penicillata Schum. l.c. atrofusca.)"]. Thus, the contents in 1825 consisted at least of Clavaria penicillata Bull. and C. plumosa Schw. -PROTONYM: Pterula Fr., Syst. mycol. 1: 464, 496, 1821 (nomen provisorium) .- Fries already published the name Pterula before 1825. On page 464 one will find the remark, "Clavaria penicillata Bull. est typus novi generis (Pterula) . . ."; no description. On page 496, Clavaria penicillata Bull. is mentioned (with description) under its original name in small type, as a species Fries was not yet able to place with confidence, with the designation "genus inquirendum." It is currently believed that in 1821 Pterula was published merely as a provisional name as it was not definitely accepted by the author on that occasion. - Typification. Doty (1948: 133), Donk (1949: 145-146), and Rogers (1950: 32) concluded that when the generic name was validly published in 1825, the reference to the previous publication of the name, where C. penicillata was the only 'original'

species, made it sufficiently clear that that species had to be taken as the type, Corner (1953: 295-297) convincingly pointed out the fallacy of this conclusion and I now agree with him that the correct type species should be C. plumosa, Fries's second species of 1825. - Fries only knew C. penicillata from Bulliard's description and illustration and, with it hesitated to establish the genus in 1821 ("genus inquirendum") and decided to introduce it definitely (in 1825) only after he became acquainted with Clavaria plumosa Schw., for which he made the new combination straightaway, while he did not at that time do the same for C. penicillata. Of the two syntypes of 1825 the former was undoubtedly the more imnortant fungus to the author at that time and Clavaria penicillata "the dubious and discordant element that caused Fries to alter his mind twice, and finally to establish Pterula as a genus of Hymenomycetes by excluding P. penicillata" (Corner 1953: 297). In 1830 Fries (l.c.) made the combination Pterula penicillata (Bull. ex Fr.) Fr., but already in 1832 [Syst. mycol. 3 (2): 285], when reducing Pterula in rank to Anthina subgen. Pterula (Fr.) Fr., he listed P. penicillata as doubtfully belonging to this taxon, mentioning that it might be a true Anthina, such as A. flammea (Jungh.) ex Fr. From this publication it also becomes clear that he studied De Schweinitz's species from dried material and we may assume that it was sent to him by its author himself. Still later P. penicillata was defintely excluded:

"Ad unicum hujus generis [= Pterulae] typum europasum (Pt. subulata Fries in Linn, 1830; dubie enim addita Clav. ornithopodioides Bull. est vera Anthina!) accedunt multae exoticae: Pt. (Clavar.) Merismatoides, Schw.! . . ., Pt. (Clav.) tenuz Schw. . . ., Pt. (Clav.) dendroides Jungh. . . . et plures novae, Pt. capillarie etc."-Fries (Summ. Veg. Scand. 2: 339, 1849).

In connection with this quotation it must be remembered that Clavaria plumosa was described from North America and that 'Clav. ornithopodicides Bull.' is an error for 'Corallo-Fungus croceus, ornithopoidicides Vaill., Clavaria penicillata Bull.' Finally, in his last work when treating the European species of the genus, Fries (1874: 681) did not even mention P. penicillata!

"At the hands of Fries the genus has evolved from P. plumosa, through [the two European species added in 1830 and 1863], embracing numerous exotic, or tropical species. The types of these three succies are in the Friesian herbarium, and I have been able to examine them . . .. All three are congeneric in the sense of Pterula as have used in my monograph, following the customary Priceian tradition. P. plumosa is the earliest species and was for five years the only binomial in the genus. It must, therefore, be the type and lectotype in the modern nomenclatorial sense,"-Corner (1958: 297).

Donk (1949: 146) already proposed Clavaria vlumosa as the type species of "Pterula Fries 1830" (see below). — Clements & Shear (Gen. of Fungi 345, 1931) suggested Pterula multifida Fr. as the type species. It is unacceptable, being added to genus as late as 1863. — At first Corner (1950: 118, 502, 689) considered Pterula subulata Fr. the type species. but on page 523 he remarked under P. subulata: "chosen as the typespecies. It may be advisible to change the type of Pterula to P. plumosa." Remark. When still convinced that Clavaria penicillata had to be taken as the type species, Donk (1949: 145-146) proposed the conservation of Pterula sensu Fr. 1830 (type species, Clavaria plumosa) against Pterula Fr. 1825 (type species, Clavaría penicillata Bull.).22 The reason for this was that with C. penicillata, Pterula would be a nomen dubium, if not a nomen anamorphosis and that, therefore, modern mycology be deprived of the name of a considerable genus of Hymenomycetes. There is every reason to believe (as Fries did in 1849) that C. penicillata is based on an imperfect fungus (sterile mycelium) and with this species as the type, Pterula would be unacceptable to most mycologists, Rogers (1950: 32) concluded that the proposal should be rejected because he thought that conservation of later applications of a name were inadmissible, an opinion he had to withdraw on a legal basis (Rogers, 1950a), although he still does not favour this kind of conserved names.23 In view of the altered typification defended by Corner and accepted above. I, herewith, withdraw the proposal, feeling that the current application of the name has been put on a secure base. — ISONYM: Pteridium Clem, in Univ. Stud. Nebraska 3 (1): 73, 1920.—Introduced as a correction, as follows: "Pterula = Pteridium"—nothing else. Since not even the author of Pterula was cited, this isonym has, I believe, to be regarded as not validly published. It would in any case be a later homonym of Pteridium Scop. (1760; Filicales: nomen conservandum).

Pterulicium Corner, Monogr. Clav. (in Ann. of Bot. Mem. 1:) 536, 699. 1950. — ETYMOLOGY: The genus Pterul(a); the genus ((Cort)icium. Gender: n. — Type species (only original species, and by original designation on p. 689): Clavaria xylogena Berk. & Br.

Ramaria Holmsk. (devalidated name).—See under Ramaria S. F. Gray.

Donk: Generic names ("Clavariaceae")

Ramaria Rafin.—See under Ramaria Holmsk.

Ramaria S. F. Gray, Nat. Arrang. Brit. Pl. 1: 655. 1821. — ETYMOLOgy: ramus, branch. Gender: f.

Type species (selected): Clavaria pratensis Pers. = C. corniculata Schaeff. ex Fr.—If a type specimen had to be indicated it would be the type of C. pratensis, preserved in Persoon's herbarium at Leyden, where I studied it.

Scope. Gray deliberately restricted the name Ramaria Holmsk, to only a part of the branched clavarias as is testified by his species and in particular by his generic description which reads:

\*Thallas fleshy, cylindrical, branched, generally pipey, below slender; sporidia scattered on the upper parts of the thallus."—Gray (l.e.). Spacing is mine.

His genus rather compares with Persoon's second subdivision of the branched clavarias, "Caule tenui s. ramis omnibus simul sumtis tenuior," and with Nees's Clavariae ramulosae group Ramalinae, discussed under Cladaria Ritgen, q.v.! He apparently wanted to exclude from this emendation Persoon's first subdivision of the branched clavarias, which corresponds with Nees's Clavariae ramulosae group Botryoideae. For some reason this second taxon (inclusive of Clavaria botrytis Pers.) did not find a place in Gray's book. That author had two bibles in relation to Fungi, Persoon's "Synopsis" (1801) and Nees's "Das System der Pilze und Schwämme" (1817)24 and it is quite clear how he arrived at his conception of Ramaria, the name of which he found cited by Persoon (Syn. Fung. 585, 1801). who headed the branched clavarias thus: "A. Coralloideae: clavulis ramosis. (RAMARIA Holmsk.)." Gray's eight (British) species confirm his generic description. This conclusion is at variance with Corner's (1953: 287), who argued that Gray, as the first author validly to publish Ramaria Holmsk., did so under this very name and authorship, and naturally did not refer to such Danish species described by Holmskjold as had not been recorded for the British Isles (forgetting Clavaria botrytis by an over-

<sup>22</sup> Compare Penicillaria Chev. (1826).

<sup>23</sup> Dr. D. P. Rogers in his function of Secretary of the Special Committee for Fungi (in Taxon 2: 29, 1958, in Mycologia 45: 313, 1958) excluded the proposal from a trial because he classed it with those proposals for conservation of a name that would be retained without conservation against the nomina rejiciends proposita. He never explained on what grounds Pterula [sensu] Fr. 1830 could by any change be the correct name against Pterula Fr. 1825; and I am unable to inform the reader about them either.

the printing, has to my great regret, prevented me from [returning my thanks for the kind assistance I have received], as a slight return for the many advantages I have received from the use of his Library and Herbarium; and has also been a cause of great delay, in being obliged to wait the arrival of another copy of Esenbeck's work from Germany, that those interesting plants the fungi might be arranged according to the latest improvements."

sight). Gray, Corner stated, took Holmskjold's genus and description and merely put in it those British species which he had to list. If this had indeed been the case I would not have felt seriously troubled about Gray's re-publication, but, as demonstated above the inevitable conclusion is that Gray did gave the genus a new meaning, and this embarrassing point can not well summarily be put aside.<sup>26</sup>.

Typification, Comparing Gray's specific descriptions one by one with his generic description (quoted above), Donk (1949: 108) concluded that the species agreeing best with it was Clavaria pratensis Pers. and it was accordingly selected as the type. This selection would make it possible (but not very advisable) to maintain the connection between Grav's and Holmskjold's names in the author's citation, because Clavaria pratensis includes Ramaria muscoides Holmsk., which had been cited before (cf. Persoon, Syn. Fung. 590, 1801) as a synonym, correctly so, as is currently assumed, Corner (1950: 74) agreed: "Ramaria S. F. Gray (1821) should strictly have precedence over Clavalinopsis Overeem, as it included C. corniculata, but the definition of Ramaria in this sense would be highly confusing and . . . is not to be recommended." Afterwards, when defending Clavaria botrytis as the type species and rejecting a choice by Doty, Corner (1953: 288) thought that if Doty's premiss (not accepted by Corner) were tenable, C. corniculata (= C. pratensis) should have been used as the type species of Ramaria as published by Gray.

When chosing the type, Donk was not yet aware of the lectotype proposed by Doty (1948: 134), who had selected Clavaria rugosa Bull. shortly before. Donk, deliberately, did not pick out this, Gray's second, species, for various reasons, a very obvious one being that Gray's description of it ("branches few, irregular") compares unfavourably with the generic one. On the here accepted basis for selecting types, prescribing, for instance, that a species agreeing very much better with the description (to which the generic name owes it valid publication) is preferable to one which agrees decidedly less well, I cannot follow Doty. There is another unfortunate side to Doty's choice: his selection (if accepted) would make Ramaria S. F. Gray the correct name for the genus now known as Clavalina J. Schroet., q.v. Recently Corner (1953: 286-290) has put forward several reasons why he, too, completely disagreed with Doty; one of them is that Clavaria rugosa as an almost unbranched species was not admitted by Holmskjold himself!

Corner (1950: 124, 543, 689) has attempted to avoid the loss of the game Ramaria for the genus he so called by selecting Clavaria botrytis Pers. as the type species of Ramaria S. F. Gray. Recently he again concluded that "the basis of Ramaria auct. is Ramaria Holmsk. (1790), validated by S. F. Gray (1821)," and that this genus as emended by Donk and Corner should have Clavaria botrytis Fr. as its lectotype (Corner, 1953: 286-290). This indeed would be the ideal solution (see below), but I am afraid that this species cannot be accepted for the generic name as published by Gray, for not only was it not mentioned by that author, but even implicitly excluded from the genus by Gray's generic description and intentions, as has been explained above.

ON RAMARIA HOLMSK. Gray ascribed the generic name to Holmskjold without supplying a bibliographic reference. I suspect that he picked up the name from Persoon's "Synopsis" (585, 1801) rather than from the original place of publication. It is usual to cite for Ramaria Holmsk, as its place of publication: Beata rur. Otia Fung. dan. 1, 1790 (or reprint: Coryph. Clav. Ram. 1797) 31; and everbody has acted as if the genus was first published in that work. To all purposes the genus must be interpreted from Holmskjold's treatment of his genus in 1790. His species on that occasion are the following:

- (1) Ramaria medullaris H.
- (2) R. gelatinova H.
- (3) R. ornithopodiaiden II.
- (4) R. muscoides (L.) H.
- (5) R. fastigibta (L.) H.
- (6) R. eristata H.
- (7) R. farinosa H. 1781
- (8) R. fimbriata H.
- (9) R. ceratoides H.
- (10) R. palmata (Scop.) H.
- (11) R. amothystina H.
- (12) R. coralloides (L.) H.

- = Calocera vincosa (Pers. ex Fr.) Fr.
- = Calacera viscosa (according to Fries, 1821:
- Clavulina cristata (H. ex Fr.) J. Schroet. var. (or a closely related species).
  - Clavaria corniculata Schueff, ex Fr.
- = Ciavaria corniculata Schaell, ex fi
- = Clavaria corniculata.
- = Clavulina cristata.
- = Isaria jarinosa (H.) ex Fr.
- : Clavaria byssiseda "Pers." ex Fr. (according to Fries, 1821: 476), a species of Ramaria (Fr.) Benord. em. Donk or rather Lentaria Corner.
- Lentinus lepideus (Fr.) Fr. (abnormal form;
   see Fries, Epier. 387, 1838).
- = Thelephora palmata (Scop.) ex Fr.
- = Clavaria zollingeri Lév.?, Clavalina sp.?
- = Ramaria (em.) spp. div. (mainly), and one form, Clavaria coralloides L. ex Fr., which (according to Fries, 1821: 467) would be Clavalina orietate var.

<sup>25</sup> Doty (1956: 21) stated that Donk (1949) "says Gray's genus was patterned after Clavaria Persoon." This must be due to an error because I defended on that eccasion the above opinion. It is the only point of agreement in this matter between Doty and me and at the same time the only point of disagreement with Corner (1953).

<sup>&</sup>lt;sup>26</sup> As to the various editions of this work, see Durand (in J. of Mycol. 13: 141-142, 1907) and Peltereau (in Bull. Soc. mycol. France 44: 57-59, 1928).

It may be indicated briefly that Holmskjold already mentioned his genus on an earlier occasion. In his "Afhandling on nogle Kryptogamer" (in Skr. Vidensk. Selsk. ny. Saml. 1: 278-302 with pl. 1781) the generic name appeared for the first time in print, and one species, "Den meelede Greensvamp. (Ramaria Farinosa)," was described, discussed, and depicted (pp. 299-301), clearly not as a new genus based on a single species, but rather as one representing a genus of wider scope and not yet formally published. Compare also page 283, on which Ramaria fimbriata Holmsk. is casually mentioned. Ramaria farinosa is better known as Isaria farinosa (cf. Fries, Syst. mycol. 3: 271. 1832) and belongs to Deuteromycetes (Moniliales)!

REINWARDTIA

Ramaria Rafin. (Anal. Nat. ou Tabl. Univ. 211, 1815) was published as a nomen nudum in "Clavaridia." I believe from experience gained in connection with other generic fungus names published by Rafinesque that he so called *Clavaria* group "A. Coralloideae . . . (RAMARIA Holmsk.)" of Persoon's (Syn. Fung 585, 1801).

Monadelphous homonym: Ramaria Holmsk. ex Quél., Fl. mycol. France 462. 1888.—Introduced for all branched species of Clavaria Fr., apparently independently of Gray and of Ramaria (Fr.) Bonord., q.v. Quélet called the genus "Ramaria, Holmsk." Doty (1950: 22) typified it by Clavaria cristata Fr., but this choice must be reconsidered, if a selection is thought of importance in this case. It must be emphatically denied that "Quélet (1888) did not recognize Clavariella botrytis . . . as a distinct species" (Doty, 1950: 21). It must also be pointed out that there is no indication in Quélet's "Flore" that Clavaria aeroporphyrea Schaeff. (Quélet took up an earlier name for C. botrytis) and other species are not at least as eligible as C. cristata.

Nomen rejiciendum (proposed). It will be gathered from what is said under the present name and under Ramaria Bonord., q.v., that at least two validly published homonyms exist: Ramaria S. F. Gray 1821 (selected type species, Clavaria pratensis) and Ramaria (Fr.) Bonord. 1851 (selected type species, C. botrytis). Of these Donk (1949a: 108) proposed Ramaria (Fr.) Bonord. as a nomen conservandum against Ramaria S. F. Gray and Cladaria Ritgen 1831 (or 1828), q.v., for the benefit of those mycologists who prefer to apply the name Ramaria to a segregate of Clavaria Fr. as delimited in a previous publication by Donk (1933: 103), and which is also sometimes called at present Clavariella P. Karst. (and cf. Cladaria). Those mycologists who preferred a quite inclusive genus of all the branched species of Clavaria were supposed not to raise objections

against the exchange of the author's citations "S. F. Gray" and "(Fr.)

Bonord."27

Doty (1948: 128) is of the opinion that since Ramaria (Fr.) Bonord... "this clearly illegitimate[28] name (a homonym) has not been widely used for the group, it seems inexcusable to conserve it." The fact is that Doty underestimated the previous use of Ramaria. Except by Gray, Ramaria has been taken up by Quélet (Fl. mycol, France 462, 1888; for nearly all European species), by Ricken (Vademecum Pilzfr. 251, 1918; and later editions; for most of the European species), and in several later, more or less popular, German booklets, for an inclusive genus; by Donk (1988: 103) for the species of The Netherlands and a few foreign ones. in the restricted generic sense as indicated above; and by Velenovsky (Novit, mycol, 161, 1939; Novit, mycol, nov. in Oper. bot, cech. 4; 88, 1947), for Czech species. Maire [in Publ. Inst. bot., Barcelona 3 (4): 31. 1937] already exchanged Clavariella against Ramaria and Corner (1950) followed in his comprehensive monograph. All these applications, when taken together, provide for numerous recombinations for species of Clavaria. under Ramaria: of the species of Ramaria as emended by Donk not many correct names can have escaped.

On the other hand Clavariella, q.v., was applied, except by its originator, Karsten, by Patouillard (Hym. d'Eur. 155, 1887), by J. Schroeter [in Cohn, Krypt.-Fl. Schlesien 3 (1): 447, 1888]; and by Maire (in Bull. Soc. mycol. France 30: 216, 1914) and some later authors more or less incidentally rather than in comprehensive treatments. The total of ready recombinations available under Clavariella is very low and very much less than that under Ramaria. Of the two, Ramaria has (and had in 1933) unquestionably attained a by far greater popularity. For these reasons, rather than because of 'having committed myself to Ramaria,' I maintain the proposal for conservation of Ramaria (Fr.) Bonord. In Corner's monograph Ramaria is the biggest genus, comprising nearly one hundred (94) species (recombinations all made!).

The proposal discussed above was rejected by ballot by the Special Committee for Fungi (cf. in Taxon 2: 31. 1953; in Mycologia 45: 320. 1953). It may be that the disastrous consequences of this decision were not fully realized because of the conflicting opinions expressed in its connection. If no proposal of this kind were accepted, (i) Ramaria S. F. Gray would become the correct name for Clavalinopsis Overeem emend.

against Cladaria Ritgen (no type selected), was replaced by the one here mentioned. It was disapproved of by Rogers (1949: 473).

23 'Hiegitimate' of Daty is the same as 'impriorable' in this paper.

Corner (1950; 63 species), the large majority of which consists of unbranched species; and (ii) Ramaria (Fr.) Bonord. (Corner, 1950; 94 species) would become perhaps Cladaria Ritgen or else Clavariella P. Karst. In view of the chaotic situation that would result, I venture to move a new proposal, very much like the previous one, but altered by the selection of a different species as the type of Cladaria Ritgen, viz., Clavaria botrytis Pers. This also aims at making Cladaria, q.v., a completely harmless name as a rejected earlier typonym of Ramaria (Fr.) Bonord.

REINWARDTIA

It would be disturbing after all to breathe new life into the still lifeless name Cladaria, now that an attempt to save it for a certain group has been overtaken by the emendation of Clavalinopsis Overeem by Corner as a fait accompli. About the same can be said of Ramaria S. F. Gray. If the proposal will be sanctioned, this latter name, too, will be completely suppressed as a rejected homonym, which is preferable to letting these two names run wild, endangering not only Ramaria (Fr.) Bonord: but also Clavalinopsis, both latter names adopted in Corner's outstanding monograph of the clavarias, which is undoubtedly fundamental to our understanding of the whole group.

Gray's "Natural arrangement of British plants" (vol. 1) had virtually fallen into oblivion during about a full century of the development of mycology and when it was taken into consideration in connection with the clavarias it was not yet definitely known to be post-Friesian. At Stockholm (1950), after prolonged discussions by the Special Committee for Fungi, it was decided (after it had already been rejected) not to alter its status as a legitimately published book. As a matter of course one may expect that its precarious admittance implies facilities for removing from competition such of Gray's generic names as are felt to be detrimental to nomenclatorial stability, one of the aims of the Code. In addition to this general remark, it may be pointed out that Ramaria S. F. Gray in particular was never taken up after its publication except once, by Doty (1948: 134) and that his tentative use of it as a substitute of Clavalina J. Schroet, must be qualified not only as confusing but also as a misapplication, because of the unacceptable type selection.

Ramaria (Fr.) Bonord., Handb. Mykol. 166. 1851. — ETYMOLOGY: ramus, branch. Gender: f.

Type species (selected): Clavaria botrytis Pers. ex Fr.—Doty (1948: 128) thinks that "there is considerable confusion in regard to just which entity among clavarioid fungi should go with [the name Clavaria botry-

tis]. The name could be considered as a nomen confusum or a nomen ambiguum." This supposed confusion dates from Coker (Clav. U.S. and Can. 111-114. 1923; and cf. Coker in J. Mitchell sci. Soc. 63: 47. 1947). I do not believe that European mycologists, who have collected the fungus themselves, are willing to subscribe to Doty's opinion. They are quite sure which species Persoon and Fries called Clavaria botrytis; it is one of the best known clavarioid fungi. (This does not imply that no errors have been committed, like Coker's; some measure of confusion exists in relation to practically every common fungus.) Corner (1953: 287-288), too, has expressed the opinion that there is nothing dubious about the application of the name Clavaria botrytis.

BASINYM: Clavaria trib. Ramaria Fr., Epier. 571. 1838,—When establishing his genus, Bonorden called it Ramaria "Fr." and explicitly cited "Clavaria. Vaill. / Fries Epicrisis p. 571" as the genus which he divided into smaller genera. This leads to the inevitable conclusion that Clavaria trib. Ramaria Fr. (1838) is to be regarded as the corresponding basinym. Fries's description of this taxon simply reads "Ramosae."

Fries did not refer back to his Clavaria trib. Ramariae Fr. (1821: 468) and it is quite clear why: in 1838 he completely abandoned his former classification of the clavarias and substituted a new one for it. In 1821 he divided Clavaria Fr. into "Trib. I. Botryoideas Nees," "Trib. II. Ramarias," and "Trib. III. Cormoideas, Nees." The branched clavarias were grouped in accordance to Persoon (1801) and Nees (1817) and Fries especially followed the latter author (see under Cladaria!). He merely exchanged the name of the second subdivision 'Ramalinae Nees' for 'Ramariae' (no author cited), or, what is not unlikely, committed an unintentional error, for his group should really have been called 'Ramalinac Nees.' It is obviously erroneous to assume that Clavaria trib. Ramariae Fr. 1821 and Clavaria I. Ramaria Fr. 1838 should be interpreted as the same taxon (Doty, 1950: 21), 'Ramaria' of 1838 corresponds to the combination of the two tribus of branched clavarias of 1821, and this combination in its turn answers to Ramaria Holmsk. Fries in 1838 carefully did not identify this taxon with 'Ramarias' of 1821, but was not afraid afterwards of speaking of it as Clavaria trib. Ramaria "Holmsk." (Fries, 1874: 666), which expressed after all the true situation; compare also Fries, Syst. mycol. 3 (Index): 151, 1832, where he stated that "Ramaria Holmsk. = Clavariae ramulosae," and not that it would be

<sup>&</sup>lt;sup>29</sup> Not, 'sertions'! Why there would be "no obligate Ramaria Fries Epicrists relationship" is another unexplained remark by Doty (in a Circular to the Members of the Special Committee for Fungi, dated Dec. 11, 1951).

Clavaria trib. Ramariae Fr. 1821! These is no indication that in connection with 'Ramariae' of 1821 he really meant Ramaria Holmsk.; what is clear is that it corresponds to 'Ramalinae Nees,' that is, to only a part of Remaria Holmsk, It is a safe assumption that the infrageneric names of 1821 and 1838 are different names altogether. However, this point is of negligible importance, Bonorden's generic name being accompanied both by a description of its own and by an (indirect) reference to Clavaria trib. Ramaria Fr. 1838.

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SCOPR. Bonorden did not adopt Fries's tribus (of 1838) unaltered in circumscription. He excluded, first, species with few, club-shaped branches, like Clavaria rugosa, which he transferred to Holocoryne Bonord., q.v., primarily founded for the unbranched species, and secondly, Cornicularia Bonord., q.v., which he characterized thus:

\*4. G[attung] Cornicalaria. Fr. / Diese Gruppe zeichnet zich dadurch aus, dass der Stamm nur in wenige kurze Acste sich theilt, welche an der Spitze kleine rudimentäre Aeste haben. . . ."-Bonorden (Handb. Mykol. 166. 1851).

Thus he arrived at a genus (Ramaria) with the following description (and no mention of species by name):

"5. G[attung] Romaria Fr. / Der Stamm ist bald dünn, bald sehr dick und theilt sich corallenartig in viele rundliche Aeste und Zweige. Die letzten ternären oder quaternären Aeste sind an den Spitzen gewöhnlich noch eingekerbt. . . . Die Mehrzahl der Ramarien wachsen in Wäldern, im Boden und bilden blumenkohlähnliche Gewächse . . ."-Bonorden (Handb. Mycol. 166, 1851).

THE EARLY CLASSIFICATION OF THE BRANCHED CLAVARIAS.—The tendency taxonomically to separate the branched clavarias from the undivided ones has been evident since the times of De Tournefort; compare Coralloides Tourn, (1696, 1700), Corallo-Fungus Vaill, (1723), and Merisma Hill (1751). The authority of Linnaeus (1753), who combined (but maintained) the two groups under Clavaria, temporarily put a stop to their separation on the generic level, but then Holmkjold (1790) introduced Ramaria as a genus for the branched forms. At first very unrelated elements were thrown together with the branched clavarias, but these were eliminated successively, mainly already by Holmskjold and Persoon.

The essays at classification of the branched clavarias may be divided into four often overlapping periods: (i) no subdivisions were thought necessary; (ii) the shape of the fruit-bodies prompted the recognition of two groups; (iii) the colour of the spores was emphasized and two groups were distinguished; lastly (iv) several characters were used to delimitate many groups and in certain cases the branched form was considered unimportant.

The second of these periods may be reviewed separatedly here in connection with questions of typification that have arisen and are now being discussed with some vigour among a small group of mycologists. After Holmkjold had admitted a distinct genus for the branched clavarias, the first author to divide that taxon (as an infrageneric one) was Persoon (1801) who admitted two groups based on the shape of the fruit-bodies, and tried to distinguish between compact forms and slender ones. It is of course not our task to evaluate the merits of this subdivision; the only aspect we are concerned with here is that it had enormous impetus lasting as it did for more than half a century. No other set of characters had any influence on the publication of genera until long after the generic names under discussion had been published, not even the division proposed by Fries in 1838, which was based on the colour of the spores. The influence of Persoon's early treatment of the branched clavarias stopped sometime after 1851 (Bonorden). During that half century (1801-1851), one line of authors thought one genus sufficient, but (if a subdivision was mentioned) subdivided it according to Persoon; and another line considered the not on the generic level, the two taxa distinguished were the same as two subdivisions distinct enough to be evaluated as genera. Whether or Persoon's. It would be erratic solely to depend on inessential hazards of publication and to typify the several names given to these two taxa by different species every time that they got new names. What I have tried to do is to anchor the two sets of names each to one type species and thus to recognize the importance of Persoon's influence according to more essential values.

The tabulation on the next page gives a review of the relevant denominations published for the branched clavarias between 1801 and 1851.

THE FIRST EMENDATION OF RAMARIA (Fr.) BORNORD.—Remembering that after the introduction of later starting-points the first restriction of Ramaria Holmsk., by Gray (1821), could not be taken into account for some time because it was not known to be definitely post-Friesian, it may be stipulated that (a) Ramuria Holmsk, was an inclusive genus; that (b) after the introduction of later starting-points the taxon started a new cycle as Clavaria trib. Ramaria Fr. (1838!); that (c) the first author to emend the latter taxon (in the rank of a genus) was Bonorden (1851), who excluded Clavaria ragosa (see under Holocoryme) and a group that almost certainly comprised Clavaria corniculata (C. pratensis) and perhaps even Clavaria cristata (see Cornicularia) 1; that (d) the next author to omend and re-define Ramaria (Fr.) Bonord., q.v., was Donk (1933: 103), Who selected Clavaria botrytis as the (obvious and unescapable) type

1753	Linnaeus	Clavaria group Ramosac	
1790	Holmskjold	Ramaria Holmsk.	
1801	Persoon		ae (Ramaria Holmsk.)  ** Caule tenui s. ramis omnibus simul sumtis tenuior.
1806	Roussel	Coralloidea Roussel	
1817	Nees	Clavariae ramuiosae Nees	
	1	Botryoideac Nees	Ramalinas Nece
1821	Fries	Clavaria p.p.	
		Trib. Botryoideae Nees	Trib, Ramariae Fr. (= Rama- linae Nees)
1821	Gray	[Not treated.]	Ramaria Holmsk. (p.p.)
1828	Ritgen	Cludaria Ritgen	
1838	Fries	Clavaria trib. Ramaria Fr. [Holmsk.]	
1851	Bonorden	Ramaria (Fr.) Bonord.	(In part:) Cornicularia Bonord.
Type species			Clavaria pratensis Pers. =/or C. corniculata Schaeff, ex Fr. (Ramaria muscoides Holmsk.)

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species, before any other typifications of the generic name, or other connected ones, had been performed.

Donk acted strictly logical and legal under the then prevailing Rules and could not follow any other course, although this meant abandoning Clavariella P. Karst. (1881), a name he originally preferred (cf. in Meded. Nederl. mycol. Ver. 18-20: 98, 1931). He did not want to propose Clavariella as a nomen conservandum against Ramaria (Fr.) Bonord., because a careful examination of literature furnished evidence that Ramaria was predominantly used (especially in German and French literature) by those authors who dealt with the branched clavarias as generically district from the undivided ones.

Corner (1950, 1953) was convinced that the above representation of facts should be accepted as sound and even went further by interpolating Ramaria S. F. Gray between the devalidated name Ramaria Holmsk. and Ramaria (Fr.) Bonord. as a re-publication virtually covering the same taxon and, therefore, correctly typifiable by the same type as had been selected for Ramaria (Fr.) Bonord. As explained under Ramaria S. F. Gray, I am unable to follow him in this one respect.

On the other hand Doty completely disagreed. For instance, (i) I believe that it may be stated that he argued that Ramaria Holmsk, and its (direct or indirect) progeny were intrinsically conceived as whitespored genera (1950: 21-22); he also remarked (ii) that "the original

sense of Ramaria Holmskjold . . . is understood to be typified by Ramaria cristata Holmskjold (pre-Friesian)" (1948: 134); and he moreover stated categorically that (iii) the restriction of the name Ramaria to forms with generally yellow, dorsally-depressed, clongate spores was a digression from the original sense contrary to Recommendation VI of the Rules (of 1935).

It is easy to reject these opinions because they simply do not cover the facts. (i) The spore-colour played no part at all in the cases tabulated shove and Holmskjold set the example in this respect by including species with white and with coloured spore-prints.30 (ii) Nowhere am I able to find that Holmskjold's generic name, or any other name given to the branched clavarias, had been typified, or restricted to a taxon, in such a manner that Ramaria Holmsk, must be understood to be typified by Ramaria cristata. It was Doty himself who first typified Ramaria Holmsk. ex Quél. (see under Ramaria S. F. Gray) by Clavaria cristata (1950: 22) and Ramaria S. F. Gray by C. rugosa (1948: 134). There is no room whatever to suppose that Ramaria Holmsk, was the natural precursor of Clavulina J. Schroet, It could only be arbitrarily turned into that genus by selecting a species of Clavulina as type and this was what Doty tried to do by selecting Clavaria rugosa Bull, ex Fr. for Ramaria as re-published by Gray (1821). This attempt must be stamped as complete failure, not even sanctioned by the Code. As has been explained under Ramuria S. F. Gray, Clavaria rugosa was not admitted to the genus by Holmskjold and among Gray's species it represents about the least eligible one! (iii) See above and Corner (1950: 124; 1953: 285-290). From the standpoint of the Code there are at least three different names; Ramaria Holmsk. (devalidated name), Ramaria S. F. Gray, and Ramaria (Fr.) Bonord., and Donk was the first to typify Ramaria (Fr.) Bonord, long before Doty tried his hand. Finally, it may be remarked that Donk acted precisely in accordance with the spirit of Recomm. VI when he proposed C. botrytis as the type species.31

31 This Recommendation has disappeared as such from the Code.

<sup>&</sup>lt;sup>30</sup> It seems that to Doty all species of Clavalina J. Schroet, are white-spored, which is not the case. — The large brown-spored species of Ramaria (Fr.) Bonord, emend, Donk, Holmskjold treated as varieties of Clavaria coralloides L. (Sp. Pl. 2: 1182, 1753) and in this he followed Linnacus. If Holmskjold's concept of that species also comprised white-spored forms (of which I am not yet sure), this would be the hest demonstration of the fact that spore-colour was not in the least taken into account by him. — Duty failed to substantiate his contention that C. coralloides L. [and Ramaria coralloides (L.) Holmsk.] should be cited as synonymous with C. cristata. I look forward with keen interest to the results of his efforts to make good for this omission.

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Typification. When previously selecting the type, Donk (1983: 104) took a species common to Holmskield's genus<sup>52</sup> and Fries's Clavaria trib. Ramaria (1838), and at the same time agreeing well with-or at least not contradicting anything in—Bonorden's description: Clavaria botrytis Pers. ex Fr. I would rather say that if one reads carefully Bonorden's description one cannot avoid thinking in the first place of this well known fungus ("blumenkohlähnlich Gewächse"). Corner (1950: 542, 689) accepted this choice but calls the genus: "Ramaria S. F. Gray emend. Donk / . . . 1821 . . .: Bonorden . . . 1851 . . .: Donk . . . 1933 . . . et . . . 1941 . . .: Maire . . . 1937 . . .." Elsewhere (op. cit. p. 689) he listed "Ramaria Bon., Quél." as a synonym of Ramaria S. F. Gray, both with Clavaria botrytis as type species. The typification of the generic name Ramaria Bonord, is to be guided by the description to which it owes it valid publication and in agreement with the accompanying reference to the tribus name of 1838, but in no way depends on the typification of the name of Fries's tribus 'Ramariae' of 1821.

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AUTHOR'S CITATION. Before Rogers had concluded that S. F. Gray's first volume of "A natural arrangement of British plants" was published after the first volume of Fries's "Systema," Donk (1933: 103) accepted as the author citation "(Holmskj. ex Fr.) Bon." Afterwards he dropped the author's indication "Holmskj." and called the genus "Ramaria (Fr.) Bon." (Donk, 1941: 177), because the connection of Holsmkjold's name with that of Bonorden appeared problematic and also because he was at a loss as to how to typify Ramaria Holmskj., q.v., not having been able to consult the presumably first use of that name in 1781 (see p. 478 of the present paper). Finally, he adopted the view now made legal that Ramaria S. F. Gray (1821) was validly published and that Ramaria (Fr.) Bonord. (1851) was a later homonym of it (Donk 1949: 107).

Typonyms: Corallium Hahn (1883), and compare Ramaria S. F. Gray and Cladaria Ritgen. — Homonyms: Ramaria Holmsk. (1790; devalidated name; "Clavariaceae") and Ramaria S. F. Gray (1821; "Clavariaceae"), q.v. — Status. Impriorable on account of the validly published homonym of 1821. — Nomen conservandum (proposed). See under Ramaria S. F. Gray.

Ramariopsis (Donk) Corner, Monogr. Clav. (in Ann. of Bot. Mem. 1:) 636, 700. 1950 (as Ramariopsis Donk). — Etymology: the genus Ramaria; 5445. appearance. Gender: f. — Type species (by original designation, both for basinym and isonym): Clavaria kunzei Fr. — Basinym: Clavaria

subgen. Ramariopsis Donk, Revis. niederl. Homob.-Aphyll. 2: 89. 1933 (in Meded. Nederl. mycol. Ver. 22 & in Meded. bot. Mus. Herb. Univ. Utrecht No. 9).—Introduced for the type species and a number of other species part of which was mentioned by name. — Scope. The generic name was applied to an emended group.

[Scleroglossum Pers. apud Moug. & Nestler, Stirp. Crypt. vogesorhen. No. 671. 1820 (devalidated name). — Type species (selected for basinym): Clavaria herbarum Pers. = Aerospermum compressum Tode ex Fr.—See Xyloglossum Pers. — Basinym: Xyloglossum Pers. (1818), q.v. — This isonym was introduced on the label to Seleroglossum lanceolatum Pers. apud Moug. & Nestler (type distribution), l.e., as follows: "Nomini generico Xyloglossum Pers. Champ. comest. p. 144 substituit cel. autor Scleroglossum." This latter name seems not to have been validly republished after 1821. — This name is sometimes mentioned as a synonym of Pistillaria Fr., for instance by Saccardo & P. Sydow (in Sacc., Syll. Fung. 16: 1282, 1902) and by Ainsworth & Bisby (Dict. Fung. 267, 1943; 2d Ed., 285, 1945); more often it is made a synonym of Aerospermum Tode ex Fr.

I could trace the following combinations published under Scierogiovaum:

(i) Scleroglossum lanceolatum Pers, "in Litt," apud Moug. & Nestler, Stirp. Crypt, vogesorhen. No. 671 1820.83—This is an avowed isonym of Clavaria berbarum Pers., which is cited as a synonym. The species should be known as Acrospormum compressum Tode ex Fr. The generic name Scleroglossum was introduced on the label of this distribution.

(ii) Soleroglossum conicum Pers, "in Litt." apud Mong, & Nestler, Stirp. Crypt. Vegesorhen. No. 672, 1820 (nomen nudum; only the habitat is mentioned). A—A few years later Persoon (Mycol. europ. 1: 290, 1822) merely stated in an observation to Perica soleropyxis Pers. that the latter species was found associated with S. conicum. It was Frics [Syst. mycol. 2 (2): 246, 1822] who furnished a description of it under the name Acrospormum conicum Fr., citing Persoon's figures 5 & 6 (Mycol. europ. 1: pl. 11).

(iii) Saleroglassum acrospermum "Pers."—Saccardo (Syll. Fung. 6: 752, 1888) followed Fries (1874: 688) in citing "Seleroglassum Acrospermum Pers. Ch. comest. pag. 148, Myc. Eur. I, t. 11, f. 3-4 . . ." as a synonym of Pistillaria seleroticides (DC.) ex Fr. Now, neither in Persoon's "Traité sur les champignons comestibles" (1818), nor in his "Mycologia europaea" (1. 1822) one will find the name Seleroglassum acrospermum. In the first mentioned of Persoon's works one will encounter Clavaria seleroticides DC, on the page cited (p. 143). (The pertinent passage is quoted in the

Hist.) and the Kew Herbarium, "et Myc. Eur. tab. XI, f. R." After kind information from Mrs. F. L. Balfour-Browne and Miss E. M. Wakefield.

Hist.) and the Kew Herbarium, "et Myc. Eur. tab. XI, fig. 6 & 7," and ". . . fig. 5, 6, 7" repectively. After kind information from Mrs. F. L. Balfour-Browne and Miss E. M. Wakefield.

<sup>32</sup> Ramaria coralloides var. apicibus purpurcia Holmsk.

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present paper under Xyloglossum.) In Persoon's second work mentioned above no explanation to plate 11, figures 3 and 4 is to be found, but Fries [Syst. mycol. 2 (2); 245, 1822] cited them as pertaining to Acrospermum scienatioides (DC. ex Fr.) Fr. 55 = Pistillaria saleratioides, presumably on the authority of Persoon or of one of the latter author's correspondents, who may have communicated the manuscript-name Scleroglossum aerospermum Pers. to replace Clavaria scleratioides DC. " - One of the two original species of Xyloglossum, the other being Clavaria herbarum Pers.

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The inevitable conclusion is that Scleroglossum is a mere name change for Xyloglossum Pers., q.v., a name to be excluded from "Clavariaceae" on account of the nature of the type species selected in the present paper and synonymous with Acrospermum. This was obviously also Fries's conclusion [Syst. mycol. 3 (Index): 154. 1832], "Scleroglossum Pers. vide Xyloglossum," and (op. cit. p. 199), "Xyloglossum Pers. / herbarum Pers. (Acrospermum compressum) / Sclerotioides Pers. (Acrosp. Sclerotioides)." Moreover, Fries [Syst. mycol. 2 (2): 244. 1822] cited "Xyloglossi spec. Pers. Ch. Com." under Acrospermum Tode."]

Scleromitra Corda in Sturm, Deutschl. Fl., Pilze Hft. 7: 59, 1829. - ETYMOLOGY: σχίημός hard; μίτρα, turban. Gender: f. - TYPE SPECIES (only original species): Pistillaria coccinea Fr.—Fries [Syst. mycol. 3 (Index): 154, 1832] identified Corda's plant with Pistillaria micans (Pers.) ex Fr. — Remark. Cnazonaria Corda and Scleromitra were simultaneously published; Donk (Rev. niederl, Homob.-Aphyll, 2: 96, 1933) listed the latter name as a synonym of the former, thus making it an incorrect name for a genus called Cnazonaria.

Sevtinopogon Singer in Lloydia 8: 139, 1945. — ETYMOLOGY: σκότους. made of leather; πώγων, beard, Gender: m. — Type species (by original designation): Lacknocladium pallescens (Bres.) Bres.-Regarded conspecific with Clavaria angulispora Pat. by Corner (1950: 649). - Scope. A second species was mentioned as probably belonging to the genus.

Sparassis Fr. ex Fr., Syst. mycol. 1: 464, 1821. — ETYMOLOGY: οπαράσσω. I tear in pieces, Gender: f. — Type species (only original species): Sparassis crispa (Wulf.) ex Fr. — Devalidated name: Sparassis Fr., Novit. Fl. suec., Partic. V. Contin. 80, 1819 (n.v.). — Homonym. Some authors consider Sparaxis Ker-Gawl. (1804; Iridaceae) an orthographic-

25 For a while Fries thought that two fungi were involved, a species of Pistillaria and one of Acrospermum [Syst. mycol, 3 (Index): 1, 1832; Epicr, 586, 1838], but later he reconsidered this opinion (1874: 686).

ally different homonym. — ISONYM: Masseeola O.K., q.v. — STATUS. Impriorable if considered a later homonym, and, therefore, replaced by Masseeola O.K.

Sphaerula Pat., Tab. anal. Fung. 1: 27, 1883 (description and figure reproduced in Rev. mycol, 5: 191 pl. 38 f. 4, 1883). — ETYMOLOGY: sphaerula, small ball. Gender: f. — Type species (only original species): Sphaerula capitata Pat.

Stelligera Heim ex Doty in Lloydia 11: 134, 1948. — ETYMOLOGY: stella, star; gero, I bear. Gender: f. — Type species (by original designation) nation and only original species); Stelligera membranacea Heim ex Doly. PROTONYM: Stelligera Heim in C.R. Acad. Sci., Paris 206: 1922. 1938 (nomen nudum).—French descriptio generico-specifica: no Latin description. - Valid Publication. Doty furnished Latin descriptions for both the genus and the only species, and proceeded to accept Stelligera as a "legitimate name in consideration of the diagnosis and discussion" published for it by him. From his introductory discussion (Doty, op. cit. pp. 124-125) it becomes clear that in this case 'legitimate' agrees with what I prefer to call 'priorable.' It is not at once evident that he accepted the genus also from a taxonomic point of view and considered Stelligera a 'correct' name. If not, even the Latin description would not ensure the name the status of a validly published one; compare Art. 43: "A name . . . which is not accepted by the author who published it . . . is not validly published." Doty's discussion summarizes his views about the genus as follows: "Eriocladus [Lachnocladium] and Vararia differ in form of fructification; Stelligera differs from these by the possession of cystidia in addition to the more highly modified setae (asterophyses)." Apart from this statement being correct or not, it may perhaps be taken as proof that Doty accepted the genus; also because, when dealing with Eriocladus (Doty, op cit. p. 131), he did not mention Stelligera and his characterisation of Eriocladus would even seem to exclude Stelligera: ". . . the genus is characterized by the dichophyses in the hymenial and subhymenial layers." These quotations would be conclusive only if one would believe that Doty seriously thought the presence of cystidia to be restricted to Stelligera and that, in addition, he really rated the 'asterosetae' of Stelliger as fundamentally different from the 'dichophyses' of Eriocladus (Lachnocladium)! It is my tentative impression that Doty, besides furnishing a Latin description, also taxonomically adopted the genus and thus validly published the name Stelligera.

<sup>24</sup> There is in the Kew Herbarium a specimen labelled in Mougeot's handwriting: "Seleroglossum bulbosum Pers. in Litt. Pers. Mycol. Europ. tab. XI, fig. 3, 4. / Clavaria sclerotioides De Cand. F. Fr. / In caulibus Gentianae luteae." After kind information by Miss E. M. Wakefield.

Stichoclavaria Ulbrich in Lindau, KryptFl. Anfänger, 3. Aufl., 1:83. 1928. — ETYMOLOGY: sticho(basidium); the genus Clavaria. Gender: f. — TYPE SPECIES (only original species): "St. falcata (Pers.) Ulbrich" = Clavaria falcata Fr. sensu Juel.—There is every reason to believe that this is a different species from the true Clavaria falcata Fr., the selected type species of Holocoryne Bonord.

Stichoramaria Ulbrich in Lindau, KryptFl. Anfänger, 3. Aufl., 1: 83. 1928. — Etymology: sticho(basidium): the genus Ramaria. Gender f. — Type species (selected): "St. cristata (Holmsk.) Ulbrich" = Clavulina cristata (Holsmak. ex Fr.) J. Schroet. — Scope. Introduced for those species of Clavulina J. Schroet. of which it had been cytologically demonstrated that they had stichic basidia: Clavulina rugosa (Bull. ex Fr.) J. Schroet. (first species), Clavulina cristata, Clavulina cinerea (Bull. ex Fr.) J. Schroet., and Clavaria grisea Pers. ex Fr. — Typification. Doty (1948: 135), to whom Clavulina rugosa seems to be the ideal branched clavarioid species, proposed this species as lectotype. In view of the original description (" ± korrallenartig verzweigt") and the popular name attributed to the genus ("Korallenpilz") it clearly is not the most eligible species. — I prefer instead Clavulina cristata, selected here for the first time — Typonym: Clavulina J. Schroet. (1888), and compare Ramaria Holmsk. (devalidated name).

Typhidium Clem.-See Typhula.

Typhula (Pers.) Fr. ex Fr., Syst. mycol. 1: 494. 1821. — ETYMOLOGY: diminutive of Typha, the reed-mace. Gender: f. — Type species (selected): Typhula phacorrhiza (Reichard) ex Fr. — Basinym: Clavaria sect. Typhula Pers., Syn. Fung. xviii. 1801 (devalidated name). — Introduced for six species of which Clavaria ovata Pers. is the first, Clavaria gyrans Batsch the third, and C. phacorrhiza Reichard the last one; the latter species was apparently not known to Persoon except from the existing descriptions. — Devalidated name: Typhula (Pers.) Fr., Obs. mycol. 2: 296. 1818.—Of the four species Fries included, Clavaria gyrans, C. erythropus Pers., and C. phacorrhiza are original species of Persoon. — Scope. In the starting-point book Fries (1821: 494) included

27 Typically it is often simple rather than branched. See also "Remark" under Clavalina.

eight species. Typhula todei Fr. being the first.19 Of the original species of Persoon, Clavaria ovata Pers, and C. muscicola Pers, found a place in Pistillaria Fr. instead of in Typhula. - Typification. Doty (1948: 136). has called attention to what might be considered the first appointment of the type species: "Ce genre est fondé sur le Clavaria gyrans, Pers., et sur quelques autres espèces voisines."-Brogniart (in Dict. Sci. nat. 33: 575, 1824; Essai Classif, nat. Champ. 86, 1825). Actually Brongniart merely said that Typhula was based on a number of species of which he mentioned one by name; all the same the manner of this mentioning may be significant. - More recently (without knowledge of Brongniart's remark) Clavaria phacorrhiza was selected by both Donk (1933: 93) and, independently, by Remsburg (in Mycologia 32: 65, 1940). Doty (l.c.) proposed the same species as lectotype, and Corner (1950: 147, 658, 689) also adopted it. — The species suggested as the type by Clements & Shear (Gen. of Fungl 345, 1931) for "Tuphula Pers. . . . 1801; Fr. . . . 1818" (applied as a generic name), viz., "Tuphula sclerotioides Fr," cannot be seriously considered as it is not an original one, neither of Persoon nor of Fries. — Isonym: Tuphidium Clem. in Univ. Stud. Nebraska 3 (1): 73. 1902.—This was introduced for grammatical reasons as follows: "Typhula = Typhidium"—nothing else. As not even an author was cited for Typhula, the new name should apparently be valued as not validly published.

[Xyloglossum Pers. ex Link in Abh. Akad. Wiss. Berlin 1824: 175. 1826. — Type species (selected): Clavaria herbarum Pers., Comment. Fung. clavaef. 68 pl. 3 f. 4 1797 = Acrospermum compressum Tode ex Fr. (type species of Acrospermum Tode ex Fr.). — Devalidated name: Xyloglossum Pers., Traité Champ. comest. 144. 1818.—The publication of Xyloglossum by Persoon runs as follows:

"Quoique les Clavaria herbarum et Clav. selevotioides, Decand. suppl. p. 29, aient le port des champigonns du dixième ordre, [10] ils n'ont cependant pas de membrane fructifère ou hymenium, et ne sont pourvus à l'extérieur de graines comme le sont les clavaires; ils sont au contraire de la nature des selévoties, et daivent y être rapportés, mais sous un genre particulier (Xyloglossum)."—Persoon (Traité Champ. comest. 148-144, 1818). Xyloglossum is also mentioned in the same work on pages 51 and 130 (name only)."

This generic name was validly re-published by Link:

"Xyloglossum eine sonderbare Gattung von einer Gestalt welche sich Clavaria nähert, auch ist ein wahrer Sprosstheil vorhanden."—Link (i.e.).

<sup>40</sup> Rather: "dauxième ordre," of Fungi Hymenomyci, page 38, famille des Helvelloides, page 75, inclusive of Clavaria (les Clavaires), page 34.

<sup>58</sup> Compare also Persoon (Ots. mycol. 2: 60. 1799) in an observation appended to Clavaria muscicola Pers.: Familiam quandam naturalem cum Clavaria gyrante, Erythropo etc. (vid. Comm. de fung. clavac. p. 80—85.) quidem officit . . .." Persoon used 'familia' for 'section' at that time.

<sup>&</sup>lt;sup>80</sup> This has been suspected of being a synonym of Pistillaria quiuquiliaria Fr. (cf. 2nder Pistillaria Fr.), but see also Corner's remarks under Pistillaria todei (Fr.) Corner (1950: 493).

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The next author to deal with the genus under this name after 1821 was Leman (in Dict. Sci. nat. 59: 158, 1829): he retained the earlier name, rejected the isonym Scleroglossum Pers., q.v., and treated the species on this occasion.

"Xyloglossum. (Bot.) Genre de la famille des champignons, établi par Persoon, dans son Traité des champignons comestibles, pag. 51, 143. Il le range près du Selevotium, et fait observer qu'il diffère du Clavaria par le défaut d'une membrane fructifère ou hymérium, et parce que les graines ne sont point à l'extérieur. Ce naturaliste se borne à ce peu de mots, et il cite les clavaria herbaram et selevotiaides, Dec., Fl. fr., 6, pag. 28, comme les espèces de son genre."—Leman (l.c.). Follows the treatment of both species. — Compare also the entry of Selevoglossum by Leman (in Diet. Sei. nat, 48: 154, 1827): "Selevoglossum. (Bot.) Nom donné par Persoon au genre Acrospermiem de Tode, qu'il avoit d'abord appelé Xyloglossum."

Compare also Dierbach's translation of Persoon's "Traité sur les champignons comestibles" which appeared after 1821 (Pers. Abh. essb. Schwämme 89. 1822). Later on Persoon changed Xyloglossum into Scleroglossum Pers., q.v. - Typification, The two original species are to-day interpreted as widely different fungi. The first, Clavaria herbarum. has been identified with Acrospermum compressum by Persoon himself (Syn. Fung. 605, 1801) and Fries [Syst. mycol. 2 (2): 245, 1822]; modern descriptions were published under the latter name by Riddle (in Mycologia 12: 176-178 pl. 11 fs. 6-12. 1920) and Brandriff (in Mycologia 28: 228-235 fs. 1-11. 1936). It is a pyrenomycetous fungus of still uncertain position. The second of Persoon's original species. Clavaria scleratioides DC., is Fries's Pistillaria sclerotioides (DC.) ex Fr. [not to be confused with Typhula sclerotioides (Pers.) Fr., the type species of Phacorhiza Pers., q.v.]. This is generally considered to be a clavariaceous plant. The selection of Persoon's first species would make Xyloglossum a synonym of Acrospermum, and of his second species, a validly published name in "Clavariaceae." I select the first species as the type, a choice suggested by the generic name, this species being often compressed. - Isonym: Scleroalossum Pers., q.v.]

REMARK. Dierbach's translation "Abhandlungen über die essbaren Schwämme" (1822) of Persoon's "Traité sur les champignons comestibles" (1818\*1) offers a peculiar nomenclatural difficulty: is it to be taken as a 'different' publication from the original one? If it is, Xyloglossum, for instance, would be validly re-published after 1821; if not, Xyloglossum, as published by Persoon, remains merely a devalidated name. Or, in different words, has one to admit a name Xyloglossum Pers. ex Pers. [Dierb.] 1822 in addition to Xyloglossum Pers. 1818? (The starting-point date for "Fungi caeteri" is 1821.)

The problem arises in a much simpler form in connection with Fries's "Observationes." This work was published before 1821, but a so-called second edition was issued dated 1824. All the differences between these two 'editions' exist in a new title-page tipped in the original issue to replace the earlier title-page: compare Rogers (in Mycologia 31: 297-307, 1939). I agree with Rogers that this so-called second edition should be dated the same as the original issue. Only the new title-page is a 'publication' of 1824.

Dierbach's translation is nothing but a translation, without alterations in the original text; what is new in it is to be found in his observations which he added separately ("Aus dem Französischen und mit einigen Anmerkungen begleitet von J. H. Dierbach"). The contents was apparently not revised by Persoon before or after the translation: it is a faithful reproduction of the original text (inclusive of errors of printing in several names) in another language, not a new publication. What is new in this German issue are the "Anmerkungen" by Dierbach; these, of coure, constitute a distinct publication to be dated 1822; the translation itself, I would conclude, should be treated as if it had appeared in 1818.

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<sup>41</sup> My copy is dated 1819.