SOME TAXONOMIC REVISIONS AND NOMENCLATURAL NOTES CONCERNING MARINE AND BRACKISH-WATER GASTROTRICHA¹

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Hummon, W. D. 1974. Some taxonomic revisions and nomenclatural notes concerning the marine and brackish-water Castrotricha. Trans. Amer. Micros. Soc., 93: 194–205. The problem of nomina nuda is discussed with respect to the Gastrotricha. A series of generic transfers are proposed or accepted, with emended taxonomic diagnoses of six families and two genera. The genus Draculiciteria n.g. is described, having as its type-species D. tesselata (Renaud-Mornant, 1968) n. comb. Two other new combinations are proposed: Cephalodasys cambriensis (Boaden, 1963) n. comb. and C. turbanelloides (Boaden, 1960) n. comb. The species Chaetonotus schromi n. n. and C. acareus n. n. are given new names for reasons of homonymy. The elevation of Halichaetonotus from sub-genus to genus and the erection of sub-orders Multitubalitina and Paucitubulatina of the order Chaetonotida are approved.

During the past several years a number of problems have arisen regarding the taxonomy and nomenclature of members of the invertebrate phylum Gastrotricha. It is hoped that by treating several of them together in a unified manner, difficulties of a similar nature may be reduced in the future. Such cases generally arise despite the best of intentions. Some occur as a result of insufficient attention paid to the literature or to the International Code of Zoological Nomenclature (1964). Others result from failure to emend the diagnostic characters of higher taxa with a significant addition or removal of lower taxa to or from their domain. Still others simply result from differences in taxonomic judgment; nor are any unique to the literature² on the Gastrotricha (e.g., see the extensive treatment by Corliss, 1962, on similar problems in the Protozoa).

CASES OF NOMINA NUDA

One of the most persistent problems is that of the nomen nudum (e.g., see Simpson, 1968; Sohn, 1968a,b). Nomina nuda occur under several types of

² Incidentally, complete bibliographies of both the marine and brackish-water Gastrotricha

and the fresh-water and soil Gastrotricha are available from the author on request.

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circumstances, but each is a trial to the taxonomic worker. In an early case with respect to marine and brackish-water gastrotrichs, Remane (1940), while discussing benthic communities of the Baltic Sea, referred to the gastrotrichs *Platydasys "schultzi"* and *Xenotrichula "gymnocephala*," neither of which has been described to this date. Both are *nomina nuda* and their species-group names have no validity.

In his thesis, d'Hondt (1967) referred to a gastrotrich found along the Culf of Gascogne, France, as "Pseudoturbanella levii n. gn., n. sp.," though no description was included. When actually described by d'Hondt (1968a), this animal was given the name Pseudoturbanella stylifera n. g., n. sp. The genusgroup name should be cited as Pseudoturbanella d'Hondt, 1968, since that was the date on which the name became available; the name Pseudoturbanella "levii" is a nomen nudum; and the type species of the genus Pseudoturbanella

is properly referred to as Pseudoturbanella stylifera d'Hondt, 1968.

Swedmark (1956) partially described and figured an enigmatic juvenile gastrotrich which he provisionally assigned to the genus Paradasys. The identity of this animal has since been the center of some discussion. For example, several years later two species of Paradasys—P. turbanelloides Boaden, 1960 and P. cambriensis Boaden, 1963—were described. Their placement in the genus Paradasys owed much to similarities with the animal referred to by Swedmark. though Boaden (1960, 1963) was thoroughly aware of important discrepancies between his specimens and those belonging to the two previously described species in the genus, *P. subterraneus* Remane, 1934 and *P. hexadactylus* Karling, 1954. D'Hondt (1965, 1966, 1968a,b), after using the citation Paradasys turbanelloides in a series of papers and in his thesis (d'Hondt, 1967), has more recently (d'Hondt, 1970, 1971b) listed both of Boaden's species under a new genus-group name "Psammodasys." Since in neither case did d'Hondt provide a generic description or diagnosis, the name "Psammodasys" has no taxonomic validity and represents a nomen nudum. However, the problem remains, since, as d'Hondt correctly recognized, neither of Boaden's species fits readily into the genus Paradasys.

Similarly, Schrom (1970), as part of his doctoral work on the Gastrotricha of the north Adriatic, prepared descriptions of 17 new species and offered comments regarding previously described species. As of the time of his writing, none of these names had taxonomic validity, since theses do not constitute publication under the International Code of Zoological Nomenclature (1964: see Articles 8, 9). Yet, six of the names—Chaetonotus "modestus," C. "jucundus," Halichaetonotus "swedmarki," Heterolepidoderma "contectum," H. "clipeatum," and H. "istrianum"—had already been included by Salvini-Plawen (1968) in a list of interstitial fauna of the north Adriatic. All of these species-group names must be treated as nomina nuda, since in no case were descriptions or figures presented. Further, Riedl (1970), in the published second edition of his Fauna und Flora der Adria, included with all good intention two of the species from Schrom's thesis work, viz., "Turbanella otti Schrom" and "Tetranchyroderma boadeni Schrom." Inasmuch as both species named were accompanied by descriptive information and figures sufficient to satisfy the conditions of Articles 10, 11, and 13 of the International Code, the names of both species are valid; it is not inappropriate to attribute authorship of the names as "Schrom in Riedl." The species, therefore, may be cited as Turbanella otti Schrom in Riedl. 1970. and Tetranchyroderma boadeni Schrom in Riedl, 1970, respectively.

D'Hondt (1970) published an annotated list of Gastrotricha found in the vicinity of Roscoff, France. Included in this list were the following names, cited as new species: Crasiella "(?)oceanica," Chaetonotus "jucundus," C. "littoralis," C. "arenarius," and C. "oceanides." As neither descriptions nor illustrations

were provided for any of these animals, all of the names become *nomina nuda*. Note that the species-group name "jucundus" had now appeared in the literature as a nomen nudum for two different animals of the genus Chaetonotus! Subsequently (see d'Hondt, 1971a), all but the first-named on this list were properly published, and thus they take the authorship and date of the 1971 work. The name Crasiella "(?) oceanica n. sp." unfortunately was referred to

again by d'Hondt (1971b), but remains a nomen nudum.

Then, in 1972, Schrom published the results of his thesis, making available the names of 15 new species which were not a part of "Schrom in Riedl, 1970" and elevating the subgenus *Halichaetonotus* Remane, 1936 to genus. Among the new species described in this paper were all six of the *nomina nuda* which had appeared in Salvini-Plawer (1968), including *Chaetonotus jucundus*. At that point the species name Chaetonotus jucundus Schrom, 1972 became a junior primary homonym of C. jucundus d'Hondt, 1971 and, according to Article 59a of the Code, as such it must be permanently rejected. Even though the separation of Halichaetonotus as a genus distinct from Chaetonotus alters d'Hondt's species to Halichaetonotus jucundus (d'Hondt, 1971), the name Chaetonotus jucundus d'Hondt, 1971 remains its junior synonym and would have priority should the two genera become reunited again in the future. As I had indicated to Schrom in late 1970, in person, that the species-group name "iucundus" already had been applied to a member of the genus Chaetonotus (d'Hondt, 1970), and, as its proper publication (d'Hondt, 1971a) preceded Schrom's own use of the name (Schrom, 1972) by a year, it is judged that sufficient time has elapsed during which the homonymy could have been but has not been removed. Therefore, the species to which the junior homonym was given is here replaced by a nomen *novum*, with description as indicated below.

Chaetonotus schromi n. n.

Description: that provided by Schrom (1972); see his pp. 314–317, and his Figure 12.

Etymology: schromi, named after its discoverer, Dr. Heinrich Schrom.

Thane-Fenchel (1970) named a new species of *Chaetonotus*, using for its species-group name a junior primary homonym "pussilus." As *Chaetonotus pusillus*, Daday, 1905 is the senior homonym, the species-group name provided by Thane-Fenchel must be rejected and replaced in accordance with the provisions of Article 53 of the Code. Having immediately notified Thane-Fenchel of the homonymy, by letter, encouraging her to replace the name herself, and having received no reply after several years regarding the manner in which this was to be accomplished, this species is herein given a *nomen novum*, with description as indicated below.

Chaetonotus acareus n. n.

Description: that provided by Thane-Fenchel (1970) on her pp. 130–131; see her Figure 12.

Etymology: acares (G), small or tiny.

Problems of Revised Diagnoses

Several diagnoses have been written for taxa established since Remane's comprehensive monograph of 1936. Aside from these, little has been done to revise the diagnoses of higher categories so as to incorporate the wealth of variability that has since been discovered in the phylum Gastrotricha. In light of our increased knowledge, the following is a relatively conservative attempt to realign taxa into more natural groupings and to provide emended diagnoses

on which future taxonomic judgments can be made. Taxa will be treated family by family within the two orders of gastrotrichs and will include all families containing marine or brackish-water forms.

Order Macrodasyida Remane, 1925

I wish to endorse the emended spelling of the orders Macrodasyida and Chaetonotida, as set forth by Rao (1970). As Rao pointed out, the -oidea ending usually used "connotes a superfamily taxon within the meaning of Art. 29A of the International Code of Zoological Nomenclature," and confusion arises when this ending is used to denote order-level taxa. The emerging system of suprafamilial name endings goes further and suggests -ida as the suffix for orders and -ina for suborders. In accordance with this system, although admittedly not required by any provisions of the Code (see Corliss, 1962, 1972), names of the two suborders of the order Chaetonotida, as set forth and described by d'Hondt (1971b) and herein accepted, should be emended to read Multitubulatina and Paucitubulatina.

Family Macrodasyidae Remane, 1926 emend. Remane, 1936

It is proposed here that *Pleurodasys* be transferred from the family Macrodasyidae to the family Lepidodasyidae. This genus was included by Remane in the Macrodasyidae on the basis of pharyngeal knobs located just anterior to midpharynx. The knobs were apparently interpreted in dorsal view as pharyngeal appendages associated with pharyngeal pores and in cross-section as homologs of lateral organ-pestle sensory organs. Lepidodasyid characters, based on much more complete material, include pharyngeal pores located at posterior end of pharynx (personal observation) and a solitary dorsal ovary (Boaden, 1963). Anterior adhesive tubes are borne on extensible feet, as in *Cephalodasys*, and provide evidence of a close relationship between the two genera. The matter of pharyngeal knobs remains unclear (Boaden, 1963), but it is likely that they have some sensory function.

No emendation of the family diagnosis as presented in Remane (1936) is necessary. With this transfer, there remain two closely related genera in the family Macrodasyidae:

Macrodasys Remane, 1924 (type-genus) Urodasys Remane, 1926

Family Dactylopodolidae Strand, 1929 emend.

As pointed out by Blake (1933), the proper name and citation for this family and its type-genus should be Dactylopodolidae Strand, 1929 (1927) and *Dactylopodolia* Strand, 1929 (1926). This should preclude further reference to Dactylopodallidae Remane, 1929 and *Dactylopodalia* Remane, 1929.

Acknowledgment is made of the transfer of the genus *Xenodasys* Swedmark, 1967 from the family Dactylopodolidae (order Macrodasyida) to the family Neodasyidae (order Chaetonotida, suborder Multitubulatina) as proposed by d'Hondt (1970, 1971b). The genus *Xenodasys* is poorly known and can be given only provisional assignment at best. But two key characters must be considered lacking in the genus, namely, anterior adhesive tubes and pharyngeal pores, in the absence of statements regarding their presence and disposition by an investigator as knowledgeable as Swedmark (see Swedmark, 1967). Aside from *Xenodasys*, the absence of both of these characters thus far is known only in members of the family Neodasyidae.

It is also necessary, in my opinion, to transfer the genus *Chordodasys* Schoepfer-Sterrer, 1969 from the family Dactylopodolidae to the family Turbanel-

lidae (both in the order Macrodasyida). While obviously an aberrant genus with unique characters, the body conformation, disposition of anterior adhesive tubes, and presence of ventral adhesive tubes in *Chordodasys* closely resemble those of other Turbanellidae, and the cephalic tentacles of *Chordodasys* show close kinship with those of *Dinodasys*, a turbanellid. These characters, I believe, outweigh the presence of cilia in the gut and the paired male genital pores, the two characters used finally by Schoepfer-Sterrer (1969) in linking *Chordodasys* to the family Dactylopodolidae by means of the genus *Dendrodasys*.

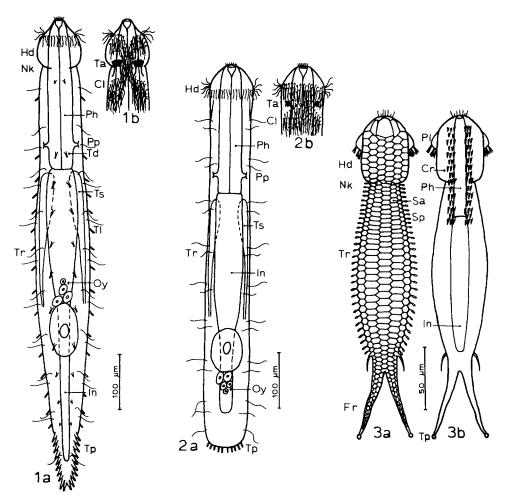
Emended diagnosis: Macrodasyida, with relatively short body; head elongate, including nearly entire pharynx in front of slight to pronounced neck constriction located at pharyngeal-intestinal junction; posterior end of trunk deeply lobed, or furcate with branches arising from narrowed medial base. Ventral cilia normal, arranged in two longitudinal rows. Lateral organ never present as pestle, at most as ciliary tufts. Anterior adhesive tubes absent; lateral adhesive tubes present or absent; dorsal adhesive tubes absent; posterior adhesive tubes several to many per side. Cuticular armament absent. Pharyngeal pores located at posterior end of pharynx. Testes paired, occasionally single; vasa deferentia exiting in mid-trunk region; penis absent. Ovaries paired, located laterally near rear of intestine. Copulatory bursa and/or seminal receptacle present. Simultaneous or alternating hermaphrodites.

Dactylopodola Strand, 1929 (1926) (type-genus) Dendrodasys Wilke, 1954

Family Lepidodasyidae Remane, 1927 emend.

Remane (1936) provided the most recent revision of the entire family Lepidodasyidae. The family at that time consisted of five species in four genera: two species of Lepidodasys, and one species each of Cephalodasys, Paradasys, and Acanthodasys. Since that time, one genus and 10 species have been added to the family: four species of the new genus Mesodasys, two species of Cephalodasys, and four species (including those of Boaden) of Paradasys. While neither family nor generic diagnoses have been emended to include the added material, two examples will be given to justify the need for such emendations. These will then be followed by diagnostic emendations of the family and of two of its genera, Cephalodasys and Paradasys. Remane's family diagnosis of 1936 indicates that the medioventral male genital pore exits near or in common with the anus. Yet the diagnosis of the genus Mesodasys Remane, 1951 holds that the medioventral male genital pore in that genus exits far in front of the anus (Remane, 1951). Similarly, the family diagnosis indicates that, while members of the Lepidodasyidae have posterior ends of various shapes, in no case do their posterior ends taper into a medial process. However, both otherwise good species of Cephalodasys described since 1936, C. palavensis Fize, 1963 and C. littoralis Renaud-Debyser, 1964, have posterior ends which do taper into a medial process (Fize, 1963; Renaud-Debyser, 1964).

As noted above, it is proposed that *Pleurodasys* be transferred from the family Macrodasyidae to the Lepidodasyidae. Similarly, on the basis of recent information, I propose that the genus *Acanthodasys* be transferred from the family Lepidodasyidae to the family Thaumastodermatidae. Though *Acanthodasys* was originally included in the Lepidodasyidae because of its cuticular armament of spines and scales and its bilateral reproductive system, emendations in the diagnosis of the Thaumastodermatidae necessitate our re-evaluation of these two characters. If the Thaumastodermatidae is sufficiently broad as to include organisms with or without cuticular armament or with armament of



Figs. 1-3. Schematic diagrams of members of the genera Cephalodasys, Paradasys, and Draculiciteria, respectively (Figs. 1a, 2a, 3a dorsal view; Figs. 1b, 2b, 3b ventral view). Illustrated are: head (Hd) and pluria (Pl); "neck" constriction (Nk); trunk (Tr) and furca (Fr); appressed (Sa) and pedunculated (Sp) scales; anterior (Ta), lateral (Tl), dorsal (Td) and posterior (Tp) adhesive tubes; ventral cilia (Cl) and cirri (Cr); pharynx (Ph), pharyngeal pores (Pp) and intestine (In); and testis (Ts) and ovary (Oy).

scales, papillae, and multi-ancrous spines, then it should be broad enough to include organisms with a combination of scalelets and uni-ancrous spines. Similarly, the unilateral right-handed reproductive system of the Thaumastodermatidae is no longer without exceptions. I have seen a species of *Tetranchyroderma* with a unilateral left-handed system and recent photos of a species of *Diplodasys* from the Joseph-Bank at 613 m depth clearly show a bilateral system (Uhlig, personal communication). Additional reasons for making the transfer lie in the character of the broad mouth and foot-like fusion of the posterior adhesive tubes, both of which have counterparts among Gastrotricha only in the Thaumastodermatidae.

Emended diagnosis: Macrodasyida with body elongated, dorsoventrally flattened; posterior end broadly expanded, rounded, truncated, or tapered into a medial process. Ventral cilia normal, ranging in distribution from two lateral bands to uniform covering, often particularly prominent in anterior region. Lateral organs generally without well-developed pestles. Anterior and posterior adhesive tubes present; lateral and dorsal adhesive tubes present or absent. Cuticular armament absent or consisting of flattened elongate scales. Pharyngeal pores located at posterior end of pharynx. Testes paired, lying lateral in anterior intestinal region; vasa deferentia exiting by means of medioventral pore located posterior to testes, often adjacent or in common with anus; penis absent. Ovary solitary, dorsal. Copulatory bursa and/or seminal receptacle present.

Lepidodasys Remane, 1927 (type-genus) Cephalodasys Remane, 1926 Mesodasys Remane, 1951 Paradasys Remane, 1934 Pleurodasys Remane, 1927

Genus Cephalodasys Remane, 1926 emend. (Figs. 1a,b)

Emended diagnosis: Lepidodasyidae with head delineated from trunk by means of a constriction; posterior end broadly expanded, rounded, truncated, or tapered into a medial process. Anterior adhesive tubes 2–7 per side, located posterior to buccal cavity in vicinity of neck constriction and borne on extensible feet; Lateral adhesive tubes present, with several to many pairs occurring along pharyngeal and intestinal regions; dorsal adhesive tubes present or absent; posterior adhesive tubes 10–20, located on lateral and posterior borders of posterior end, and may be separated into groups on either side of midline or may merge almost indistinguishably with lateral adhesive tubes. Cuticle thin, without armament, but often with epidermal glands or with granular appearance. Pharyngeal length in adult about one-third total body length; intestine more or less divisible into broad anterior secretory region and narrower posterior absorptive region.

Genus *Paradasys* Remane, 1934 emend. (Figs. 2a,b)

Emended diagnosis: Lepidodasyidae with head not delineated from trunk by means of constriction; posterior end rounded or truncated. Anterior adhesive tubes 1–2 per side, located posterior to buccal cavity and borne directly on ventral body surface; lateral and dorsal adhesive tubes absent; posterior adhesive tubes 6–10, located on lateral and posterior borders of posterior end, and sometimes separated into groups on either side of midline. Cuticle thin, without armament or epidermal glands but often with a granular appearance. Pharyngeal length in adult about one-third total body length; intestine more or less divisible into broad anterior secretory region and narrower posterior absorptive region.

It is clear from these emended diagnoses that *Paradasys turbanelloides* and *P. cambriensis* do not belong in the genus *Paradasys*, since both possess neck constrictions, 5–7 anterior adhesive tubes per side borne on extensible feet, lateral adhesive tubes, and 10–20 posterior adhesive tubes. It is therefore proposed that these two species be transferred to the genus *Cephalodasys*, with names, authorships, and dates for the species involved as follows:

Cephalodasys maximus Remane, 1926 (type-species)
C. cambriensis (Boaden, 1963) n. comb.
C. littoralis Renaud-Debyser, 1964
C. palavensis Fize, 1963
C. turbanelloides (Boaden, 1960) n. comb.

Paradasys subterraneus Remane, 1934 (type-species)
P. hexadactylus Karling, 1954
P. littoralis Rao & Ganapati, 1968

Family Planodasyidae Rao & Clausen, 1970

No emendation of this family or its members is necessary. It should be noted, however, that while Rao & Clausen (1970) clearly indicated that Rao should be regarded as the author of the genus *Planodasys* and its type-species, *P. marginalis*, it was not stated how the citation should read. In keeping with Article 51 of the Code, the genus should be cited as *Planodasys* Rao in Rao & Clausen, 1970, and the species should be cited as *Planodasys marginalis* Rao in Rao & Clausen, 1970.

Planodasys Rao in Rao & Clausen, 1970 (type-genus) Crasiella Clausen, 1969

Family Thaumastodermatidae Remane, 1926 emend.

The addition of *Acanthodasys* brings the number of genera in the family Thaumastodermatidae to eight. The family remains one of the best defined in

the entire phylum Gastrotricha.

Emended diagnosis: Macrodasyida with body broad to elongated, dorsoventrally flattened; posterior end rounded, truncate, or with small bilateral processes. Ventral cilia normal, often occurring in transverse rows; distributed uniformly, but restricted to pharyngeal region in *Hemidasys*. Lateral organs mostly pestles. Anterior and posterior adhesive tubes present; lateral adhesive tubes present, few to many, often predominantly ventrolateral in position. Cuticular armament absent or consisting of scalelets, scales, papillae or hooklike ancres with one to five spines each. Pharyngeal pores located at posterior end of pharynx, but often inconspicuous. Reproductive organs generally restricted to right side, occasionally present on left side or present bilaterally; both genital pores exit near anus. Testis lies lateral in anterior intestinal region; penis generally absent. Ovary lies dorsolateral and posterior. Copulatory bursa and seminal receptacle both present.

Thaumastoderma Remane, 1926 (type-genus)
Acanthodasys Remane, 1927
Diplodasys Remane, 1927
Hemidasys Claparède, 1867
Platydasys Remane, 1927
Pseudostomella Swedmark, 1956
Ptychostomella Remane, 1926
Tetranchyroderma Remane, 1926

Family Turbanellidae Remane, 1925 emend.

The addition of *Chordodasys* brings the number of genera in the family Turbanellidae to six. But, it has not diminished the cohesiveness of the group significantly.

Emended diagnosis: Macrodasyida with body elongate and more or less strap-shaped; head usually well defined, short, often bearing lateral protuber-

ances or tentacles; posterior end of trunk bearing paired lobes, separated in some cases by a rather deep cleft. Ventral cilia normal, arranged in two longitudinal rows. Lateral organ occasionally present as a pestle, generally limited to ciliary tufts. Anterior adhesive tubes several, typically borne on extensible feet, occasionally present in tuft-like form; lateral adhesive tubes present or absent, when present often supplemented by dorsal and/or ventral adhesive tubes; posterior adhesive tubes several to many per lobe. Cuticular armament absent or, if present, in form of cone-like scalelets and shovel-like spines. Pharyngeal pores located at posterior end of pharynx. Testes paired; vasa deferentia short, recurving and exiting together in testicular region or diverging posteriorly to exit laterally in midtrunk region; penis absent. Ovaries paired, located laterally near rear of intestine. Copulatory bursa present or absent; seminal receptacle present.

Turbanella Schultze, 1853 (type-genus)
Chordodasys Schoepfer-Sterrer, 1969
Desmodasys Clausen 1965
Dinodasys Remane, 1927
Paraturbanella Remane, 1927
Pseudoturbanella d'Hondt, 1968

Order Chaetonotida Remane, 1925 Suborder Multitubulatina d'Hondt, 1971

Family Neodasyidae Remane, 1929 emend.

The addition of *Xenodasys* brings the number of genera in the family Neodasyidae to two. Little more can be done with the group until additional data are available.

Emended diagnosis: Chaetonotida with body more or less elongate and strap-shaped; head well defined, short; posterior end of trunk bearing paired feet. Ventral cilia normal, arranged in two longitudinal rows. Anterior adhesive tubes absent or rudimentary; lateral adhesive tubes present; dorsal adhesive tubes absent; posterior adhesive tubes several per foot, fused at least at their bases. Cuticle thin; cuticular armament absent or consisting of large wart-like protuberances. Pharyngeal pores absent. Testes paired, well developed; vasa deferentia exiting separately in midtrunk region; penis absent. Ovaries paired, located laterally near posterior end of testes. Copulatory bursa and seminal receptacle present.

Neodasys Remane, 1927 (type genus) Xenodasys Swedmark, 1967

Suborder Paucitubulatina d'Hondt, 1971 Family Xenotrichulidae Remane, 1927 emend.

Renaud-Mornant (1968) described a new species, found sublittorally in the vicinity of Naples, Italy, and assigned it to the genus *Polymerurus*, calling it *P. tessalatus*. According to her description, the ventral surface was difficult to study but bore two ciliary fields the length of the pharyngeal region and on to the anterior portion of the intestinal region, at which point they ceased. The animal was of great interest to me since I had just found a similar beast sublittorally in the vicinity of Woods Hole, Massachusetts. The animal is unmistakable because of its reptilian appearance. The ventral ciliation of my specimens, while distributed similarly to that described by Renaud-Mornant, was in the form of "hypotrichous" cirri. This character indicates that the animal in question is not a *Polymerurus* nor even a member of the family Chaetonotidae;

rather, it belongs to the family Xenotrichulidae, as would be suggested by the abbreviated distribution of its ventral ciliary fields. This matter was discussed by Renaud-Mornant and myself in 1969. *Polymerurus tesselatus* has subsequently been reported by Luporini et al. (1971, 1973), but no mention of its ventral cirri was made. I have since seen similar specimens in the littoral sands of the American Virgin Islands, southern Florida, and New England (findings will be discussed in more detail elsewhere).

Recently, while perusing d'Hondt's (1967) thesis, it occurred to me that the animal he referred to as "Xenotrichula sp. (X. bispina? Roszczak, 1939)" on his pp. 43–46, and as "Xenotrichula (Xenotrichuloides) mirabilis n. sgn., n. sp.," on his p. 207, is actually related to the species described by Renaud-Mornant. D'Hondt (1968a) referred to it later as "Xenotrichula sp. (X. bispina? Roszczak, 1939)," but still later d'Hondt (1971b) spoke of it as "Xenotrichula (Xenotrichuloides) mirabilis d'Hondt, 1967." None of the names attributed to this animal by d'Hondt has taxonomic validity, because neither the subgenus nor the speciesgroup name was accompanied by a published description or figure. Also, while he did realize that his animal was a xenotrichulid, d'Hondt apparently did not recognize any relationship between that animal and the one described by Renaud-Mornant, since he refers separately to Polymerurus tesselatus in his review (d'Hondt, 1971b) of the Gastrotricha.

It is here proposed that *Polymerurus tesselatus* be transferred to the family Xenotrichulidae and, inasmuch as its taxonomic characters are sufficiently unique to warrant the establishment of a new genus, that it be designated the

type-species for the genus *Draculiciteria* n. g. (see below).

Emended diagnosis: Chaetonotida having head without well-developed cephalion (head shield), occasionally with pleuria; neck constriction present but often hidden by scalar covering; trunk more or less inflated and extended posteriorly into a caudal furca; body without adhesive tubes other than those associated with the posterior end. Ventral ciliation inserted as tightly packed "hypotrichous" cirri, occurring in two longitudinal rows in the pharyngeal and anterior trunk region, often with one additional pair of loose tufts in midtrunk region; ventral cirri of one or more sizes; head cilia 1–3 pairs of dorsal or lateral cirri or tufts of normal cilia or bristles; body often with several pairs of dorsal bristles. Cuticular covering scalar, often with more than one type, though limited regions of body may be naked. Hermaphroditic, with well-developed testes.

Genus *Draculiciteria* n. g. (Figs. 3a,b)

Xenotrichulidae with head bearing laterally expanded pleuria; neck constriction sharp, occurring some distance behind pleuria; trunk inflation slight; furcal branches elongate and flexible. Ventral cirri of one size. Cuticle thickened into scales, with simple appressed scales borne dorsally on body and pedunculated scales borne laterally on trunk.

Etymology: dracula (L), little lizard; citeria (L), likeness.

Type-species: Draculiciteria tesselata (Renaud-Mornant, 1968) n. comb.

Three genera, then, currently comprise the family Xenotrichulidae:

Xenotrichula Remane, 1927 (type-genus) Draculiciteria n. g. Heteroxenotrichula Wilke, 1954

Family Chaetonotidae Zelinka, 1889 emend. Hummon, 1969

No further diagnostic emendation is necessary for the family Chaetonotidae at this time. The raising of *Halichaetonotus* to the generic level increases the

number of genera in the family to eight. And, lest previously published nomenclatural notes suffer from insufficiently broad distribution, I call attention to Blake's (1933) finding that the name *Lepidoderma* Zelinka, 1889 was a junior homonym. His replacement of the preoccupied generic name is the name *Lepidodermella* Blake, 1933, though it should now also bear the earlier date (as shown below). Genera currently comprising the family Chaetonotidae, then, are as follows:

Chaetonotus Ehrenberg, 1830 (type-genus)
Aspidiophorus Voigt, 1904
Halichaetonotus Remane, 1936
Heterolepidoderma Remane, 1927
Ichthydium Ehrenberg, 1830
Lepidodermella Blake, 1933 (1889)
Musellifer Hummon, 1969
Polymerurus Remane, 1927

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