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THE TAXONOMICAL COMPOSITION OF THE FAMILY MICROCOTYLIDAE TASCHENBERG, 1879 (MONOGENEA)

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Abstract. The paper presents a system of monogenean family Microcotylidae with the indication of specific composition of all taxa and diagnoses of some taxa; a new subfamily Polynemicolinae including 2 genera — *Polynemicola* Unnithan, 1971 and *Microcotyloides* Fujii, 1944 is distinguished. New genera *Pseudoaspinatrium* (3 species, type species — *Aspinatrium euzeti* Ktari, 1971), *Pseudobivagina* (3 species, type species — *Bivagina kyphosi* Yamaguti, 1968) and *Pseudoneobivagina* (with a single species — *Neobivagina pelotretis* Dillon et Hargis, 1965) are substantiated. The family Microcotylidae on the whole involves 8 subfamilies, 39 genera and some 150 species.

The Microcotylidae Taschenberg, 1879 is the largest family in monogenean subclass Oligonchoinea Bychowsky, 1937. At present some 150 species belonging to more than 40 genera are counted within this family. However, the specific composition and status of some genera remain obscure up to now, and there is no unanimous opinion concerning the family division into subfamilies. The attempt of Unnithan (1971) to order the system of Microcotylidae *sensu stricto*, in spite of some positive results, failed and merely caused additional confusion (Mamaev 1977). We have not recognized any of the subfamilies proposed by Unnithan, and only 5 of this 13 new genera were recognized (Mamaev and Lebedev 1979), 4 of them requiring a critical review of specifical composition.

When preparing the handbook of identification of higher monogeneans we made a revision of the family Microcotylidae, making use of both the literary data and large collection material of the Laboratory of General Helminthology. (We had the opportunity to acquaint with some species from the collections of the other research institutes, too.) As a result, a certain picture about general subdivisions and specific composition of this family has been obtained.

The system of Microcotylidae is given briefly* below. This system, however, is not quite perfect requiring further studies of a new material (in particular, the subfamily Microcotylinae is too heterogeneous, and possibly it will be divided into 2—3 subfamilies).

Microcotylidae Taschenberg, 1879

Mazocraeidea, Microcotylinea. Haptor elongated, symmetric, seldom subsymmetric. Anchors situated on posterior apex of haptor, they may be observed only in the youngest specimens; in adults they are usually absent. Clamps numerous, usually similar in size and shape, consisiting of 5 (seldom 6) sclerites: 2 antero-lateral, 2 postero-lateral and 1 medio-basal; the latter often with lanceolate supplementary process that is seldom

* The diagnoses are given only for the taxa the size of which or taxonomic status were essentialy emended, and for the new ones. Only the most needed synonyms are cited, as the citation of all synonyms would increase the list of Latin names nearly twice.

well developed and sometimes even turns into a separate sclerite (the sixth—scleritum medio-supplementarium). Buccal suckers septate, usually with marginal row of minute spines or tubercles. Intestinal limbs, as a rule, unfused posteriorly, with relatively short branches. Testes usually numerous, postovarial. Copulative apparatus is very various. Ovary narrow, usually in form of interrogation mark. Vagina present or absent. The true seminal receptacle (a separate sack connected by a duct with the oviduct) absent, its function is performed by the expanded part of oviduct (seldom there is a marked swelling resembling the true receptacle). Parasites of marine fishes, mainly of Perciformes.

I. Microcotylinae Monticelli, 1892

Microcotylidae with symmetric or subsymmetric well marked haptor on the posterior end of body. Clamps are typical microcotylid with supplementary process lanceolate, rarely twopronged or sticklike. Anchors always absent in adults. Intestinal limbs with lateral appendages or branches, unfused posteriorly, and without anastomoses as a rule. Copulative organ without prostatic system, very various, armed or unarmed; genital atrium armed or unarmed. Vagina usually single, mediodorsal (with single or for once many appertures), rarely laterodorsal; sometimes there are two vaginae situated dorsolaterally or ventrolaterally. Parasites of many marine fishes, particularly of Perciformes.

1. *Microcotyle* Van Beneden et Hesse, 1863.* Type species: *M. donavini* V. Ben. et Hesse, 1863. Other species: *M. aigoi* Ishii et Sawada, 1938; *M. angelichthys* MacCallum, 1913; *M. archosargi* MacCallum, 1913; *M. arripis* Sandars, 1945; *M. atriobursata* (Caballero et Bravo-Hollis, 1972), comb. n. (syn. *Paramicrocotyle a.*); *M. australiensis* MacCallum, 1921; *M. bassensis* Murray, 1931; *M. bothi* Yamaguti, 1968; *M. branchiostegi* Yam., 1937; *M. brevis* Dillon et Hargis, 1965; *M. caudata* Goto, 1894; *M. centropristis* MacCallum, 1915; *M. cepolae* Yam., 1937; *M. costricta* Robinson, 1961; *M. debueni* Mane-Garzon, 1959; *M. ditrematis* Yam., 1940; *M. elegans* Goto, 1894; *M. emmelichthyops* Yam., 1968; *M. erythrini* V. Ben. et Hesse, 1863; *M. euedis* MacCallum et MacCallum, 1913; *M. furcata* Linton, 1940; *M. fusiformis* Goto, 1894; *M. gimpo* Yam., 1958; *M. helotes* Sandars, 1944; *M. hiatulae* Goto, 1899; *M. longicauda* Goto, 1899; *M. nemadactylus* Dillon et Hargis, 1965; *M. neozealanicus* Dillon et Hargis, 1965; *M. odacis* Sandars, 1945; *M. pacifica* Crane, 1972; *M. panceri* Sonsino, 1891; *M. pempheri* Machida et Azaki, 1977; *M. pentapodi* Sandars, 1944; *M. peprili* Pearse, 1949; *M. polymixiae* Yam., 1968; *M. pomacanthi* MacCallum, 1915; *M. pomatomi* Goto, 1899; *M. poronoti* MacCallum, 1915; *M. sebastisci* Yam., 1958; *M. sebastis* Goto, 1894; *M. stenotomi* Goto, 1899; *M. tamplicensis* (Caballero et Bravo-Hollis, 1972) comb. n. (syn. *Paramicrocotyle t.*); *M. tanago* Yam., 1940; *M. temnodontis* Sandars, 1945; *M. toba* Ishii et Sawada, 1938; *M. victoriae* Woolcock, 1936; *M. zalembius* Crane, 1972. The species listed undoubtedly belong to the genus *Microcotyle*.

However, the validity of many of them cannot be estimated now. The revision of specific composition of the genus can be hardly accomplished without reexamination of the type material. The difficulty of identification is supported by the fact that the species of this genus are not strongly specific and can parasitize many unrelated hosts.

2. *Atriostella* Unnithan, 1971. Type (single) species: *A. otolithis* Unnithan, 1971 from *Otolithes argenteus* (Sciaenidae). The validity of this genus is problematic, some details in the description of morphology are doubtful. (For other species of *Atriostella* see Mamaev 1977.)

3. *Bivagina* Yamaguti, 1963*. Parasites of perciform fishes, mainly of Sparidae. Type species: *B. tai* (Yam., 1938) Yam., 1963 (syn. *Microcotyle ichimidai* Ishii et Sawada, 1938 = *Polynemicola* (*Ishiella*) *i.*—Unnithan, 1971). Other species: *B. alcedinis* (Parona et Perugia, 1890) Yam., 1963; *B. baumi* (Sprehn, 1930) Yam., 1963; *B. centrodonti* (Brown, 1929) Mamaev et Parukhin, 1975; *B. heterospina* Mam. et Par., 1975; *B. pagrosomi* (Murray, 1931) Dillon et Hargis, 1965. (For the revision of the genus see Mamaev and Parukhin 1975.)

4. *Caballeraxine* Lebedev, 1972*. Type (single) species: *C. chainanica* (Lebedev, Parukhin et Roitman, 1970) Lebedev, 1972 from *Caranx malabaricus* and *Velifer multispinosus*.

5. *Diplostamenides* Unnithan, 1971*. Parasites of Sciaenidae, rarely of some other perciforms. Type species: *D. sciaenae* (Goto, 1894) comb. n. (syn. *Microcotyle sc.*; *Atriostella sc.* (Goto, 1894) Unnithan, 1971; *Diplostamenides umbrinae* Unn., 1971; *Microcotyle hemiatriospinalis* Lebedev, Parukhin et Roitman, 1969; *M. madrasi* Tripathi, 1959). Other species: *D. eriensis* (Bangham et Hanter, 1936) Unn., 1971; *D. pamae* (Tripathi, 1956) Unn., 1971; *D. priacanthi* (Meserve, 1938) Unn., 1971; *D. spinicirrus* (MacCallum, 1918) Unn., 1971; sp. inq.—*Microcotyle panceri* Sonsino, 1891.

6. *Gamacallum* Unnithan, 1971. Type (single) species: *G. macroura* (MacCallum et MacCallum, 1913) Unn., 1971 from *Roccus lineatus* (Moronidae).

7. *Jaliscia* Mamaev et Egorova, 1977*. Type (single) species: *J. caballeroi* (Bravo-Hollis, 1960) Mam. et Eg., 1977 (syn. *Microcotyle c.*) from *Trachurops crumenophthalmus* (Carangidae).

8. *Kahawaia* Lebedev, 1969*. Type (single) species: *K. truttae* (Dillon et Hargis, 1965) Leb., 1969 (syn. *Gonoplasius t.*) from *Arripis truttae*.

9. *Monomacracanthus* Mamaev, 1976*. Type (single) species: *M. cadodai* Mam., 1976 from *Pseudosciaena crocea* and *Sciaena dussumieri*.

10. *Paramicrocotyloides* Rohde, 1978. Type (single) species: *P. reticulatus* Rohde, 1978 from *Seriola grandis*.

11. *Pauciconfibula* Dillon et Hargis, 1965* (syn. *Bradyhaptorus* Unnithan, 1971). Parasites of Trachynidae. Type species: *P. trachini* (Parona et Perugia, 1890) Dillon et Hargis, 1965. Other species: *P. draconis* (Briot, 1904) Dill. et Harg., 1965 (very likely it is conspecific with the type species).

12. *Polymicrocotyle* Lamothe-Argumedo, 1967. Type (single) species: *P. manteri* Lamothe-Argumedo, 1967 from *Lutianus colorado*.

13. *Pseudoaspinatrium* gen. nov.* Microcotylinae with wide triangular haptor, clamps typically microcotylid. Buccal suckers small, septate. Intestinal limbs with developed lateral branches, unfused, extend into haptor. Testes usually very numerous, postovarian. Copulative organ with weak musculature, unarmed like genital atrium. Ovary long, twisted. Vagina mediodorsal, unarmed; vaginal duct unpaired, divided into two ducts connected with lateral vitellarian ducts. Type species: *P. euzeti* (Ktari, 1971) comb. n. (syn. *Aspinatrium* e.). Other species: *P. gallieni* (Euzet et Ktari, 1971) comb. n. (syn. *Aspinatrium* g.); *P. pogoniae* (MacCallum, 1913) comb. n. (syn. *Microcotyle p.*).

The species included in this genus differ from *Aspinatrium* in the dorsal position of vagina and in the absence of prostatic system (Ogawa and Egusa 1980).

14. *Sebasticotyle* Mamaev et Egorova, 1977*. Type (single) species: *S. ochotense* Mam. et Eg., 1977 from *Sebastes glaucus*.

15. *Solostamenides* Unnithan, 1977*. Parasites of Mugilidae. Type species: *S. mugilis* (Vogt, 1878) Unn., 1971 (syn. *Microcotyle m.*). (For the redescription see Euzet

* The genera marked with asteriks studied on the basis of collection materials.

and Combes 1969). Other species: *S. pseudomugilis* (Hargis, 1956) Unn., 1971.

16. *Diplasiocotyle* Sandars, 1944. Microcotylinae with symmetric haptor, clamps of microcotylid type but with well developed sticklike supplementary median process. Intestinal limbs far extending into haptor. Muscular copulative organ armed with a crown from thin straight hooks with points bent inside, rows of similar hooks situated on each side (on walls of genital atrium) on two muscular "bolster". Two muscular sucker-like vaginae situated dorsally. Eggs with posterior filament only. Parasites of Mugilidae. Type species: *D. johnstoni* Sanars, 1945. Other species: *D. agonostomi* (Sandars, 1945) comb. n. (syn. *Microcotyle a.*; *Neobivagina a.*—Dillon and Hargis 1965).

17. *Neobivagina* Dillon et Hargis, 1965. Only one species, should be left in this genus namely the type species, *N. canthari* (Van Beneden et Hesse, 1863) Dillon et Hargis, 1965 from *Cantharus griseus* and *C. brama*. It is very similar to *Diplasiocotyle*. Probably, Yamaguti (1963) was right placing this species in the latter genus, but in view of the difference between their hosts (Kyphosidae for *N. canthari*, and Mugilidae for *Diplasiocotyle* spp). the genus *Neobivagina* should be retained until the question is elucidated by new data. However, it is necessary to give a new diagnosis, as Dillon and Hargis (1965) made the diagnosis of this genus practicaly not according to the description of the type species but of *N. pelotretis* (the latter has ventrally situated vaginal pores, and hence does not belong to this genus).

Generic diagnosis: Microcotylinae with symmetric haptor, slamps typically microcotylid. Intestinal limbs with lateral appendages, unfused. Genital atrium armed with thin, arrow-shaped hooks with points slightly bent outside; these hooks form a central crown (16—20) and two posterolateral rows (of 5—7 hooks each). Two laterodorsal vaginal appertures resembling muscular suckers.

18. *Pseudobivagina* gen. nov. Microcotylinae with subsymmetric haptor, clamps of microcotylid type but with well developed rod-shaped supplementary process. Intestinal limbs with developed lateral appendages and branches, unfused, extending into haptor, one being longer than the other. Muscular copulative organ armed dorsally with semicrown from rib-like spines, and covered with longer ribs arranged in a dome on walls of genital atrium. Ejaculatory duct with a thick coat of muscles and divided into two parts: thick straight anterior, forming expulsor, and thinner winding posterior one. Two sucker-like vaginae situated laterodorsally. Parasites of Perciformes. Type species: *P. kyphosi* (Yamaguti, 1968) comb. n. (syn. *Bivagina k.*; *Neobivagina k.*—Bravo-Hollis 1979). Other species: *P. punctipinnus* (Crane, 1972) comb. n. (syn. *Bivagina p.*; *Neobivagina p.*—Bravo-Hollis 1979); P. aniversaria (Bravo-Hollis 1979) comb. n. (syn. *Neobivagina a.*).

This genus differs from *Neobivagina* and *Bivagina* in asymmetric haptor and in peculiarities of copulative apparatus: the copulative organ is armed with a semicrown of rib-like spines, and covered with a dome from longer ribs arranged on walls of genital atrium (*Neobivagina* armed with a crown of thin sagittate hooks and two lateral short rows of these hooks; *Bivagina* has no armament.)

19. *Pseudoneobivagina* gen. nov. Microcotylinae with symmetric haptor, clamps typically microcotylid. Intestinal limbs with lateral branches, extending into haptor, there anastomosing and fusing. Copulative organ with crown of vertically standing thin hooks with outside bent points, it surrounded by crown of similar hooks with inside bent points, situated on walls of genital atrium. Two sucker-like vaginae situated laterоventrally, vaginal ducts joint with vitelline reservoir (?). Type (single) species: *P. pelotretis* (Dillon et Hargis, 1965) comb. n. (syn. *Neobivagina p.*) from *Pelotretis flavilatus* and *Peltorhamphus novae-zeelandiae* (Pleuronectidae), New Zealand.

This genus differs from *Neobivagina* in ventral position of vagina and in intestinal limbs anastomosing and fusing.

20. *Lutianicola* Lebedev, 1970*. Type (single) species: *L. haifonensis* Leb., 1970—parasite of fishes of the genus *Lutianus*. There is a mistake: in the first description of the species and genus (Lebedev 1970) it is noted that vaginae are laterodorsal, but in fact they are lateroventral.

21. *Magniexcipula* Bravo-Hollis, 1981. Type (single) species: *M. lamothei* B.-H., 1981—parasite of Sparidae.

II. Atriasterinae Maillard et Noisy, 1979

The new (emended) diagnosis of this subfamily was given in the paper by Mamaev (1984), where it was pointed out that representatives of this subfamily have an armed genital atrium and unarmed copulative organ. It should be corrected: it is question able, as in some species the whole genital atrium changed into original copulative organ.

1. *Atriaster* Lebedev et Parukhin, 1969*. Parasites of Sparidae. Type species: *A. heterodus* Leb. et Par., 1969. Other species: *A. acanthopagri* Mamaev et Parukhin, 1975; *A. bifidacanthus* Mam. et Par., 1975; *A. spinifer* Mam. et Par., 1975.

2. *Atrispinum* Maillard et Noisy, 1979*. Mostly, parasites of Sparidae. Type species: *A. acarne* Maillard et Noisy, 1979. Other species: *A. salpae* (Parona et Perugia, 1890); *A. sargi* (Par. et Per., 1890); *A. seminalis* (Euzet et Maillard, 1973); *A. labracis* (Van Beneden et Hesse, 1863) Wind, 1983.

3. *Sparicotyle* Mamaev, 1984. Type (single) species: *S. chrysophrii* (Van Beneden et Hesse, 1863) Mamaev, 1984 (syn. *Microcotyle ch.*) from *Sparus aurata*. (Redescription—Euzet and Noisy 1978—79).

4. *Pagellicotyle* Mamaev, 1984*. Type (single) species: *P. mormyri* (Lorenz, 1879) Mam., 1984 (syn. *Microcotyle m.*; *Bychowskicotyla m.* Unnithan, 1971) from *Pagellus mormyrus*.

III. Prostatomicrocotylinae Yamaguti, 1968 (syn. Polylabrinae, Lebedev, 1976) (Diagnosis of subfamily—Ogawa and Egusa 1980).

1. *Polylabris* Euzet et Cauwet, 1967*. Parasites of Perciformes, particularly of Sparidae. Type species: *P. diplodi* Euzet et Cauwet, 1967. Other species: *P. acanthogobii* (Yamaguti, 1940); *P. acanthopagri* Mamaev et Parukhin, 1976; *P. carnarvorensis* Dillon, Hargis et Harrisses, 1983; *P. gerres* (Sandars, 1944)(syn. *P. gerres* (Machida, 1973)); *P. japonicus* Ogawa et Egusa, 1980; *P. kuhliae* (Yamaguti, 1968); *P. mamaevi* Ogawa et Egusa, 1980 (pro *P. gerres* (Sandars, 1944) sensu Mam., Par., 1976 (however, the validity of this species is doubtful)); *P. maomao* (Yam., 1968); *P. sigani* Dillon, Hargis et Harrisses, 1983; *P. sillaginae* (Woolcock, 1936); *P. parasillaginae* (Sandars, 1945) comb. n. (syn. *Microcotyle* p.). Sp. inq.: *P. tubicirrus* (Paperna et Kohn, 1964); *P. virgatarum* (Tubangui, 1931) (see Addendum).

2. *Polylabroides* Mamaev et Parukhin, 1976*. Parasites of Sparidae. Type species: *P. biungulatus* Mamaev et Parukhin, 1976. Other species: *P. australis* (Murray, 1931) Roubal, 1981; *P. multispinosus* Roubal, 1981. (And one new species from our collection its description is in press.) (see Addendum).

3. *Aspinatrium* Yamaguti, 1963. (Generic diagnosis—Ogawa and Egusa 1980.) Type (single) species: *A. spari* (Yam., 1963) from *Sparus longispinis*.

4. *Grandicotyle* Lebedev, 1976*. Type (single) species: *G. bychowskyi* Leb., 1976 from *Seriola grandis*.

5. *Tonkinaxine* Lebedev, Parukhin et Roitman, 1970*. Type (single) species: *T. homocerca* Leb., Par. et Roit., 1970 from fishes of the genus *Seriola*. (There are some mistakes in the original descriptions of this species and genus (see Lebedev et al. 1970). A redescription made by us is in press.

IV. Prosomicrocotylinae Yamaguti, 1963

Microcotylidae with wide flat body. Haptor not differentiated as a separate organ, consisting of two narrow frills on the posterior half body margins, not uniting posteriorly. Clamps massive. Copulative organ not differentiated, genital atrium muscular, with spines. Vagina single, mediodorsal.

Prosomicrocotyle Yam., 1958*. Parasites of Hexagrammidae, rarely of some other Scorpeniformes. Type species: *P. gotoi* (Yam., 1934) Yam., 1958. Other species: *P. chiri* (Goto, 1894) Yam., 1958. Both from fishes of the genus *Hexagrammos*. (In addition, there are two new species in our collection: one from *Hexagrammos lagocephalus*, another from *Paraliparis dactylosus*, their descriptions are in press.)

V. Metamicrocotylinae Yamaguti, 1963

Microcotylidae with symmetric or somewhat asymmetric haptor. Skeleton of clamp consisting of 6 sclerites, as median supplementary process is turned into large, dagger-shaped median. Copulative organ not differentiated. Genital atrium armed with long spines. Vagina absent.

1. *Metamicrocotyle* Yam., 1953. Parasites of Mugilidae. Type species: *M. bora* Yam., 1953. Other species: *M. cephalus* (Azim, 1939) Hargis, 1954; *M. filiformis* Yam., 1953; *M. inoblita* Bürnheim, 1970; *M. macracantha* (Alexander, 1954) Koratha, 1955; *M. manaarensis* Unnithan, 1971; *M. mugilis* Yam., 1968; *M. pacifica* Bravo-Hollis, 1982; *M. chamelense* B.—H., 1983.

2. *Intracotyle* Mamaev, 1970*. Parasites of Perciformes, particularly of Pomadasiidae. Type species: *I. orientale* Mamaev, 1970. Other species: *I. caballeroi* Mam., 1977; *I. eduardoi* (Tendeiro, 1960) Mam., 1970 (syn. *Microcotyle e.*); *I. hannibali* (Euzet et Ktari, 1970) Mam., 1977 (syn. *Heteraxinoides h.*).

VI. Anchoromicrocotylinae Bravo-Hollis, 1981 (emend.)

Microcotylidae with long symmetric or subsymmetric haptor and with keeping larval prohaptor that has 2 pairs of anchors and sometimes 1 pair of larval marginal hooklets too. Clamps of microcotylid type. Intestinal limbs of equal length, far extending into haptor, unfused. Copulative apparatus very complex (big muscular copulative organ with accessory glands and large prostatic system, or lacking, but genital atrium of very complex structure, furnished with muscular pockets and spines of various configuration). Vagina mediodorsal with long unpaired duct. Parasites of Sciaenidae.

1. *Anchoromicrocotyle* Bravo-Hollis, 1981*. Type (single) species: *A. guaymensis* Bravo-Hollis, 1981 from *Cynoscion nobilis*.

2. *Cynoscionicola* Price, 1962. Type species: *C. heteracantha* (Manter, 1938) Price, 1962. Other species: *C. jamaicensis* Lambert et Euzet, 1979; *C. pseudoheteracantha* (Hargis, 1957) Price, 1962; *C. sciaenae* Tantalean, 1974; *C. similis* Lambert et Euzet, 1979; *C. srivastavai* Bravo-Hollis et Caballero, 1970. (Characteristics of genus and species—Lambert and Euzet 1979.)

VII. Polynemicolinae subfam. nov.

Microcotylidae with long narrow haptor. Intestinal limbs long, of unequal length, unfused. Copulative organ in form of muscular tongue or tube (resembling cirrus but sliding and not turning out), spined or serrated. Ejaculatory duct usually S-shaped, with large prostatic vesicle and system of prostatic glands opening into it. Vagina single, mediodorsal or lateral, usually armed, vaginal chamber large and complex.

This subfamily differs from the others in: (1) structure of copulative organ, which has the form of muscular tongue or tube (resembling cirrus) with prostatic system, (2) vagina with large chamber.

1. *Polynemicola* Unnithan, 1971*. Parasites of Polynemidae, rarely of Sciaenidae. Type species: *P. bulbovaginata* Unn., 1971. Other species: *P. aequispinosa* Mamaev, 1977; *P. ambigua* Mam., 1977; *P. heterocotyle* Mam., 1977; *P. polynemi* (MacCallum, 1917) Unn., 1971; *P. sciaenae* Mam., 1977; *P. tritestis* Unn., 1971; sp. inq.: *Polynemicola* sp. (syn. *Microcotyle* sp. in Gupta, Khullar, 1968).

2. *Microcotyloides* Fujii, 1944*. Parasites of Percoidei and Polynemidae. Type species: *M. incisa* (Linton, 1910) Fujii, 1944. Other species: *M. impudica* Caballero, Bravo-Hollis et Grocott, 1955.

VIII. Syncoelicotylinae Mamaev et Zubchenko, 1978

Microcotylidae with long narrow body and short symmetric "butter-fly-like" haptor (in form of two separate lobes), clamps of microcotylid type. Intestinal limbs long with developed anastomosing lateral branches. Testes, numerous, postovarian. Copulative organ armed, of complicated structure. Seminal receptacle absent. Vagina mediodorsal, armed or unarmed, with vaginal chamber and unpair duct. Parasites of fishes of genus Notacanthus (Notacanthiformes).

1. *Syncoelicotyle* Mamaev et Zubchenko, 1978*. Type (single) species: *S. notacanthi* Mam. et Zubt., 1978 from *Notacanthus nasus*.

2. The new genus* with single species from *Notacanthus sexpinis*. (Collection of Lab. of General Helminthology. The description has not yet been published, but the previous diagnosis of the subfamily (see Mamaev and Zubchenko 1978) has already been modified taking into account the new genus.)

In the end it is necessary to mention the species of Microcotylidae which were described insufficiently and the systematic position of which cannot be established without reexamination of the type material.

Sp. inquirendae, inc. sed.: *Microcotyle angelichthys-towsendi* MacCallum, 1916; *M. inada* Ishii et Sawada, 1938; *M. leiognathi* Tripathi, 1959; *M. mouwoi* Ishii et Sawada, 1938; *M. otrynteri* Pearse, 1949; *M. pontica* Pogoreltseva, 1964; *M. sciaenicola* Murray, 1932; *Yogendrotrema rajghatai* Kumar et Agarwal, 1983.

ТАКСОНОМИЧЕСКИЙ СОСТАВ СЕМЕЙСТВА *MICROCOTYLIDAE TASCHENBERG*, 1879 (*MONOGENEA*)

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Резюме. В статье излагается система моногеней семейства *Microcotylidae*, с указанием видового состава всех таксонов, даются диагнозы ряда таксонов; выделяется новое подсемейство *Polynemicolinae*, включающее два рода — *Polynemicola Unnithan*, 1971 и *Microcotyloides Fujii*, 1944; обосновываются также новые роды: *Pseudoaspinatrium* (с 3 видами, типовой — *Aspinatrium euzeti Ktari*, 1971), *Pseudobivagina* (с 3 видами, типовой — *Bivagina kyphosi Yamaguti*, 1968), *Pseudoneobivagina* (с единственным видом — *Neobivagina pelotretis Dillon et Hargis*, 1965). В целом семейство включает 8 подсемейств, 39 родов и около 150 видов.

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