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SOME REMARKS ON THE FAMILY TANZANAPSEUDIDAE, WITH THE DESCRIPTION OF THREE NEW SPECIES AND THE VALIDATION OF THE GENUS *ACANTHAPSEUDES* ROMAN, 1976 (CRUSTACEA: TANAIDACEA: APSEUDOMORPHA)

MODEST GUȚU

Abstract. Two new species of the genus *Tanzanapseudes* Băcescu, 1975 (*T. bacescui* n. sp. and *T. mirificus* n. sp.) and one belonging to the genus *Acanthapseudes* Roman, 1976 (*A. hansgeorgmuelleri* n. sp.) from the islands Sri Lanka and Mauritius (Indian Ocean) are described and illustrated, as a result of the synonymization invalidation of the genus *Acanthapseudes* with *Tanzanapseudes*. At the same time, some morphological data on a doubtful species of the genus *Tanzanapseudes* (from Mozambique Channel) are presented, and manca I and II stages in *T. mirificus* n. sp. and manca I in *A. hansgeorgmuelleri* n. sp. are described, unknown in tanzanapseudids up to now. Also, new diagnoses (of the family Tanzanapseudidae and of the two genera), as well as the identification key of the genera and species of the above-mentioned family are presented.

Résumé. On décrit deux nouvelles especes du genre *Tanzanapseudes* Băcescu, 1975 (*T. bacescui* n. sp. and *T. mirificus* n. sp.) et une espèce appartenant au genre *Acanthapseudes* Roman, 1976 (*A. hansgeorgmuelleri* n. sp.) des îles Sri Lanka et Mauritius (Océan Indien). A cette occasion on a invalidé la synonymisation du second genre avec le premier. On présente aussi quelques données morphologiques d'une espèce incerte du genre *Tanzanapseudes* (collectée dans le canal Mozambique) et on décrit les stades manca I et II de *T. mirificus* n. sp. et manca I chez *A. hansgeorgmuelleri* n. sp., stades décrits pour le première fois chez les Tanzanapseudides. On présente aussi de nouvelles diagnoses, ammendées, pour la fam. Tanzanapseudidae et ses deux genres, ainsi qu'une clé commune d'identification des genres et des espèces de cette famille.

Key words: Tanzanapseudidae, *Acanthapseudes*, *A. hansgeorgmuelleri* n. sp., *Tanzanapseudes*, *T. bacescui* n. sp., *T. mirificus* n. sp.

Băcescu (1975) described a very interesting tanaidacean genus, *Tanzanapseudes* (with two species, *T. langi* and *T. longiseta*), included by him in a new family, Tanzanapseudidae, from the Western Indian Ocean (Coasts of Tanzania).

Roman (1976), without knowing the Băcescu's paper (op. cit.), described a similar species to *Tanzanapseudes*, classified by her in other new genus, *Acanthapseudes* (family Metapseudidae in Roman's opinion), from the same geographical area (near the Madagascar Island). It is about the species *A. elegans* Roman, 1976. Three years later, Kudinova-Pasternak (1979) synonymized the Roman's genus to *Tanzanapseudes*, this synonymy being agreed by all specialists.

Müller (1992) described a new tanzanapseudid species (*T. polynesiensis*) from the French Polynesia (Bora Bora Island), and, recently, Stepien & Blazewicz-Paszkowycz (2009) described other two species (*Tanzanapseudes levis* and *T. nieli*), from the Western Australia, raising to six the number of the species classified in the genus *Tanzanapseudes*.

Studying several specimens from the North-western Indian Ocean, sent by the late Dr. Hans-Georg Müller and by Prof. Dr. Marie-Louise Roman, I discovered the presence of other three new tanzanapseudid species. At the same time, I was

surprised observing that one of the species has the body setae different from those of the other *Tanzanapseudes* species, but resembling to those of the type-species of the genus *Acanthapseudes* Roman, 1976, this thing making me to consider the genus described by Roman (op. cit.) valid.

Further on, I shall present new diagnoses for the family Tanzanapseudidae and genera *Acanthapseudes* and *Tanzanapseudes*, as well as the descriptions of the three new species (from the islands Sri Lanka and Mauritius), belonging to the mentioned genera. At the same time, I present some morphological data on a doubtful species of the genus *Tanzanapseudes* (collected during the French Expedition „Benthedi", 1977, from the Mozambique Channel), whose identity I haven't established, because of the bad conservation conditions. Also, I describe the manca I and II stages of the two genera (unknown up to now in tanzanapseudids), and, in the final part of the paper, I present the identification key of genera and species included in the already mentioned family.

Remarks on terminology. Being consistent with the terminology used by me in my previous papers (Guțu, 1981, 1996, 2006, etc.), as well as of the other specialists (Băcescu, op. cit.; Roman, op. cit.; Kudinova-Pasternak, 1978, etc.), pereopods II-VII correspond now to the pereopods I-VI (Larsen, 2003; Müller, op. cit.; Stepien & Blazewicz-Paszkowycz, op. cit., etc.).

Family Tanzanapseudidae Băcescu, 1975

Although, initially, family Tanzanapseudidae was considered valid (Kudinova-Pasternak, 1978; Sieg & Winn, 1978; Guțu, 1981), later, some tanaidologists (Sieg, 1980, 1983 a, b, 1984; Müller, op. cit.) considered it a subfamily of the family Metapseudidae, a family in which Roman (op. cit.) classified the genus *Acanthapseudes*, described by her (genus synonymised by Kudinova-Pasternak, 1979, as I have mentioned above, with *Tanzanapseudes*). In a brief comment on Metapseudidae, Guțu (1996: 85-86) pleads for the validation of the family Tanzanapseudidae, opinion agreed by all specialists now.

As a result of the analysis of the morphological features, characteristic to the known species, I considered necessary to work out a new diagnosis of the family Tanzanapseudidae (as well as of the two genera), for eliminating all present confusions.

New diagnosis (modified after Guțu and Sieg, 1999).

Body short (at most 2.2 mm long) and broad (about 1.4 times as long as wide), oval in dorsal view, strongly dorsoventrally flattened, with 31 great triangular prolongations around (each of them having small denticles on both margins, and some, simple or plumose, setae), giving it an aspect of a star. Carapace large, shorter than wide, with an anteromedian great and acute rostrum (denticulated on sides and with some, simple or plumose, setae) and two prolongations (denticulated or not, but without setae) situated on sides of rostrum; each lateral margin of carapace with four long expansions (denticulated and with simple or plumose setae); ocular lobes well defined, with pigmented visual elements. Pereon with six short but wide pereonites, each of them having great epimeres (denticulated and with simple or plumose setae, similar to lateral prolongations of carapace), excepting the pereonites three and four which have, in addition, two long simple setae on the anterior and posterior margins, respectively. Pleon, narrower caudally (having the pleonites and pleotelson fused in a single segment), with six lateral (three on each side) and two caudal prolongations

(pleotelson), similar to those of carapace or pereonite epimeres. Antennule with a long three-articulated peduncle; first article great, having some spiniform processes on both sides; outer and inner flagella uni-articulated, the outer one much greater than the inner flagellum. Antenna, seven-articulated, without squama. Mandible and maxillule with three- and two-articulated palp, respectively. Labium palp (terminal lobe) ovate, ended in a long spine. Maxilliped with a very short coxa; basis broad (about two times shorter than wide), with some long plumose setae on the inner margin; palp, four-articulated, each of the last two articles being only a little smaller than the second one; endite larger than the second palp article; caudodistal inner seta simple (not leaf-shaped). Epignath cup-shaped, with a well developed spine. Cheliped dimorphic (stronger in males), without exopodite. Pereopod II of embrasing-type, with exopodite, is characterized by a relatively small basis (shorter than propodus), a great ischium (only a little smaller than carpus), a well developed merus (greater than carpus), a thick dactylus (with a strong claw), and the presence of some robust sternal spines only on propodus. Pereopods III and IV similar to pereopod II, excepting the presence of exopodite. Pereopods V-VII, also of embrasing-type, differs from the first three ones by the length of merus, which is shorter than carpus. Pleopods, in three pairs, biramous, the basal article being longer than the longest branch. Uropod, biramous; exopodite two-articlulated; endopodite, usualy, four-articulated.

Composition (2 genera with 9 species): *Acanthapseudes* Roman, 1976 and *Tanzanapseudes* Băcescu, 1975.

Geographical distribution: Indian Ocean and Southern Pacific.

Remarks. As it results from the description of the adults of the family Tanzanapseudidae nine species (including the three new species described in this paper), the setae from the rostrum level and of the lateral prolongations of the body can be simple (in *Acanthapseudes hansgeorgmuelleri* n. sp., fig. 9, and *A. elegans*, cf. Roman, op. cit.: 156 and fig. 1) or plumose (in the other seven species, considered to belong to the genus *Tanzanapseudes*, by me, figs 1, 7; Băcescu, op. cit.: 83 and fig. 1 A; Müller, op. cit.: 102 and fig. 1; Stepien & Blazewicz-Paszkowycz, op. cit.: figs 1, 4). As regards the species with plumose setae, the pereonites 3 and 4 have two simple long setae each, on the posterior margin and, respectively, the anterior margin of the epimere (Fig. 1; Băcescu, op. cit.: fig. 1 A; Müller, op. cit.: 102). Although in the species *Tanzanapseudes levis* and *T. nieli* these setae are plumose, as it results from the illustration presented by Stepien & Blazewicz-Paszkowycz (op. cit.: figs 1, 4), in the description, the two authors do not refer to their aspect. I presume that they are simple, as in the other species. Also, the rostrum configuration is not known in *T. levis* (cf. Stepien & Blazewicz-Paszkowycz, op. cit.: 47 and fig. 4).

As regards appendages of the adults, they are not too different for permitting the delimitation the two systematic "groups", *Acanthapseudes* and *Tanzanapseudes* (Figs 2-4, 7, 10; Băcescu, op. cit.; Roman, op. cit.; Müller, op. cit.; Stepien & Blazewicz-Paszkowycz, op. cit.).

It is interesting that the difference between the setae of the adults (simple in *Acanthapseudes*, fig. 9, and plumose in *Tanzanapseudes*, figs 1, 7) doesn't occur in manca stages. Therefore, manca I in *A. hansgeorgmuelleri* n. sp. does not have simple setae as adults but plumose (Figs 9, 10 H, I), as manca stages and the adults of *T. mirificus* n. sp. (Figs 1, 5, 6).

In spite of this, I consider that the different configuration of setae which characterizes the adults suggests the presence of two evolutional lines within family Tanzanapseudidae, in different levels, the species of the genus *Acanthapseudes* (with simple setae in adults and plumose in manca stages) being superior, in my opinion, to those of the genus *Tanzanapseudes* (with plumose setae both in adults and in manca stages).

I think I am not wrong asserting that the importance of these setae is that of creating water currents which assure a good oxygenation. The change of the seta structure in the species of the "group" *Acanthapseudes* (from plumose, in manca stages, in simple, in adults) probably is due to the different environment conditions in which they lived, in comparison with the adults of the *Tanzanapseudes* species, which kept the plumose structure in the manca stages (which gave them a larger surface and, in conclusion, a greater water flow and a better oxygenation). Therefore, by the synonymization invalidation of the two genera I only want to point out the presence of the two evolutional lines, whose common ancestor had plumose setae (as in the present manca stages), structure which was "lost" in the adults of *Acanthapseudes*.

Although the difference between the adults of the two "groups" might be considered insignificant (and, finally, exaggerated for their consideration as valid genera), I think that in the case of the families with "extreme" adaptations (very specialized) as Tanzanapseudidae, intrageneric differences (and more than that the intraspecific ones) are less obvious (generating great difficulties in the identification of these taxa) than in genera (and in the species) belonging to the families with less "specialized" adaptations. That's just I think that, under these circumstances, some morphologic features, apparently minor, have not to be ignored. In this respect, I take into consideration the difficulty of the species identification of other taxa, extremely "specialized" (this time I refer to the genus level), as in the case of the genus *Synapseudes* Miller, 1940. Besides, it is possible that the male chelipeds of the genus *Acanthapseudes* (unknown up to now) to have some morphologic characteristics different to those of the genus *Tanzanapseudes*, as in the case of the genera *Mesokalliapseudes* Lang, 1956 and *Alokalliapseudes* Guțu, 2006 (recently confirmed by the molecular studies, cf. Drumm & Heard, 2010: 30), whose females have similar chelipeds, while males have them slightly different (Guțu, 2006: 159).

Genus *Tanzanapseudes* Băcescu, 1975

New diagnosis. Rostrum and all lateral denticulated prolongations of the body with plumose setae, excepting those which are situated on posterior and anterior margins of pereonites three and four, respectively (which are simple). Uropod endopodite with four articles. Male cheliped dimorphic (larger than in female).

Remarks. The morphological features from the present diagnosis do not coincide totally with the descriptions or illustrations presented by Stepien & Blazewicz-Paszkowycz (op. cit.) in the species *T. levis* and *T. nieli* (see my above comments).

Composition (7 species): *Tanzanapseudes bacescui* n. sp., *T. langi* Băcescu, 1975, *T. levis* Stepien & Blazewicz-Paszkowycz, 2009, *T. longiseta* Băcescu, 1975, *T. mirificus* n. sp., *T. nieli* Stepien & Blazewicz-Paszkowycz, 2009 and *T. polynesiensis* Müller, 1992.

Tanzanapseudes mirificus n. sp.
(Figs 1-6)

Material: 25 specimens (1 female with embryos, 6 females with oostegites, 4 adult males, 2 subadult males, 8 juveniles and 4 mancas I and II), Indian Ocean, Mauritius Island, Flic en Flac, Station MAU-1, collected in reef flat, mainly from dead corals, 0.5-2 m deep; 15-30 March, 2006. Leg. Dr. Hans-Georg Müller.

Remarks. In the above reckoning, a female with oostegites (destroyed by dissection) and a subadult male (in a bad conservation stages) were not taken into consideration, for making only some observations, at the level of the chelipeds.

Holotype, female with embryos, preserved in the Collections of the „Grigore Antipa" National Museum of Natural History from Bucharest (Romania), No. 250438;

Allotype, adult male, in the same collection, No. 250439;

Paratypes, 23 specimens (6 females, 3 adult males, 2 subadult males, 8 juveniles, 1 manca I and 3 manca II), preserved as follows:

- 15 specimens (3 females with oostegites, No. 250440; 2 adult and 2 subadult males, No. 250441; 4 juveniles, No. 250442; 1 manca I and 3 manca II, No. 250443) in the Collections of the „Grigore Antipa" National Museum of Natural History from Bucharest (Romania);

- 8 specimens (3 females with oostegites, 1 adult male and 4 juveniles), preserved in the Collections of the Zoological State Museum of Munich (Germany).

Description of the female with oostegites (paratype)

Body (Fig. 1) short (2.12 mm) and broad (1.54 mm), about 1.37 times longer than wide, dorsoventrally strongly flattened, oval in dorsal view, with 31 radial prolongations, around, each of them having denticulate margins and some long plumose (and simple, in two pereonites) setae.

Carapace large, approximately 2 times wider than long (including the rostrum) and 2 times shorter than the length of pereon and pleon (measured together); dorsally with some very small tubercles or spines. Anterior margin with a median rostrum (four or five-denticulated on sides and with eight plumose setae around) and two prolongations similar to rostrum, but with more denticles and without setae. Each side with four great prolongations, having 10-15 unequal denticles, around, and 7-9 plumose setae, as follows: the first prolongation with nine plumose setae around and the follwings three ones with seven or eight plumose setae, situated only distally and on the posterior (caudal) margins. Ocular lobes well defined, with pigmented visual elements.

Pereon, 1.5 times longer than the carapace (measured with rostrum), with six short but wide pereonites, each of them having great epimeres (relatively similar to the lateral prolongation of carapace) with denticulate margins and plumose or simple setae; epimeres of the first two pereonites with seven plumose setae, situated distally and on the posterior margins; third pereonite (a little longer than the previous one, having more denticles on the caudal margin than the other epimeres), with three plumose and two simple setae on the distal side and posterior margin, respectively; fourth pereonite, about as long as the second one, with three or four plumose and two simple setae on the distal end and the anterior margin, respectively; fifth and sixth pereonites, unequal, shorter and narrower than the previous ones, with eight plumose setae on the anterior margin and distally.

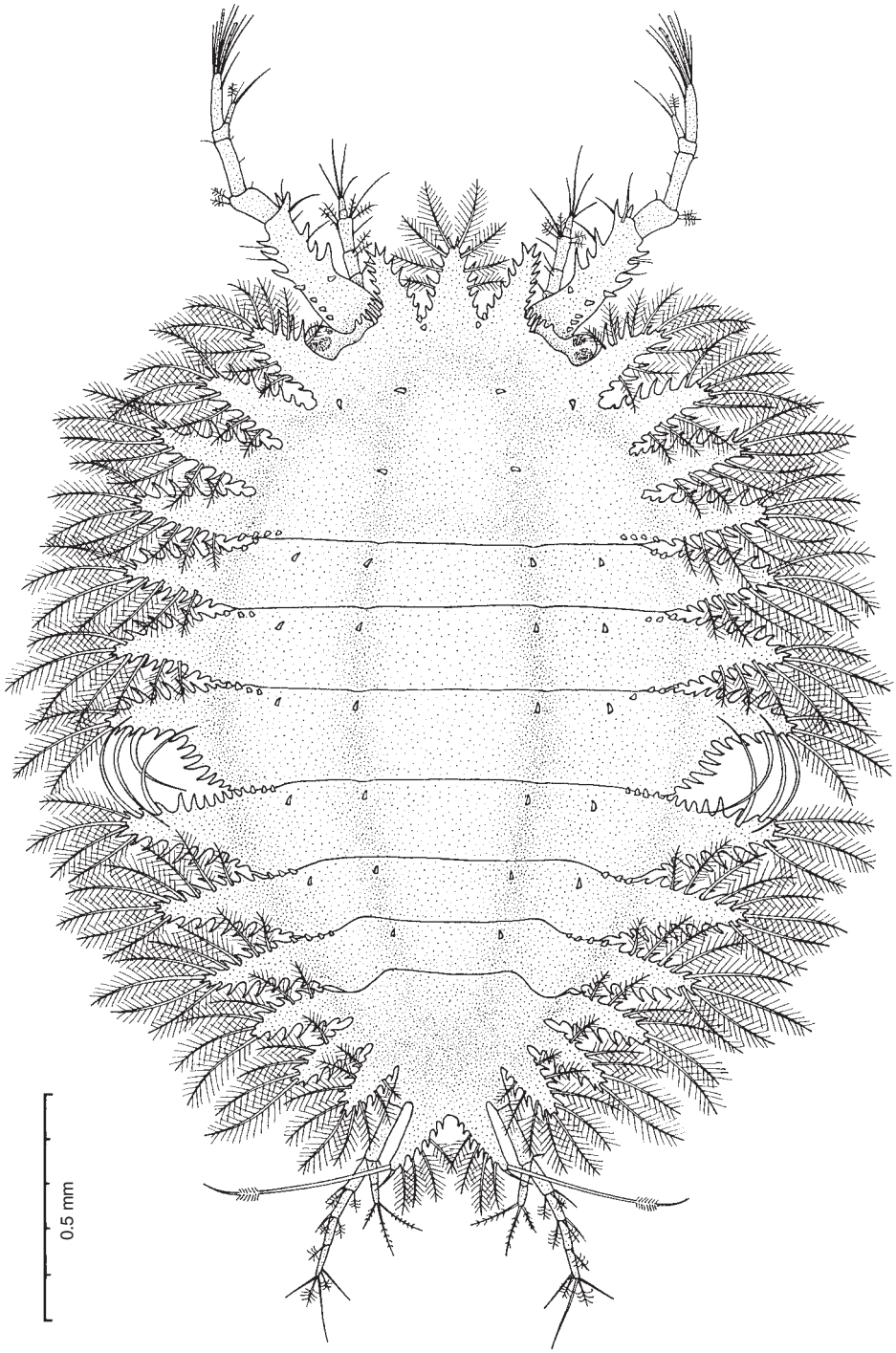

Fig. 1 - *Tanzanapseudes mirificus* n. sp., female, paratype: body (dorsal view).

Pleon, narrower caudally, with pleonites and pleotelson fused in a single segment, has three prolongations on each side (similar to the last epimere of pereon, but smaller than that) and other two caudal, corresponding to pleotelson; first two lateral prolongations with five or six plumose setae on the anterior and distal margins; third lateral prolongation with eight or nine plumose setae, around. The two caudal prolongations (pleotelson) have the inner margins with some denticles and four plumose setae; the outer sides smooth; terminally with two unequal simple setae, one of them being very long.

Antennule (Fig. 2 A) with a long three-articulated peduncle; first article large, about four times longer than the median thickness, with four or five small tuberculiform spines in the first outer half, and four great spines and some broom setae in the second outer half; inner margin with four or five stout spines and three setae, the two distal being plumose; second article, four times shorter than the first one, with around six distal broom setae; third peduncular article thin and long, about 1.4 times longer than the second one. Fourth article (common to the two flagella) very short. Outer flagellum with only one great article (as long as third peduncular article), having one midinner simple seta, and six, also simple, and two aesthetascs situated distally. Inner flagellum, thin, two times shorter than the outer one, ended in one broom and two simple setae.

Antenna (Fig. 2 B), as long as the first peduncular article of antennule, without squama. Peduncle, five-articulated; second article short, as long as the first one, with one distoexternal simple seta; third article, shortest, with one long simple seta in the distoinner corner; fourth article, a little shorter than the second one, with two distal broom setae; last peduncular article, a little shorter than the previous two ones (measured together), with two simple and five broom setae. Flagellum with two small articles, ended in four simple setae.

Mandibles (Fig. 2 C, D) without special features. Palp three-articulated; first article, 1.5 times shorter than the second one, apparently with one long plumose seta; second article with about seven setae on the distoinner margin; third article, as long as the second one, with one very long and about 12 short setae on the distoinner margin, and other two, ciliate, on the outer margin. Pars incisiva of both mandibles four-denticulated; lacinia mobilis of left mandible, three-denticulated. Setiferous lobes with three or four furcate setae. Pars molaris relatively thin and long.

Labium (Fig. 2 E) with some very short setae and three small spines in the distoexternal corner of basal lobe. Palp ovate, longer than wide, ended in a long setiform spin; both margins with fine setae.

Maxillule (Fig. 2 F) with biarticulated palp, ended in three unequal setae. Outer endite, apparently, with nine denticles. Inner endite with three ciliate setae.

Maxilla, unstudied.

Maxilliped (Fig. 2 G) with a very short but wide coxa. Basis, about two times wider than long, with seven very long plumose setae on the inner margin. Palp, well developed, four-articulated; first article, shortest, with a distoexternal small spine, and one distoinner very long, apparently simple, seta; second article, relatively small (only a little larger than the following one), with about 16 unequal simple setae (four of them being very long) on the inner margin, and one distoexternal setiform spine; third article with five thick, and four fine, simple setae; fourth palp article large, approximately equal to the third one, and only a little smaller than the second article, with one small and nine strong and long simple setae. Endite large, with two

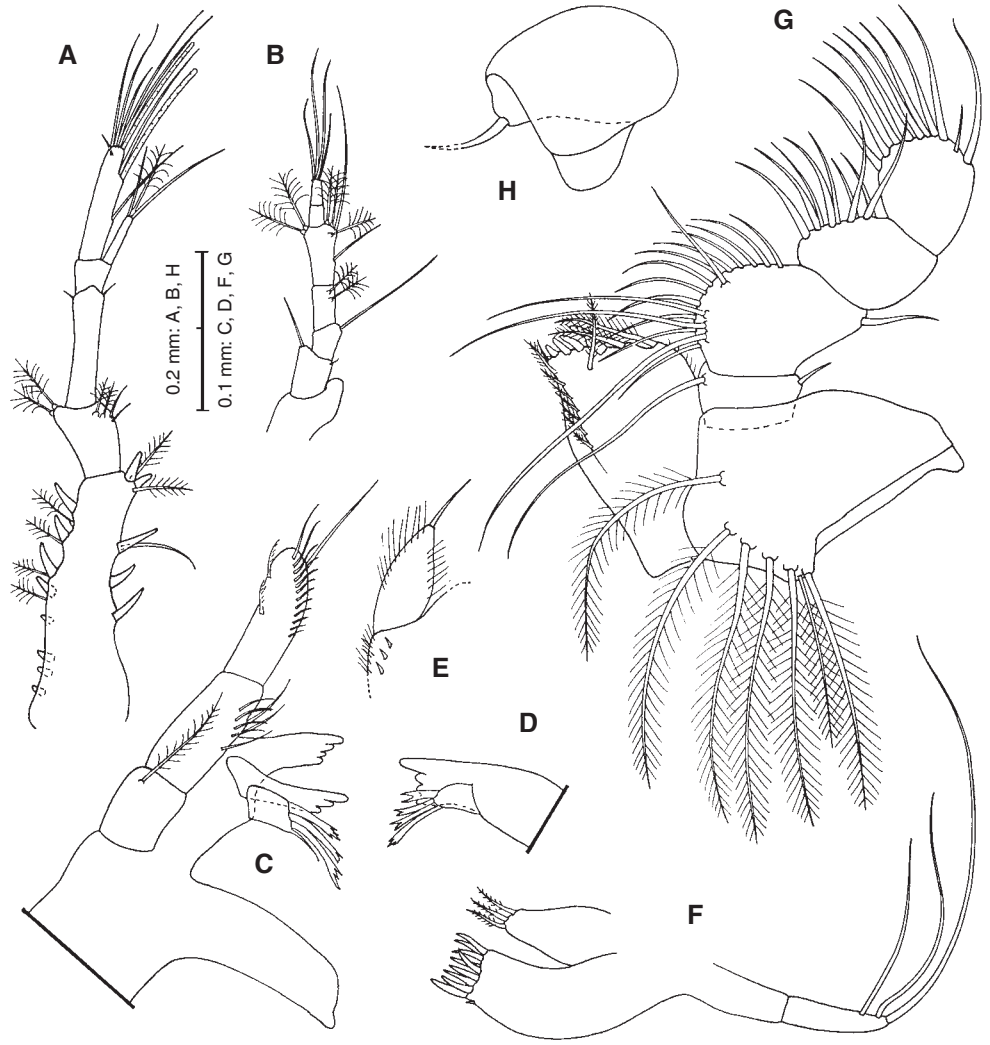

Fig. 2 - *Tanzanapseudes mirificus* n. sp., female, paratype: A, antennule; B, antenna; C, left mandible (distal part); D, pars incisiva and setiferous lobe of right mandible; E, labium (schematic); F, maxillule; G, maxilliped; H, epignath.

plumose setae and four short but thick spiniform formations on the distal margin; distoinner seta, plumose; inner margin with seven short plumose setae.

Epignath (Fig. 2 H) cup-shaped, with a well developed spine.

Cheliped (Fig. 3 A) without exopodite. Basis relatively small, approximately 2 times longer than wide, with two short plumose setae on sternal margin. Merus only a little shorter than basis, with one sternal long circumplumose seta. Carpus, longer than basis, and about 2.5 times narrower than its thickness, with four long and one short simple setae on the sternal margin, and two or thee distosternal denticles. Propodus (together with the fixed finger) as long as carpus, but wider than that;

fixed finger, with about 32 long simple setae around and other two ones near the dactylus joint; inner margin with six rounded denticles; claw well developed, curved. Dactylus curved, with three distal simple setae; inner margin with five small denticles and five short ciliate setae; claw stout, longer than the propodal one.

Pereopod II (Fig. 3 B) with a small, three-articulated, exopodite, ended in two plumose setae. Basis, wider distally, relatively short; midsternally with one long and distosternally with one short simple seta; tergally with one broom and one small simple seta. Ischium great, only three times shorter than basis length, with one small distosternal seta. Merus, approximately as long as basis, with one sternal and one tergal small simple seta, and one ciliate spine in distotergal corner. Carpus, as long as wide, and about 1.5 times shorter tham merus, with two small distosternal simple setae; distotergally with one robust ciliate spine and four unequal ciliate spiniform setae. Propodus, approximately as long as basis and ischium or merus and carpus (measured together), with one proximal ciliate spine, one median broom and two

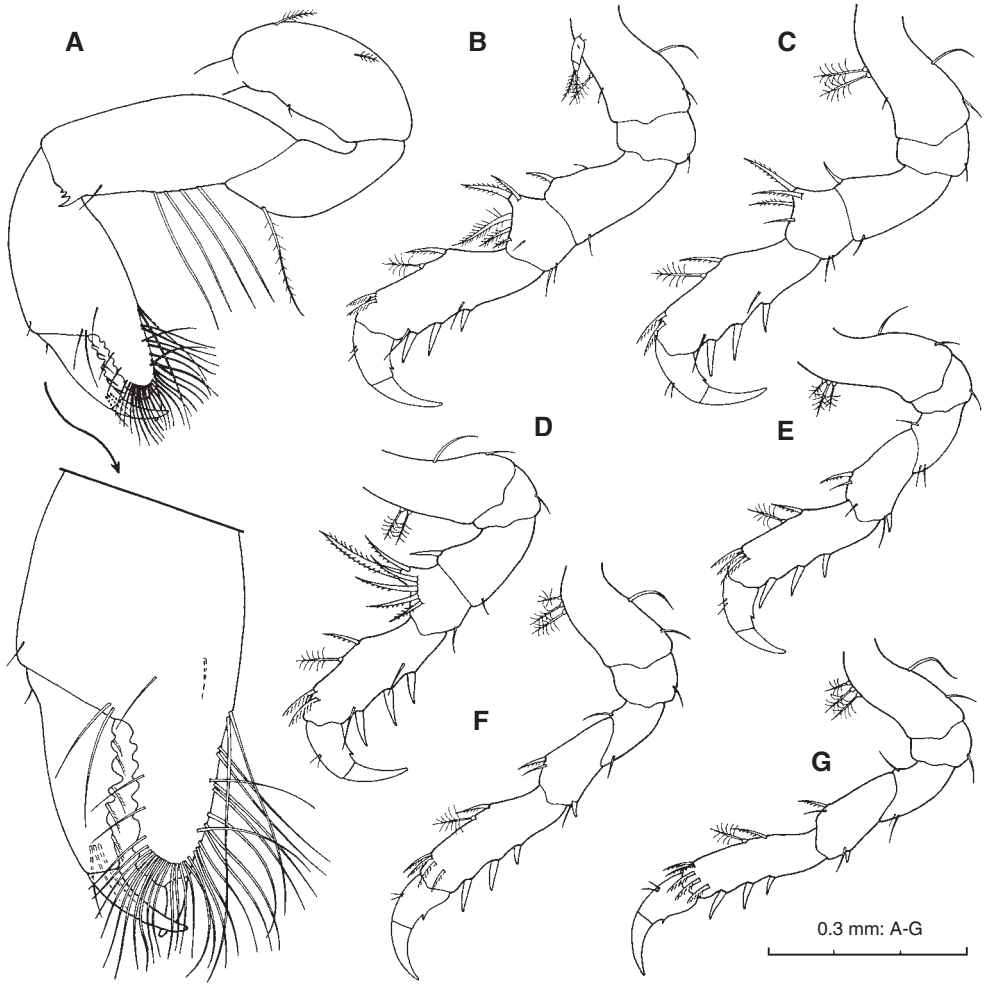

Fig. 3 - *Tanzanapseudes mirificus* n. sp., female, paratype: A, cheliped; B-G, pereopods II-VII.

distal ciliate setae on the tergal margin; sternally with three robust spines and two short simple setae: dactylus thick, curved, as long as ischium, with two tergal short setae and one distosternal small spine; claw well developed, curved, acute apically.

Pereopods III and *IV* (Fig. 3 C, D) similar to pereopod II, excepting the absence of exopodite, the number of basal broom setae, and the size and number of carpus ciliate spines or setae, as it results from the presented illustration.

Pereopod V (Fig. 3 E) relatively similar to pereopods II-IV, excepting the length of merus, of carpus, and the setulation or spinulation of carpus and propodus. Thus, the main features by which this pereopod differs from the previous ones consists in: the presence of three broom setae on tergal margin of basis; the smaller length of merus; the greater length of carpus (which is longer than the merus); the absence of distotergal spine of merus, but the presence of a small seta; the presence of a small spine in the distosternal corner of carpus; the presence of only one small seta and of one small spine in the distotergal margin of carpus; the presence of three distotergal ciliate setae and three sternal stout spines on propodus.

Pereopods VI and *VII* (Fig. 3 F, G) very similar to pereopod V, excepting the number of distotergal ciliate setae of propodus: four in pereopod VI and five in pereopod VII.

Pleopods (Fig. 4 A-C) biramous, in three unequal pairs. Basal article great, approximately three times longer than wide, with four long plumose setae on the inner margins, and two to four plumose setae on sides. Exopodite, slightly longer than endopodite, with five or six long plumose setae, around. Endopodite with five or six plumose setae around.

Uropod (Fig. 4 D) biramous. Peduncle long and narrow, with one long proximoinner simple seta. Exopodite four-articulated, 1.5 times loger than peduncle, with two broom and one ciliate setae on the outer corner of first three articles, and two broom and four simple setae, on last article. Endopodite two-articulated, shorter than the peduncle, ended in three, apparently, plumose setae.

Description of the adult and subadult males (paratypes)

The body and appendages, excepting the size and the configuration of cheliped, similar to female. Cheliped (Fig. 4 E) without exopodite. Basis large, about as long as wide, with a narrow proximotergal prolongation by which it joined with coxa; sternal margin round, having a small proximosternal denticulated expansion and one relatively short plumose seta. Merus short and thick, with one long simple seta; distosternally with some denticles. Carpus thick, about 1.8 times longer than its smaller wide, with one great proximotergal tubercle and two small tergal simple setae; distal side of inner margin with two denticles; proximosternally with three simple setae; distosternal corner of outer surface extended in a large denticulated expansion. Propodus very large; together with its fixed finger longer than the merus and carpus (measured together); sternal margin with some denticles; fixed finger narrow, with a proximoinner denticulated expansion and six simple setae; distoinner side with two small and two great denticles; about 22 unequal simple setae are present on the outer and distoinner margins; claw short, but robust. Dactylus narrow, curved, with about ten unequal tuberculiform denticles and nine ciliate setae on the inner margin, the median denticle being the greatest; distolaterally with three simple setae; claw stout, greater than the same of fixed finger. Subadult males differ from the adult ones by the smaller size of distosternal denticulated expansion of cheliped carpus.

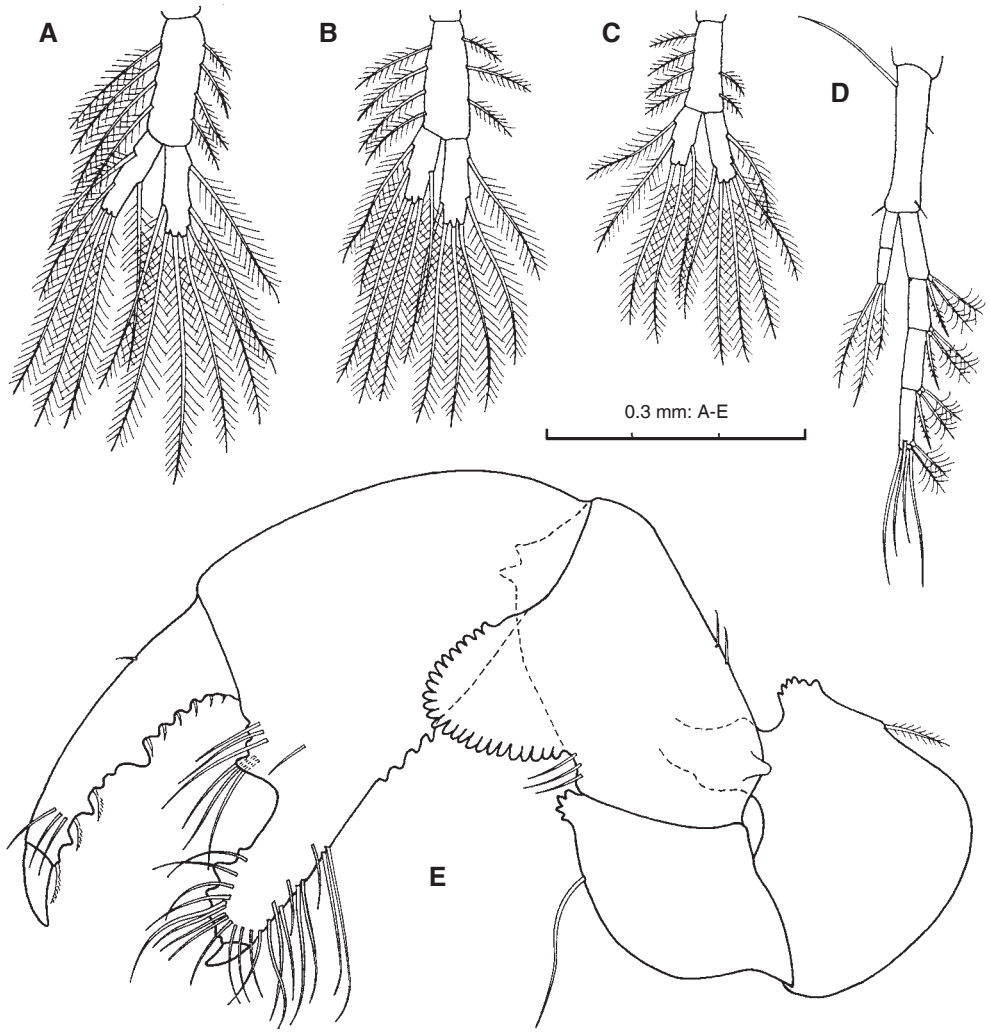

Fig. 4 - *Tanzanapseudes mirificus* n. sp., female (A-D) and male (E), paratypes: A-C, pleopods I-III, respectively; D, uropod; E, cheliped.

Description of the manca I and II, and juveniles (paratypes)

Manca I (Fig. 5) have the following characteristics: (1) the length of body, 0.8 mm; (2) the maximum width of body, 0.53 mm; (3) the ratio length/width of body (without the length of setae), 1.51; (4) the absence of pereonite VI; (5) the absence of rostral plumose setae; (6) the presence of only one plumose seta in the distal end of each lateral prolongation of body; (7) the absence of pereopod VII; (8) the presence of only two sternal spines on the pereopods II-VII propodus; (9) the absence of pleopods; (10) the uropod endopodite with only three articles.

Manca II (Fig. 6) has in addition (comparatively to manca I): (1) the length of body, 0.92 mm; (2) the maximum width of body, 0.62 mm; (3) the ratio length/width

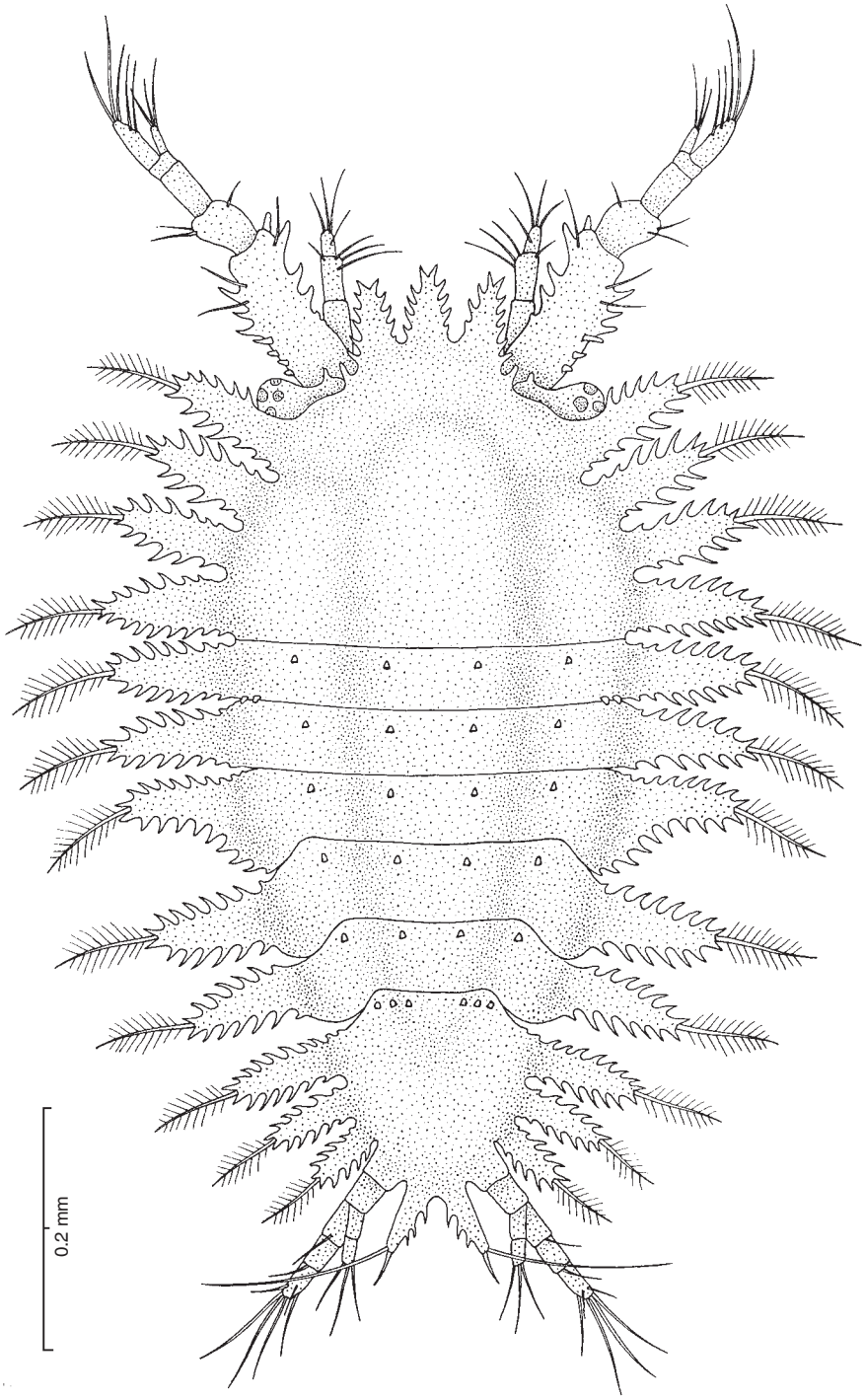

Fig. 5 - *Tanzanapseudes mirificus* n. sp., manca I, paratype: body (dorsal view).

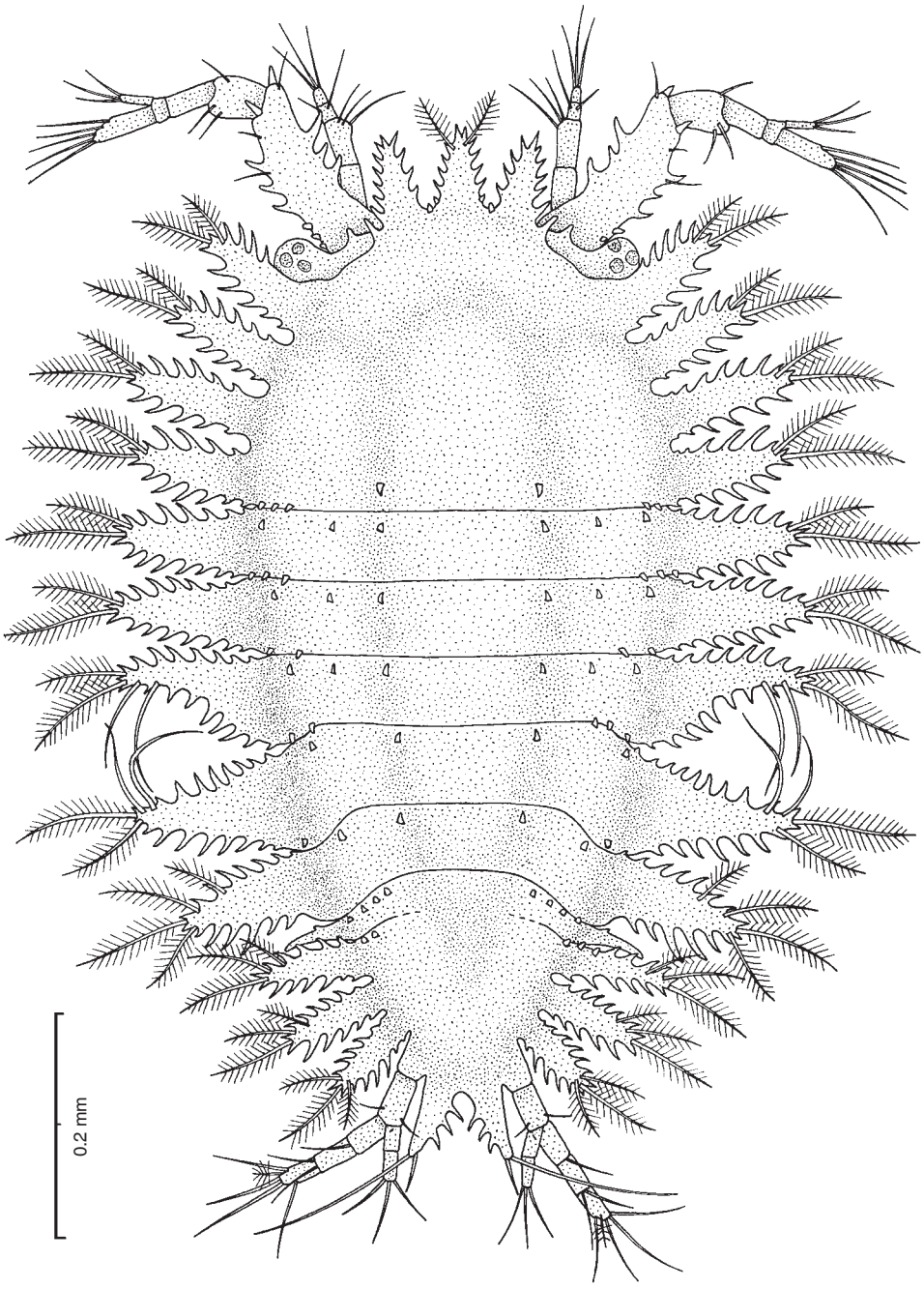

Fig. 6 - *Tanzanapseudes mirificus* n. sp., manca II, paratype: body (dorsal view).

of body (without the length of setae), 1.48; (4) the presence of a very short pereonite VI (having small epimeres, similar to a great spine, but without denticles and plumose setae); (5) the absence of the distinct joint between pereonite VI and pleon; (6) the presense of two plumose setae at least, on rostrum or lateral prolongations of body (excepting the pereonite VI); (7) the presence of two simple setae on the posterior and anterior margins of pereonite three and four, respectively; (8) the presence of incomplete pereopod VII; (9) the presence of incomplete pleopods (each of them being similar to a small ovate lobe, pointed distally).

Juveniles. Although they resemble the adults, frequently they have only two sternal spines on the propod of the pereopods II-VII or only on the last two-three pereopods. Also, the number of the denticles and of the plumose setae from the rostrum level and of the lateral prolongations of the carapace, pereon and pleon can be lower or higher, being influenced by the size of the body. Sometimes, the exopodite of the uropods has only three articles.

Variability. Some adult specimens can have the lateral expansions from the body level with more or less one or two denticles and one (rarely two) plumose seta than those described in female. Also, they can have the propod of the pereopods II and III (sometimes IV, too) with four sternal spines (instead of three, as in most of the specimens), and the pereopods VI and VII (sometimes V, too), with only two spines (instead of three). Females can have 2 or 3 distosternal denticles and 3-4 sternal setae on the cheliped carpus. Rarely, the endopodit of the uropods has only three articles.

Etymology. From the Latin *mirificus*, „wonderful", „mirific".

Remarks. Although *Tanzanapseudes mirificus* n. sp. has many similar morphological features to the species *T. bacescui* n. sp., *T. langi*, *T. longiseta* and *T. polynesiensis*, it differs from these by:

- the presence of denticles on the outer margin of carapace anterior prolongations (absent in *T. langi*);
- the presence of denticles on the distosternal corner of cheliped carpus of the females and males (absent in *T. longiseta*);
- the greater number of setae (about 32) situated around the fixed finger of cheliped propodus and the presence of three sternal spines on the pereopods V-VII propodus in the adult females (comparatively to approximately 23 setae and two spines, respectively, in *T. bacescui* n. sp.);
- the absence of proximotergal denticles of pereopods III and IV basis, and the greater size of the carpus expansion in male chelipeds (in contrast with the species *T. polynesiensis*).

Tanzanapseudes bacescui n. sp.
(Fig. 7)

Material: 1 female with oostegites, Indian Ocean, Sri Lanka Island, Ahangama, Station SL-47, collected from large sponge (outsides brown, inside yellow) on wave-exposed coral reef flat, lower intertidal; 14 March 1993. Leg. Dr. Hans-Georg Müller.

Holotype (female with oostegites) preserved in the Collections of the „Grigore Antipa" National Museum of Natural History from Bucharest (Romania), No. 250444.

Description of the females with oostegites (holotype)

Body, very similar to the same of preceding described species, 1.4 times longer than broad, having 1.7 mm length and 1.17 mm the maximum width (measured without setae).

Carapace, *pereon* and *pleon* also similar to the same of the previous species, excepting the number of plumose setae, and of size and number of denticles of the body radial prolongations. The mentioned differences can be easy observed at the level of rostrum (which has only ten denticles and six plumose setae, comparatively to 12 denticles and eight plumose setae in *T. mirificus* n. sp.), and of the two anterior prolongations of carapace (which have 13 robust denticles, comparatively to 15-17, smaller), as it results from the figures 1 and 7 A.

Antennule and *antenna* without conspicuos differences, comparatively with *T. mirificus* n. sp.

Mouth parts, unstudied.

Cheliped (Fig. 7 B) without exopodite. Basis slightly curved, two times longer than wide, with one proximosternal plumose seta and other five, simple. Merus narrow, with two sternal setae, one of them setulate and very long. Carpus (longer than basis), three times narrower than its length, with six sternal simple setae, two of them shorter. Propodus, about as long as carpus but wider than that; fixed finger with approximately 23 simple setae around, and the inner margin slightly denticulated; claw stout, short and curved. Dactylus curved, a little thinner than the fixed finger, with three distal simple setae; inner margin with small tuberculiform denticles; claw much greater than that of propodus.

Pereopod II (Fig. 7 C) with a small exopodite, ended in two short plumose setae. Basis, thicker distally, with two sternal simple setae: one median, long, and one distal, short. Ischium well developed, with one distosternal small simple seta. Merus, a little shorter than basis, with one distosternal simple seta and one distotergal small ciliate spine. Carpus, only a little longer than ischium, with two distosternal simple setae; tergally with four ciliate spines, one of them stronger. Propodus, 3.7 times longer than wide, and as long as basis and ischium or merus and carpus, measured together, with one ciliate spine and one broom seta situated midtergally, and three distotergally ciliate setae; three robust spines and two short simple setae are present on the sternal margin. Dactylus thick, as long as carpus, with one very small spine and two short setae, distosternally and midtergally, respectively; claw, about as long as dactylus, stout and curved.

Pereopods III and *IV* (Fig. 7 D, E), very similar to pereopod II, excepting the exopodite, which is absent. Pereopod III carpus with only two tergal ciliate spines.

Pereopod V (Fig. 7 F) with two sternal simple and two tergal broom setae on basis. Ischium similar to the same of pereopods II-IV. Merus, a little shorter than carpus, with one distotergal and two distosternal small simple setae. Carpus, with one small spine and one short simple seta in distosternal cornes, and two distotergal small spines. Propodus similar to the same of previous pereopods, excepting the number of distotergal ciliate setae, four in this case, the number of sternal spines, only two, and the absence of the two sternal small setae. Dactylus and its claw as in previous pereopods.

Pereopods VI and *VII* (Fig. 7 G, H) similar to the pereopod V. There are three distotergal ciliate setae of propodus (not four as in pereopod V).

Pleopods with long peduncle, biramous, in three, unequal, pairs.

Uropod, as in the previous described species.

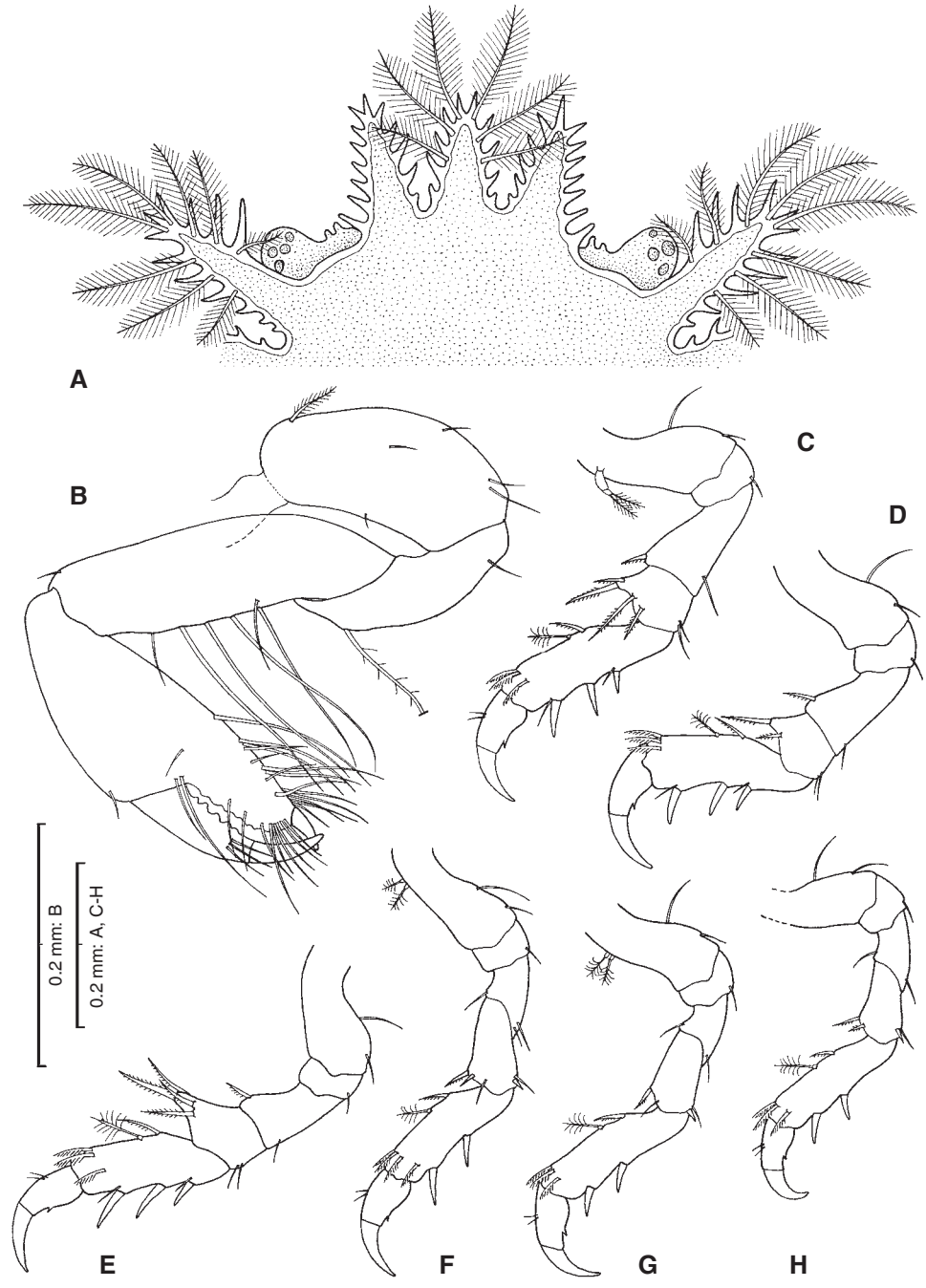

Fig. 7 - *Tanzanapseudes bacescui* n. sp., female, holotype: A, carapace, anterior part (dorsal view); B, cheliped; C-H, pereopods II-VII, respectively.

Etymology. The name of species is dedicated to the memory of my professor, the well-known carcinologyst Mihai Băcescu, who discovered and described, among many other taxa, the genus *Tanzanapseudes*.

Remarks. Although *T. bacescui* n. sp. has many morphologic features similar to those of the species *T. mirificus* n. sp., both at the body level and of several appendages (antennules, antennae, pereopods, pleopods and uropods), I think it is about a different species. The most serious argument, which I took into consideration, is the low number of the setae placed at the distoinner end of the fixed finger of the cheliped propodus (of only seven or eight, fig. 7 B), in comparison with that of the species *T. mirificus* (which has, at least, 12 setae, fig. 3 A).

Another morphologic feature which distinguishes the two species is, in my opinion, the number of the sternal spines on the pereopods V-VII propodus (only two in *T. bacescui*, fig. 7 F-H, in comparison with three in the adult specimens of *T. mirificus*, fig. 3 E-G). In *T. mirificus* n. sp. only the juveniles and some subadult specimens (of small size) have only two sternal spines on the propodus of the mentioned pereopods. To the presented aspects I add (although it is very difficult to quantify) that the size of the denticles from the lateral prolongations of the carapace, pereonites and pleon is larger in the species *T. bacescui* n. sp.

Tanzanapseudes indet.
(Fig. 8)

Material: 1 female with oostegites, Indian Ocean, Mozambique Channel, Iles Glorieuses (Northwest of Ile du Lys), Lat S 11° 25' 7 - Long E 47° 19' 5, collected in coraligen sand, 26 m deep; April 8, 1977. Leg. French „Benthedi" Expedition, Station 101-DS.

Remarks. The material preserved in the Collections of the „Grigore Antipa" National Museum of Natural History from Bucharest (Romania), No. 250445.

Partial description of the females with oostegites

Remarks. Because of the precarious state of the single specimen which I had at my disposal (which was preserved in formalin for a long period of time, in all probability, this thing influencing negatively the configuration and structure of some appendages, by decalcifiation, as well as the prolongations of the carapace, pereon and pleon) I couldn't do a complete description of this species. That is why, I reduce myself only to the illustration and minute description of pereopods.

Body as in the two preceding species; standard length, 1.7 mm; maximum width, 1.25 mm; ratio length/width of body, 1.36.

Carapace, *pereon* and *pleon* with great denticulated prolongations and plumose setae, relatively similar to the same of previous described species.

Cheliped unstudied (lost).

Antennule, *antenna* and *cheliped*, apparently, as in above described species.

Pereopod II (Fig. 8 A) with a small exopodite, ended in two short plumose setae. Basis, thicker distally, about two times longer than the median width, with one broom and two short simple setae on tergal (anterior) margin; mid- and distosternally with one long and one short simple seta, respectively. Ischium well developed, with a small distosternal seta. Merus, shorter than basis, with four distal setulae. Carpus, only a slightly longer than ischium, with two distosternal short simple setae; tergal side with five ciliate spiniform setae, one of them much

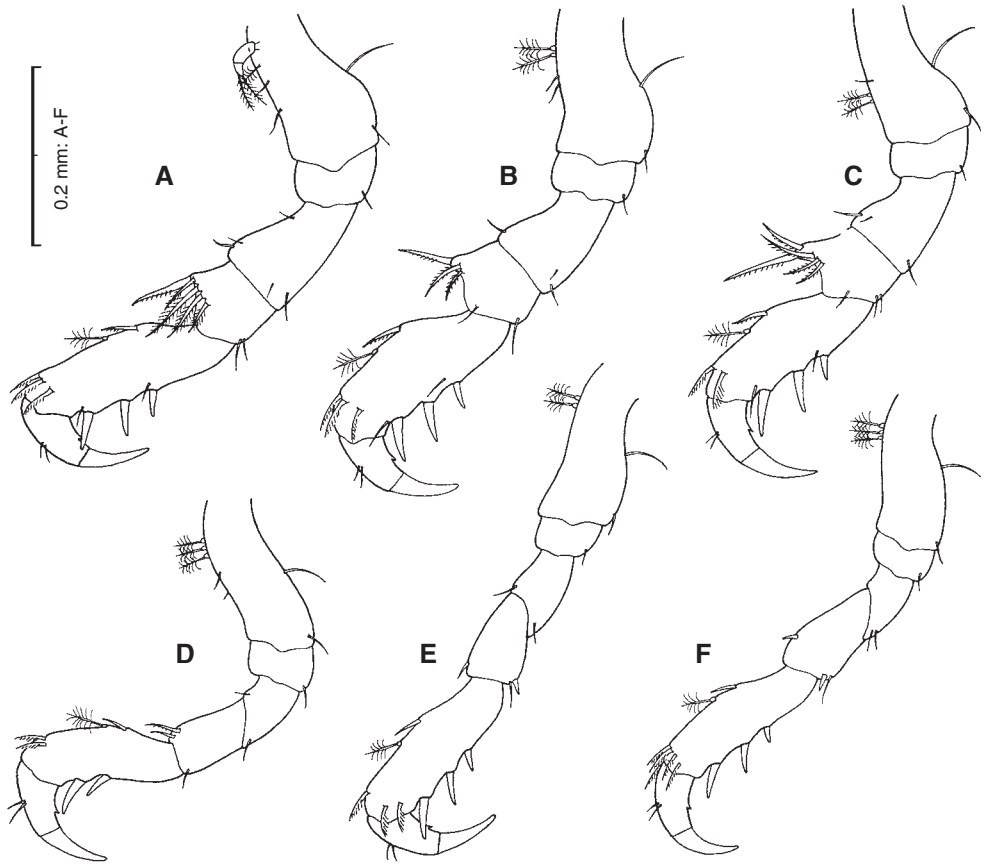

Fig. 8 - *Tanzanapseudes* indet., female: A-F, pereopods II-VII, respectively.

stronger. Propodus, about three times longer than median breadth, and a little longer than basis, with three robust spines and two small simple setae on sternal margin; midtergally with one spine and one broom seta, and distotergally with three ciliate setae. Dactylus thick, as long as carpus, with one spinule and two setulae, sternally and tergally, respectivelly; claw long and curved.

Pereopods III and *IV* (Fig. 8 B, C) relatively similar to preceding pereopod, excepting the absence of exopodite. The main diferences between these pereopods and the previous one consists in the number of tergal ciliate spiniform setae of pereopod III carpus (only three, comparatively to five), and of the distotergal ciliate setae of pereopod IV propodus (two, not three).

Pereopod V (Fig. 8 D) slightly thinner than the previous pereopods. Basis, having an uniform thickness, with three broom and two simple setae, tergally, and other two simple, mid- and distosternally. Ischium well developed. Merus, a little shorter than carpus, with two distal simple setae. Carpus with one distosternal and two distotergal simple setae. Propodus, slightly longer than the merus and carpus

(measured together), with one fine spine and one broom seta, midtergally, and two ciliate setae, distotergally; sternal margin with only two stout spines. Dactylus and its claw as in preceding pereopods.

Pereopods VI and *VII* (Fig. 8 E, F) differs from the pereopod V by the sternal spines of propodus (which are in number of three), and by the distotergal ciliate setae (three in pereopod VI propodus and five in pereopod VII).

Pleopods in three pairs, biramous, ended in some plumose setae.

Uropod, with four-articulated exopodite and two-articulated endopodite.

Remarks. One of the morphologic features which distinguish it from the other described species (as well as from the other five already known) is represented by the number of the sternal spines of the pereopod V propodus (only two, fig. 8 D), while the pereopods VI and VII have three spines (Fig. 8 E, F). In the species *T. bacescui* n. sp. (Fig. 7 F-H) and *T. nieli* (cf. Stepien & Blazewicz-Paszkowycz, op. cit.: fig. 3 D-F) the propodus of the last three pereopods always has the same number of sternal spines. Also, in the species *T. mirificus* n. sp., from which I had numerous specimens, I haven't found any specimen with less sternal spines on the pereopod V propod in comparison with the pereopods VI and VII. As this morphological feature could be a deviation from the above logic, I preferred not to consider this species new to science, also, because its origin is in the same geographic perimeter from where other three similar species were described. It is about *T. mirificus* n. sp., from the water of the Mauritius Island, and the two species described by Băcescu (*T. langi* and *T. longiseta*) from the coasts of Tanzania.

A special remark is about the collecting depth (26 m), comparatively to all known species of the genus *Tanzanapseudes*, which live at the most 4-5 m (Stepien & Blazewicz-Paszkowycz, op. cit.: 47).

Genus *Acanthapseudes* Roman, 1976

New diagnosis (females; males unknown). Rostrum and all lateral denticulated prolongations of the body with simple setae. Uropod endopodite with three or four articles.

Composition (2 species): *Acanthapseudes elegans* Roman, 1976 and *A. hansgeorgmuelleri* n. sp.

Remarks. A morphologic feature observed in *Acanthapseudes hansgeorgmuelleri* n. sp., but unmentioned in the diagnosis (which might be another characteristic of the genus) is the presence of numerous tubercles placed on the dorsal side of the body. After all appearances some of them are broken, only the insertion point being visible on the body, as a small circle. The mentioned tubercles have three-four terminal short rami, which could be the proximal extremity of some long, but broken, simple setae. When I make this assertion, I take into consideration the configuration of these tubercles at the pleon level (Fig. 9). As it results from Roman's description (op. cit.: 156 and fig. 1), apparently similar tubercles can occur in the species *A. elegans*.

It is not impossible, when the males will be discovered, to remark (as I have already mentioned) other characteristic features only to the genus *Acanthapseudes,* too.

Acanthapseudes hansgeorgmuelleri n. sp.
(Figs 9, 10)

Material: 1 adult female (with 1 specimen manca I in marsupium), Indian Ocean, Mauritius Island, Flic en Flac, Station MAU-1, collected in reef flat, from mainly dead corals, 0.5-2 m deep; 15-30 March, 2006; Leg. Dr. Hans-Georg Müller.

Holotype (female with oostegites) was preserved in the Collections of the „Grigore Antipa" National Museum of Natural History from Bucharest (Romania), No. 250446.

Paratypes, 1 specimen manca I (from the female marsupium), in the same collection, No. 250447.

Description of the females with embrios (holotype)

Body (Fig. 9) oval in dorsal view, strongly dorsoventrally flattened, about 1.28 longer than broad, with 31 great denticulated prolongations and numerous simple setae, around; standard length and maximum wide (measured without setae), 1.75 and 1.36 mm, respectively.

Carapace large, 2.2 times wider than long (including the rostrum) and about 2.3 times shorter than the length of pereon and pleon (measured together); dorsally with about 12 small tubercles and other seven, greater, like a small trident. The anteromedian prolongation (rostrum) with five denticles on sides and six simple setae; at sides of rostrum with a prolongation (similar to rostrum, but with more denticles and without setae). Each lateral margin with four large denticulated prolongations. First lateral prolongation with 9-10 denticles (from which only two are situated on anterior margin) and six simple setae, around. Each of other three lateral prolongation with 14-15 unequal denticles, around, and six simple setae, situated distally and on the caudal (posterior) margin. Ocular lobes well defined, with pigmented visual elements.

Pereon with six short, but wide, pereonites. Each pereonite with large epimeres, similar to the carapace prolongation, having at the basis an evident tubercle (furcated distally), also similar to the same of carapace. Epimeres of the first two pereonites with 15-16 denticles around, and six simple setae, situated distally and on the caudal margin. Third pereonite, slightly longer than others ones, with approximately 20 denticles around of epimeres and only five simple setae (situated as in the first two pereonites). Epimeres of fourth pereonite, with about 18 unequal denticles around and six simple setae situated on the anterior (rostral) margin and distally. Epimeres of the last two pereonites with 15-16 denticles around and four or five simple setae, situated only distally.

Pleon, narrower caudally, with pleonites and pleotelson fused in a single segment, presents three prolongations on each side (similar to the last epimeres of pereon), and other two, caudally. First two denticulate prolongations with six simple setae on the anterior and distal margins. Last lateral prolongation with six or seven simple setae, around. The two caudal prolongations (pleotelson) with five denticles and two or three simple setae on inner margins and, apparently, two small spines on sides; distally with one long simple seta.

Cheliped (Fig. 10 A) without exopodite. Basis relatively narrow, about two times longer than wide, with one small sternal simple seta. Merus well developed, with one distosternal long plumose seta and other one, simple and short, proximotergally. Carpus, approximately 1.5 times longer than basis, with two short

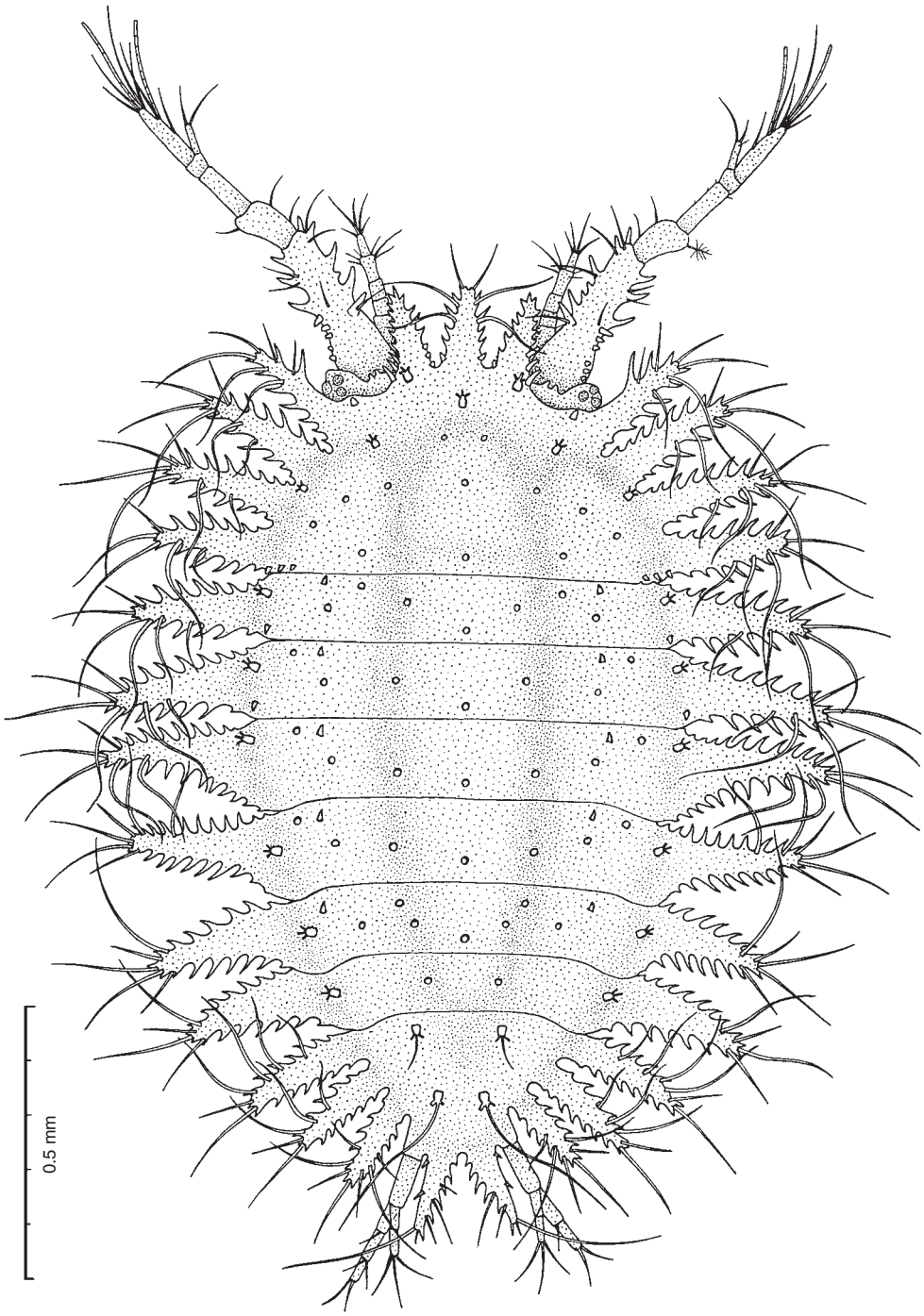

Fig. 9 - *Acanthapseudes hansgeorgmuelleri* n. sp., female, holotype; body (dorsal view).

and four very long simple setae on sternal margin; distosternally with one conspicuos denticle. Propodus (measured together with fixed finger) as long as carpus, but a little wider than that; fixed finger, relatively long, shorter than propodus palm, with about 30 unequal simple setae around; inner margin denticulated; claw robust. Dactylus, slightly narrower and shorter than fixed finger, with three distal simple setae; inner margin sligthly denticulated; claw great, stout, approximately two times longer than propodus claw.

Pereopod II (Fig. 10 B) with a relatively small exopodite, ended in one plumose seta. Basis short, thicker distally, about two times longer than maximum width, with one sternomedian and one distosternal simple setae; tergally with one simple and two broom setae. Ischium great, a little shorter than carpus. Merus, 1.5 times longer than capus, with two short distosternal simple setae; tergally with one median small seta and one distal spine. Carpus short and thick, with one stout spine and four spiniform setae (three of them apparently ciliate) on tergal margin, and two distosternal short setae. Propodus, as long as previous two articles (measured together), with one spine, one broom and three ciliate setae on tergal margin; sternally with three stout spines and two short simple setae. Dactylus, thick and curved, with one sternal spinule and two tergal small setae; claw stout, about two times shorter than dactylus.

Pereopods III and *IV* (Fig. 10 C, D) relatively similar to pereopod II, excepting the absence of exopodite, and the size of tergal spine in pereopod IV carpus (which is much greater than the same of pereopods II and III).

Pereopod V (Fig. 10 E) basis, ischium, propodus and dactylus similar to the same of preceding three pereopods. Merus, a little longer than ischium but narrower than that, with two distosternal and one distotergal simple setae. Carpus, longer than merus and much greater than the same of pereopods II-IV, with one small spine and one seta, distosternally, and two distotergal simple setae. Propodus differs from the same of previous pereopods by the number of distotergal ciliate setae, four in this instance.

Pereopods VI and *VII* (Fig. 10 F, G) similar to pereopod V, less than the number of sternal spines and distotergal ciliate setae of pereopod VII propodus (these being two and four, respectively).

Pleopods in three pairs, biramous, ended in some long plumose setae; basal article narrow, longer than branches.

Uropods (Fig. 9) short. Exopodite, two-articulated, ended in three simple setae. Left endopodite with three, and the right one with only two articles, both ended in two short simple setae.

Additional observation. Although the described female had the endopodit of the two uropods formed of two and three articles, I think it is about four, as I remarked in the manca stage, the discussed exopodites being in a regenerating process, probably (as a result of an accidental loss).

Description of the manca I (paratype)

Manca I is characterized by: (1) the length of body, 0.6 mm; (2) the maximum width of body, 0.3 mm; (3) the ratio length/width of body (without the length of setae), 2; (4) the absence of pereonite VI; (5) the absence of rostral setae; (6) the presence of only one plumose seta in the distal end of each lateral prolongation of body (Fig. 10 H, I); (7) the absence of pereopod VII; (8) the presence of only two

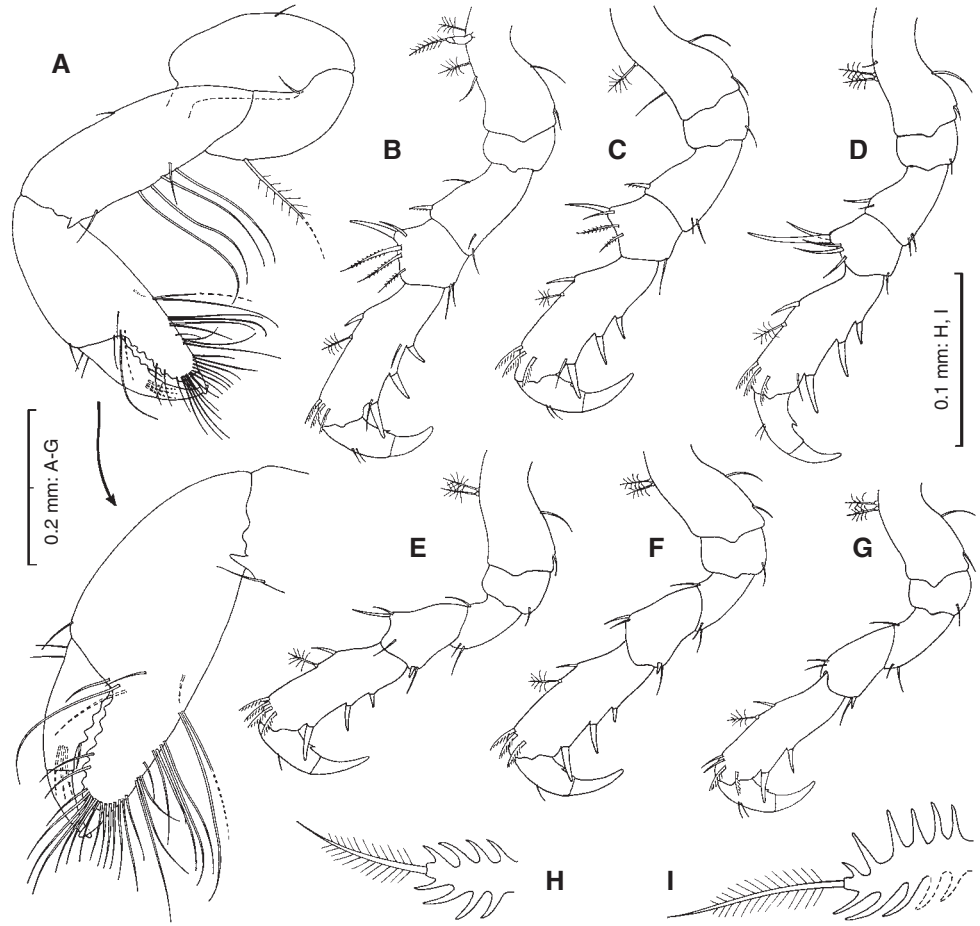

Fig. 10 - *Acanthapseudes hansgeorgmuelleri* n. sp., female (A-G) and manca I (H, I), holotype and paratype, respectively: A, cheliped; B-G, pereopods II-VII, respectively; H, second (left) prolongation of carapace; I, epimera of last (fifth) pereonite.

sternal spines on the pereopods II-VII propodus; (9) the absence of pleopods; (10) the uropod exopodite four-articulated, ended in three long simple setae.

Out of the usual differences among the adults and mancas stages, which are present in all tanaidaceans, the main morphological feature by which the manca I differs from the adult specimen in the species *A. hansgeorgmuelleri* n. sp. consists in the configuration of terminal setae of lateral prolongations of body. Thus, as I already mentioned, in contrast with the simple setae, which are characteristic to adults (Fig. 9), in manca I these setae are plumose (Fig. 10 H, I), as in the species of the genus *Tanzanapseudes* (Figs 1, 5-7).

Etymology. The species is named in the memory of the late Dr. Hans-Georg Müller, who, with uncommon generosity, offered me for study a numerous and interesting material from many geographic area.

Remarks. Comparatively to *A. elegans*, the new species it is characterized by: (1) only two denticles on the anterior margin of the first lateral prolongation of carapace (Fig. 9; Roman, op. cit.: fig. 1); (2) the presence of two small spines on the outer margins of last two pleonal prolongations, fig. 9 (in *A. elegans* are present some denticles, cf. Roman, op. cit.: fig. 24); (3) a smaller number of robust spines situated on the sides of the first peduncular article of antennule (Fig. 9; Roman, op. cit.: fig. 10); (4) the presence of one sternodistal denticles on cheliped carpus (Fig. 10 A; Roman, op. cit.: figs 12, 15); (5) only three sternal spines on pereopods II and III propodus, fig. 10 B, C (comparatively to four in *A. elegans*, Roman, op. cit.: figs 14, 16); (6) only two sternal spines on pereopod VII propodus (Fig. 10 E; three in *A. elegans*, Roman, op. cit.: fig. 21); (7) the absence of proximotergal spines of pereopods III and IV basis (Fig. 10 C, D; Roman, op. cit.: figs 16, 18); (8) a smaller number of distotergal ciliate setae on pereopod VII propodus (Fig. 10 G; Roman, op. cit.: fig. 21).

Key to the genera and the species of the family Tanzanapseudidae

1 - Body with simple setae on lateral denticulated prolongations .... *Acanthapseudes* **2**
- Body with plumose setae on lateral denticulated prolongations, excepting those situated on the posterior and anterior margins of pereonites three and four, respectively (which are simple) ..... *Tanzanapseudes* **3**

2 - Pereopods III and IV basis with one and two proximotergal denticles, respectively ..... *A. elegans* (♀; ♂ unknown)
- Pereopods III and IV basis smooth proximotergaly .... ***A. hansgeorgmuelleri*** n. sp. (♀; ♂ unknown)

3 - The two anterior prolongations of carapace, situated on sides of rostrum, without denticles on both margins ..... *T. levis* (♀; ♂ unknown)
- The two anterior prolongations of carapace, situated on sides of rostrum, with denticles on inner margins, at least **4**

4 - The two anterior prolongations of carapace, situated on sides of rostrum, with denticles only on inner margin ..... *T. langi* (♀; ♂ unknown)
- The two anterior prolongations of carapace, situated on sides of rostrum, with denticles on both margins **5**

5 - Pereopods III and IV basis with four proximosternal denticles .... *T. polynesiensis* (♀; ♂)
- Pereopods III and IV basis without proximosternal denticles (at most with some setae) **6**

6 - Antennule first peduncular article with six stout denticles on outer margin .... *T. nieli* (♀; ♂ unknown)
- Antennule first peduncular article with at most four stout denticles on outer margin **7**

7 - Pereopods V-VII propodus with two sternal spines .... ***T. bacescui*** n. sp. (♀; ♂ unknown)
- Pereopods V-VII propodus with three sternal spines **8**

8 - Cheliped carpus with two distosternal denticles at least .... ***T. mirificus*** n. sp. (♀; ♂)
- Cheliped carpus rounded distosternally .....*T. longiseta* (♀; ♂)

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CÂTEVA OBSERVAȚII PRIVIND FAMILIA TANZANAPSEUDIDAE, CU DESCRIEREA A TREI SPECII NOI ȘI VALIDAREA GENULUI *ACANTHAPSEUDES* ROMAN, 1976 (CRUSTACEA: TANAIDACEA: APSEUDOMORPHA)

REZUMAT

Sunt descrise, din apele insulelor Sri Lanka și Mauritius (Oceanul Indian), trei specii noi din familia Tanzanapseudide, două aparținând genului *Tanzanapseudes* Băcescu, 1975 (*T. bacescui* n. sp. și *T. mirificus* n. sp.) și una genului *Acanthapseudes* Roman, 1976 (*A. hansgeorgmuelleri* n. sp.), ocazie cu care a fost invalidată sinonimizarea celui de al doilea gen cu primul, făcută de Kudinova-Pasternak (1978). Totodată sunt prezentate unele date morfologice cu privire la o specie incertă din genul *Tanzanapseudes* (colectată în cadrul expediției franceze "Benthedi", din Canalul Mozambic, a cărei identitate nu a putut fi stabilită datorită condițiilor proaste de conservare) și sunt descrise stadiile manca I și II la *T. mirificus* n. sp. și manca I la *A. hansgeorgmuelleri* n. sp., stadii necunoscute până în prezent la tanzanapseudide. De asemenea sunt prezentate noi diagnoze, amendate, pentru familia Tanzanapseudidae și cele două genuri ale sale, *Acanthapseudes* și *Tanzanapseudes*, precum și o cheie comună de identificare a genurilor și speciilor familiei în discuție.

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