

THE CAPRELLIDEA (CRUSTACEA: AMPHIPODA) COLLECTED BY THE EXPEDITION OF “GRIGORE ANTIPA” NATIONAL MUSEUM OF NATURAL HISTORY FROM TANZANIA, WITH THE DESCRIPTION OF A NEW GENUS AND TWO NEW SPECIES

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Abstract. A new genus *Tanzacaprella* n. gen. and two new species *Tanzacaprella bacescui* n. sp. and *Paradeutella tanzaniensis* n. sp. are described based on the material collected during the expedition of “Grigore Antipa” National Museum of Natural History (Bucharest) from the coasts of Tanzania. A key to the species of the Caprellidea reported so far from Tanzanian waters is also given.

Résumé. Dans le matériel collecté en Tanzanie par l’expédition du Muséum National d’Histoire Naturelle “Grigore Antipa” (Bucarest) on a décrit un nouveau genre, *Tanzacaprella* n. gen. et deux nouvelles espèces, *Tanzacaprella bacescui* n. sp. et *Paradeutella tanzaniensis* n. sp. De même on présente une clé de détermination pour les espèces du sous-ordre Caprellidea des côtes de la Tanzanie.

Keywords: Caprellidea, Tanzania, new taxa, key.

INTRODUCTION

Since Mayer’s monograph on the world Caprellidea from the Siboga Expedition (Mayer, 1903) little work has been done on Indian Ocean Caprellidea. In the western Indian Ocean we only stand out the work of Larsen (1997) where a new species of *Metaproterella*, *M. unguja*, is described from Zanzibar Island.

In general, there are few studies dealing with peracarid crustaceans from the equatorial coast of eastern Africa (Petrescu, 1998). That is why “Grigore Antipa” National Museum of Natural History from Bucharest organized a scientifical expedition on the coast of Tanzania during December 1973 and January 1974. The four members of the expedition were: the late Acad. Mihai Băcescu (oceanographer, carcinologist, director of the museum at that time, the scientific leader of the expedition), the late Geza Julius Müller (marine biologist, researcher at the Romanian Institute of Marine Research from Constanța at that moment), Teodor T. Nalbant (ichthyologist, that time researcher at “Grigore Antipa” Museum) and Dragoș Neculce (mammalogist, that time researcher at the Institute of Biology from Bucharest). In the present paper we include the list of all identified taxa of the Caprellidea collected from Tanzanian waters during the “Grigore Antipa” Museum Expedition. We include also lateral view figures of the majority of the species, the complete description of *Tanzacaprella* n. gen., *Tanzacaprella bacescui* n. sp. and *Paradeutella tanzaniensis* n. sp., and a key of the Tanzanian caprellids.

MATERIAL AND METHODS

The material of caprellids consists of 45 specimens preserved in ethanol 70%. Marine samples were collected from the coral reefs by the first three researches by dredging between 0 and 30 m, using also SCUBA diving (Müller and Nalbant) in different biotopes (sand, mud, between corals, sponges and algae). Another material

was obtained by washing the corals, sponges and algae from 0.5-1 m during low tide. A map of the study area is included in Petrescu (1998).

All the material is preserved in the collections of "Grigore Antipa" National Museum of Natural History from Bucharest.

RESULTS

Ten genera and eleven species were identified, a genus and two species are here-by described as new for science. The other taxa are mentioned for the first time from Tanzanian waters. The families have been grouped following Takeuchi (1993).

Family Phiscidae Vassilenko, 1968

Pseudocaprellina pambanensis Sundara Raj, 1927

Family Caprellidae White, 1847

Genus *Fallopitrella* McCain, 1968

Fallopitrella biscayensis McCain, 1968

Genus *Hemiaegina* Mayer, 1890

Hemiaegina minuta Mayer, 1890

Genus *Metaprotella* (Mayer, 1882)

Metaprotella sp.

Genus *Paracaprella* Mayer, 1890

Paracaprella tenuis Mayer, 1903

Genus *Paradeutella* (Haswell, 1880)

Paradeutella tanzaniensis n. sp.

Genus *Pariambus* (Mayer, 1882)

Pariambus sp.

Genus *Protella* Dana, 1853

Protella similis Mayer, 1903

Genus *Tanzacaprella* n. gen.

Tanzacaprella bacescuin sp.

Triprotella amica Arimoto, 1970

Genus *Pseudocaprellina* Sundara Raj, 1927

Pseudocaprellina pambanensis Sundara Raj, 1927

(Fig. 1)

Material: 1 female, 1 juvenile from Bahary Beach, collected at low tide, 25.12.1973.

Remarks

This species were described by Sundara Raj (1927) based on a male from Gulf of Mannar India. The present specimens from Tanzania are in good agreement

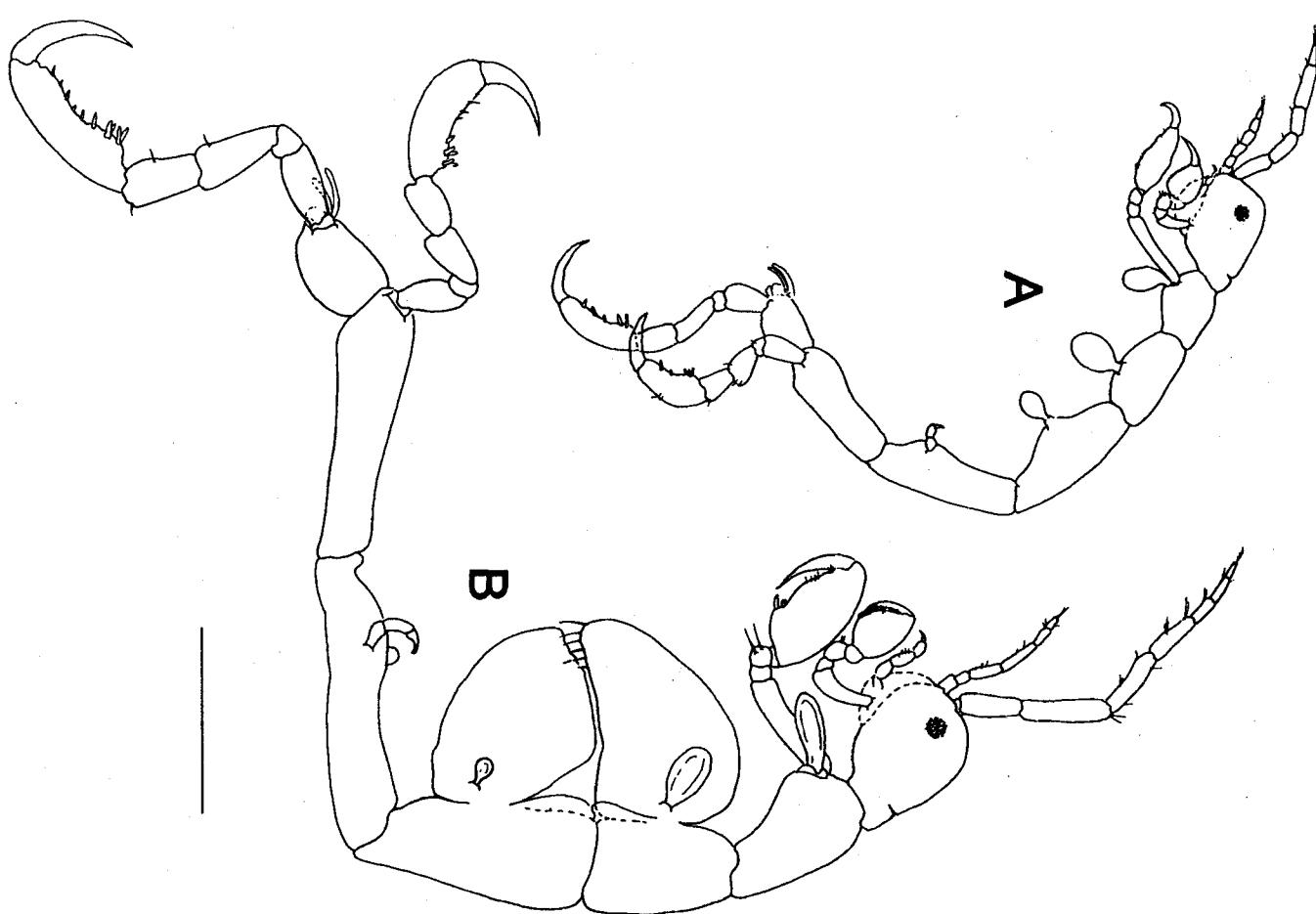


Fig. 1 - *Pseudocaprellina pambanensis* Sundara Raj, 1927. Lateral view. A, juvenile; B, female. Scale bar: 0.5 mm.

with the original description enlarging the distribution of the species to the African coasts of the Indian Ocean.

Genus *Fallopriella* McCain, 1968

Fallopriella biscayensis McCain, 1968

(Fig. 2)

Material: 1 male, 2 females, 1 juvenile from *Syringodium*, 1.12.1973; 1 female from Mbudya, east of island, collected at low tide, 0.5 m depth, between corals through *Cymodocea*, 12.12.1974; 1 male, 2 females and 1 juvenile from Kunduchi, 12.12.1973; 1 male collected by dredging from Kunduchi, 22 m depth, 8.1.1974; 1 male and 1 female from Mbudya, between corals, 24.1.1974.

Remarks

Specimens described by McCain (1968) were smaller (male 4 mm, female 2.5 mm) than these from Tanzania. Nevertheless all the morphological characteristics are in agreement with the description of McCain (1968) based on specimens collected from Florida and Bermuda coasts. With the present study, *F. biscayensis*, collected previously only from Atlantic Ocean, extends its distribution to the Indian Ocean.

Genus *Hemiaegina* Mayer, 1890

Hemiaegina minuta Mayer, 1890

(Fig. 3)

Material: 1 female collected by dredging from Kunduchi, 22 m depth, 8.1.1974.

Remarks

Recently, *Hemiaegina costai* de Araújo Quiteite, 1972, the another species of the genus so far, fell in synonymy of *H. minuta* (Serejo, 1997). *Hemiaegina costai* is widely distributed along the Atlantic, Pacific and Indian Ocean.

Genus *Metaprotella* (Mayer, 1882)

Metaprotella sandalensis Mayer, 1898

Material: 1 male and 3 juveniles from Mbudya Island, sand, 5 m depth 21.12.1973.

Remarks

Metaprotella sandalensis is very common in shallow waters of the tropical Indo-Pacific Ocean. A complete redescription and detailed figures of this species are included in Müller (1990).

***Metaprotella* sp.**

Material: 1 female from Mbudya Island sand, 5 m depth, 21.12.1973; 1 female clinging to *Fungia*, 12.1.1974; 1 juvenile clinging to *Syringodium*, 1.1.1974; 2 males and 1 female from corals; 1 female from Kunduchi; 1 male 2.1.1973; 1 female 24.12.1973.

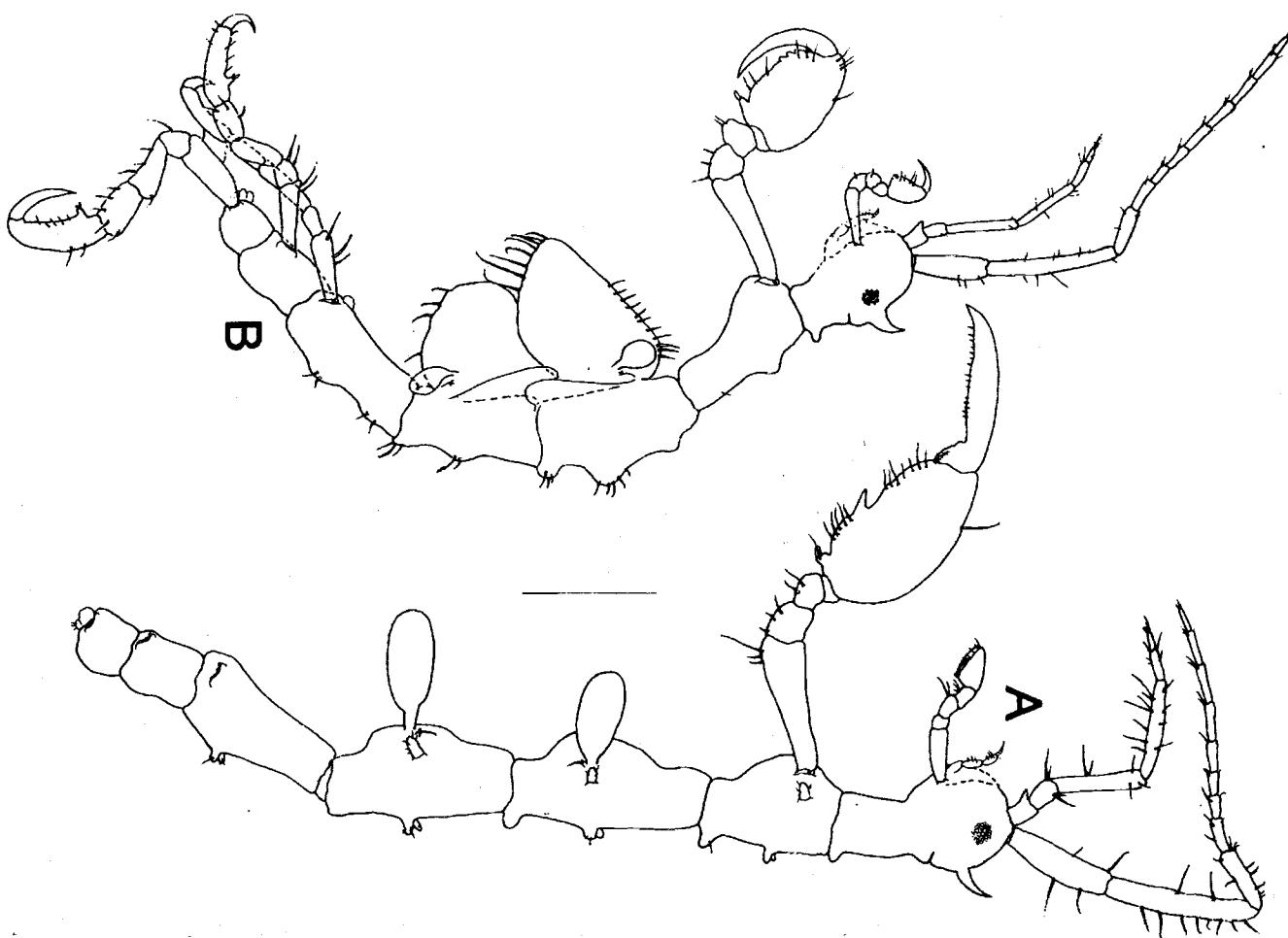


Fig. 2 – *Fallopriella biscayensis* McCain, 1968. Lateral view. A, male; B, female. Scale bar: 0.5 mm.

Remarks

This species is very close to *M. sandalensis* differing primarily by the 2-articulate pereopods 3 and 4 and the presence of well-marked suture between head and pereonite 1. A revision of the genus *Metaprotella* is necessary to clarify the position of *Metaprotella* sp.

Genus *Paracaprella* Mayer, 1890
Paracaprella temnis Mayer, 1903
 (Fig. 4)

Material: 3 males and 6 females from Bahary Beach, collected at low tide, 25.12.1973; 1 female clinging to *Syringodium*, 1.1.1974; 1 male clinging to *Fungia*, 12.1.1974.

Remarks

The present specimens agree basically with those described by McCain (1968) and Laubitz (1970) for *Paracaprella temnis* except for the absence of setae in the peduncle of antenna 1 and the complete absence of mandibular palp in all specimens observed. *Paracaprella temnis* had been previously recorded only from the West Atlantic coast.

Genus *Paradeutella* (Haswell, 1880)
Paradeutella tanzaniensis n.sp.
 (Figs 5, 6, 7)

Material: Holotype male no. AMP 328; type-locality: Western Indian Ocean, Tanzania, Mbudya Island, sand, 5 m depth, 21.12.1973.

Etymology

The species bears the name of the type locality – Tanzania.

Description of holotype male

Body (Fig. 5), cephalon (head + pereonite 1) and pereonites 2-6 carrying dorsal rounded projections. Formula of these tubercles on cephalon to pereonite 6: (1-1)-(2-1)-(2-1)-(2-1)-(2-1). Head rounded. Eye reduced to 9 ocellles. Pereonite 3 the longest. Pereonites 4 and 5 subequal. Gills elongated, length about 5 times width. Body length: 5.9 mm.

Abdomen (Fig. 6 E) with a pair of appendages, a pair of lateral lobes and single dorsal lobe. Abdominal appendages 1-articulate, cleaved distally. Length about 1.3 times width. Dorsal lobe with a pair of plumose setae. Penes large, length about 2 times width, situated medially.

Antenna 1 (Fig. 6 A) shorter than the body. Flagellum composed of 8 articles and a little shorter than the peduncle. Articles 1 and 2 of peduncle subequal, article 3 about 1/3 of article 2.

Antenna 2 (Fig. 6 B) as long as peduncle of antenna 1. Swimming setae absent. Peduncular article 1 carrying an acute projection distally.

Gnathopod 1 (Fig. 6 D) slender, merus to propodus setose. Propodus about 2 times longer than carpus, length about 2.1 times of width. Only a proximal grasping spine. Dactylus curved denticulate on inner margin.

Gnathopod 2 (Fig. 6 C) inserted in the anterior half of pereonite 2; basis slender, with the same length than pereonite 2. Ischium as long as merus to carpus combined. Propodus a little longer than basis, length about 2 times width. Palm of

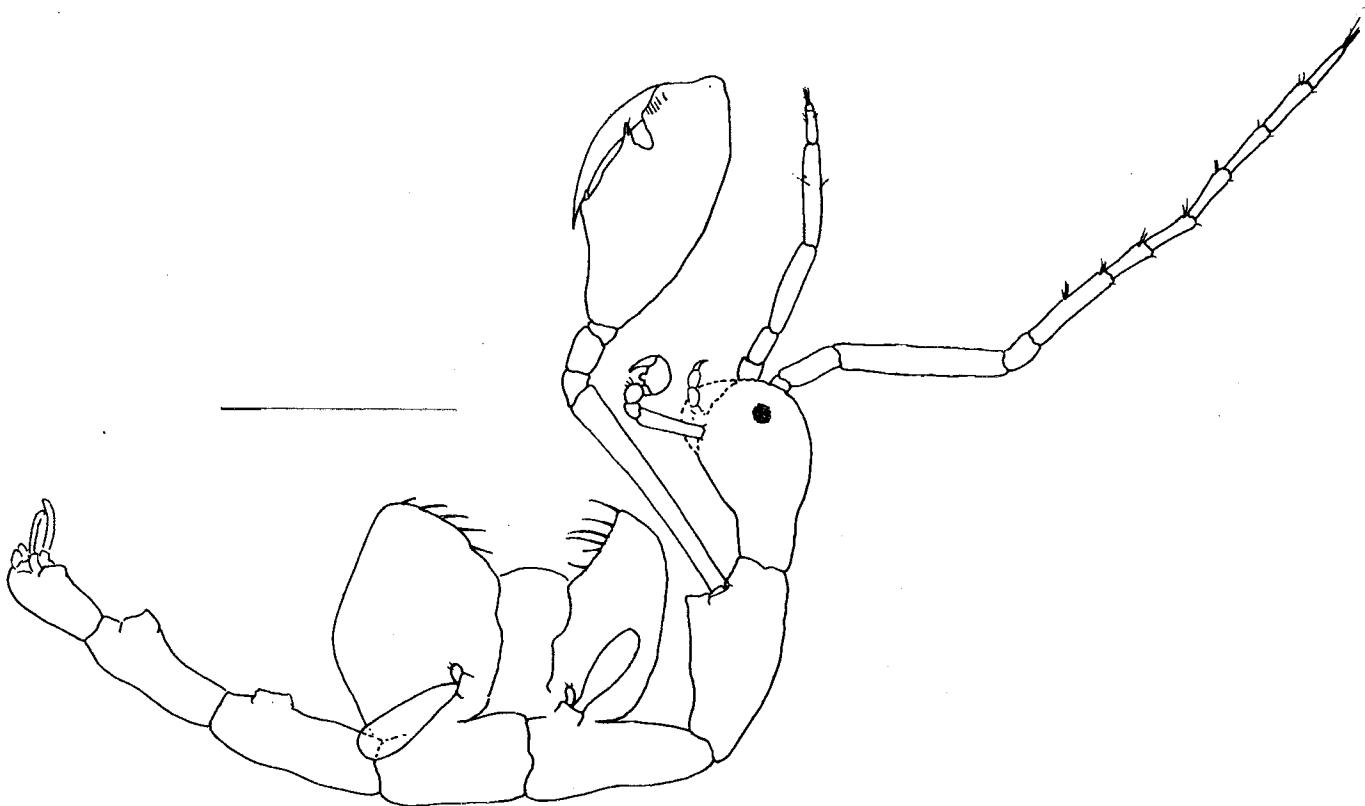


Fig. 3 – *Hemiaegina minuta* Mayer, 1890. Female lateral view. Scale bar: 0.5 mm.

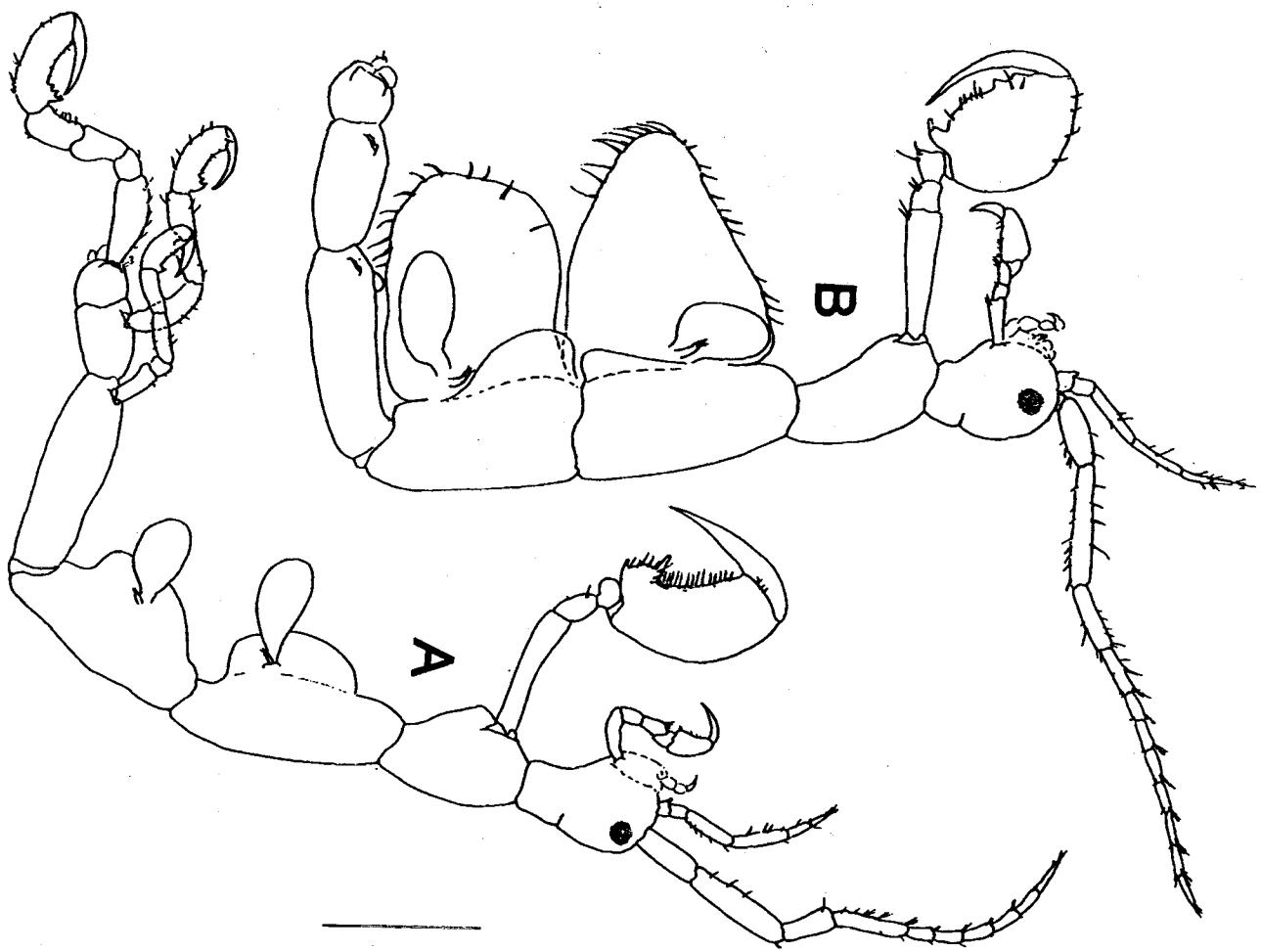


Fig. 4 – *Paracaprella tenuis* Mayer, 1890. A, male; B, female. Scale bar: 0.5 mm.

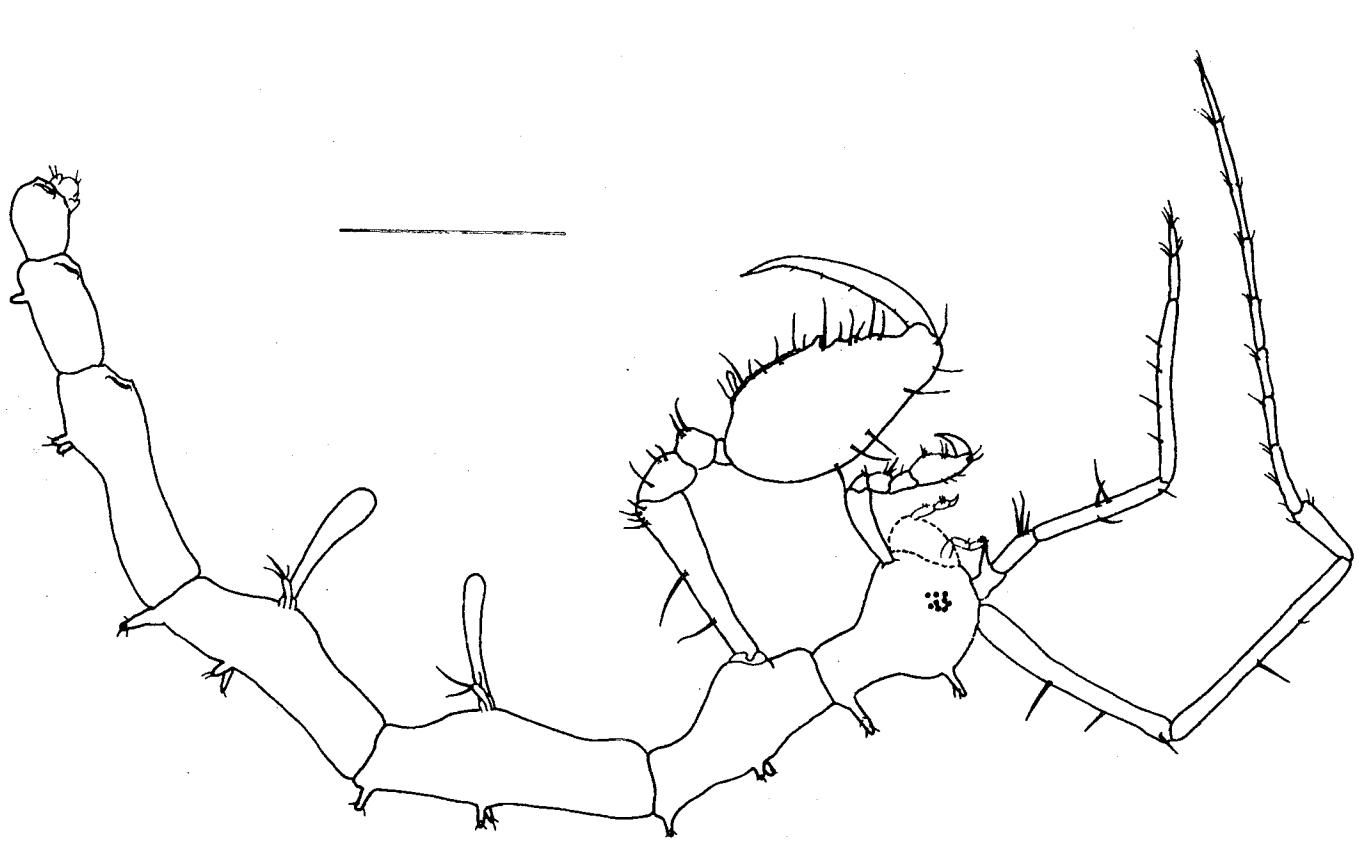


Fig. 5 – *Paradenetella tanzaniensis* n. sp. Holotype male. Lateral view. Scale bar: 0.5 mm.

CAPRELLIDEA (AMPHIPODA) FROM TANZANIA

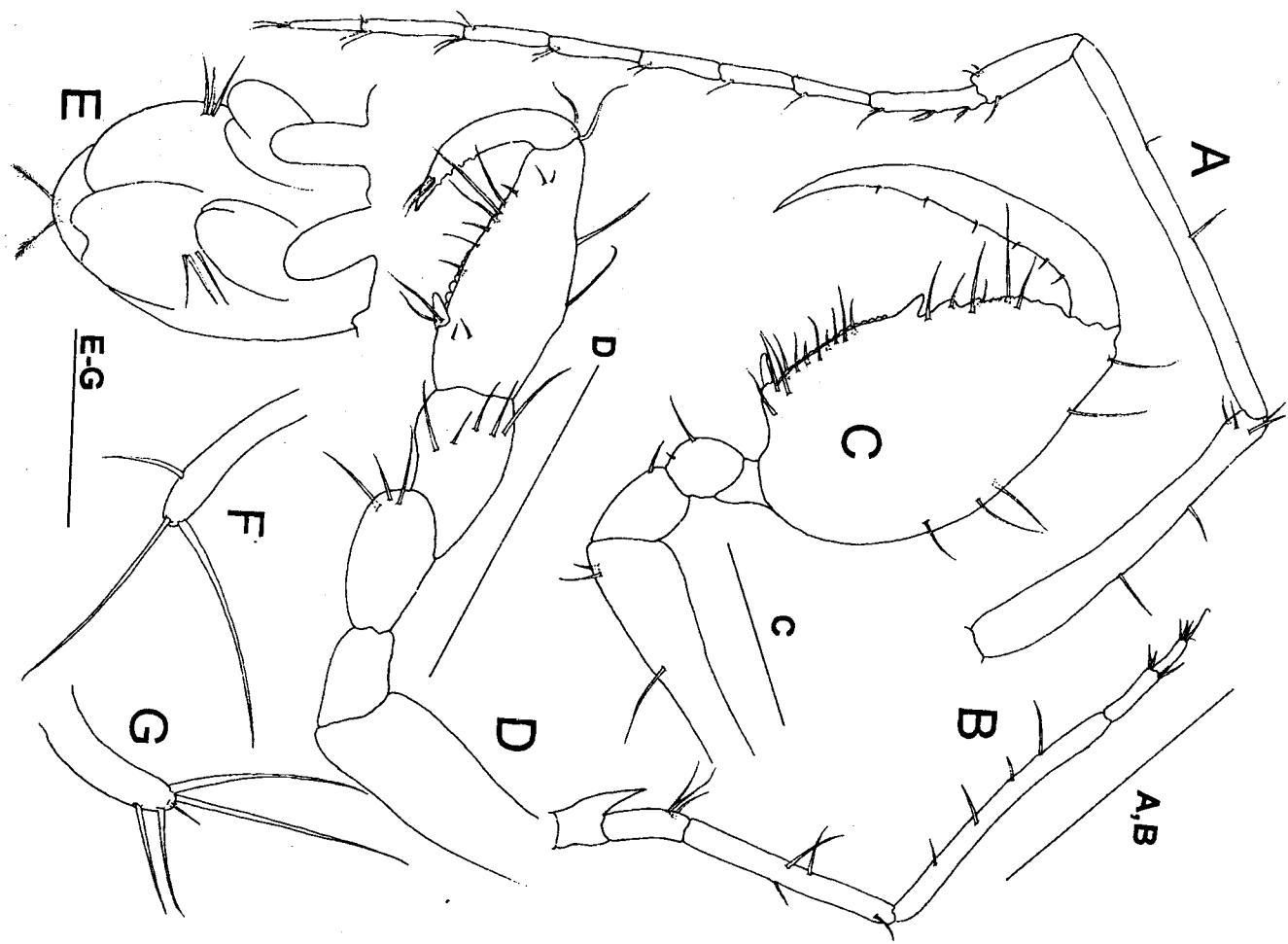


Fig. 6 – *Paradeutella tanzaniensis* n. sp. Holotype male. A, antenna 1; B, antenna 2; C, gnathopod 2; D, gnathopod 1; E, abdomen; F, pereopod 3; G, pereopod 4. Scale bars: A,B: 0.5 mm; C: 0.3 mm; D: 0.2 mm; E-G: 0.1 mm.

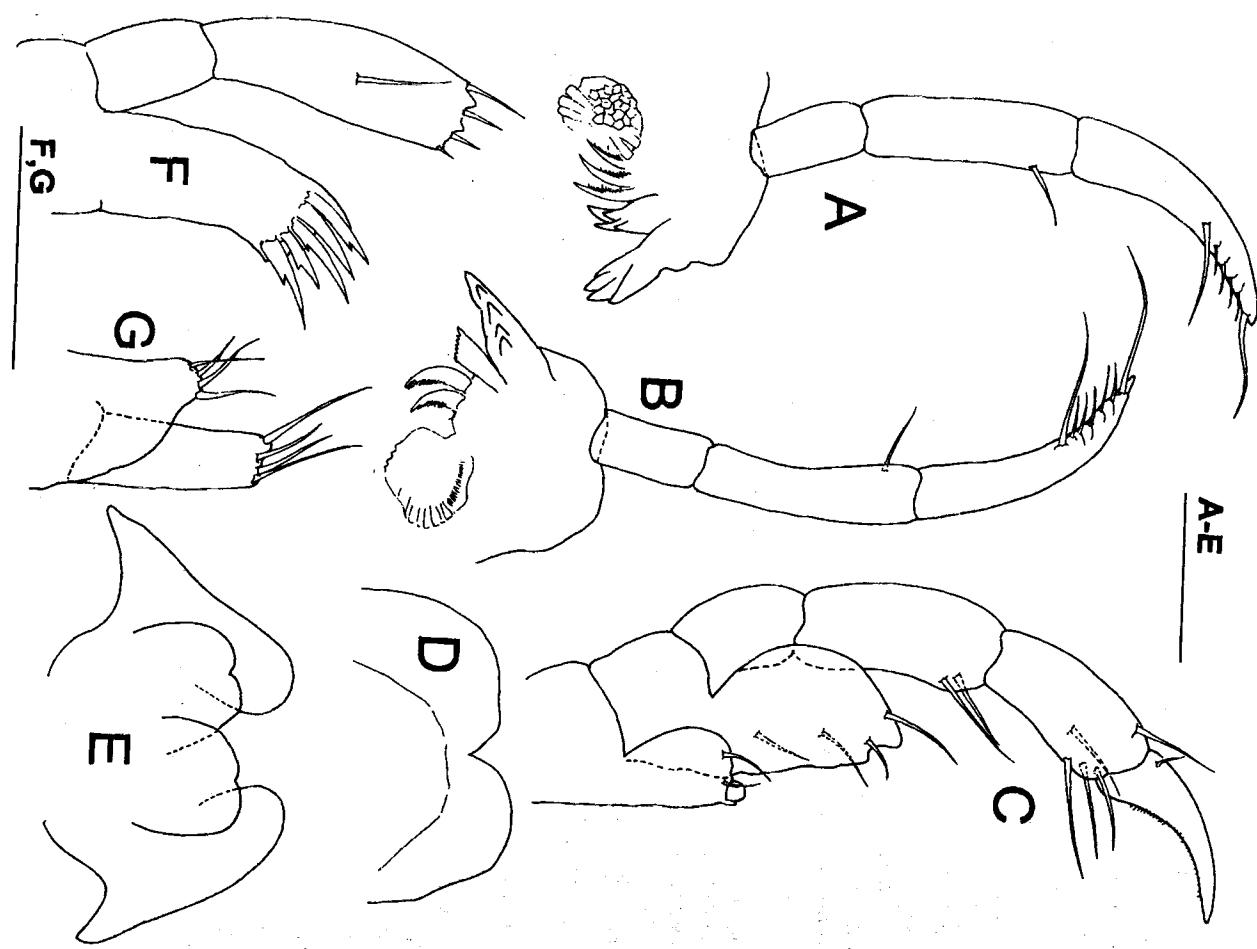


Fig. 7 – *Paradeutella tanzaniensis* n. sp. Holotype male. A, left mandible; B, right mandible; C, maxilliped; D, upper lip; E, lower lip; F, maxilla 1; G, maxilla 2. Scale bar: 0.05 mm.

propodus concave with a medial projection rounded followed by little ones on the distal end. A grasping spine situated on proximal end. Palm between grasping spine and medial projection with serriform teeth and short fine setae.

Pereopods 3 and 4 (Fig. 6 F, G respectively) reduced, 1-articulate. Length about 4.5 times width. Pereopod 3 carrying 3 setae, pereopod 4 carrying 5 setae. Pereopods 5-7 missing in holotype. Nevertheless, by the insertion on the pereonites we can assure that they are not reduced.

Mandibles (Fig. 7 A, B) with palp. Mandibular molar process strong. Left mandible with incisor divided into 4 teeth followed by *lacinia mobilis* divided into 4 teeth and 3 pectinate setae. Right mandible with incisor divided into 5 teeth followed by *lacinia mobilis* divided into numerous minute teeth and 2 pectinate setae. Article 2 of the palp carrying 1 seta. Article 3 with 1-5-1 setae.

Maxilliped (Fig. 7 C), inner plate small, carrying 2 simple setae and a round tooth; outer plate rounded about 3 times as big as the inner one, carrying 2 setae medially and 2 setae on apical end.

Upper lip (Fig. 7 D) symmetrically bilobed, not pubescent apically.

Lower lip (Fig. 7 E), inner lobe with a cleft at the middle of the lobe distally. Outer lobe round apically, not pubescent.

Maxilla 1 (Fig. 7 F), outer lobe carrying 5 stout apical teeth. Distal segment of palp with 4 spines on apical end and a seta medially.

Maxilla 2 (Fig. 7 G), outer lobe rectangular; inner lobe, shorter and wider than outer lobe. Both, outer and inner lobe, carrying 4 setae distally.

Remarks

The abdomen of *Paradeutella tanzaniensis* seems to be closer to genus *Protella* Dana than *Paradeutella* Mayer. Nevertheless, we have considered this species belonging to genus *Paradeutella* mainly on the basis of the setal formula 1-x-1 on the article 3 of the mandibular palp. The genus *Protella* is characterised by a setal formula 1-x-y-1 (Laubitz, 1993). Furthermore the feature of antenna 1 in *P. tanzaniensis*, with a short article 3 of the peduncle, is very similar to all the species of the genus *Paradeutella*. Laubitz (1993) considered the genus *Protella* and *Paradeutella* belonging to different families; *Protella* inside family Protellidae McCain 1970, emend. and she removed the genus *Paradeutella* to the new family Pariambidae Laubitz, 1993 mainly on the basis of a different setal formula than 1-x-y-1. Moreover, the genus *Protella* and *Paradeutella* differs clearly in the abdomen structure. Pleopods and uropods are absent in *Paradeutella* while 1 pair of uniramous uropods (appendages) are described in *Protella* (Takeuchi, 1993). The present species, *Paradeutella tanzaniensis*, posses a pair of appendages well-developed in abdomen as in the genus *Protella*, differing from the rest of the species of *Paradeutella*. Until now, eight species have been describe inside the genus *Paradeutella* (McCain and Steinberg, 1970); *Paradeutella echinata* (Haswell, 1880); *P. bidentata* Mayer, 1890; *P. armata* Mayer, 1903; *P. laevis* Mayer, 1903; *P. serrata* Mayer 1903; *P. spinosa* Mayer 1903; *P. multispinosa* Schellenberg, 1928 and *P. bituberculata* Barnard, 1937. *Paradeutella tanzaniensis* differs from all of these species by the following combination of characteristics: eyes reduced, round dorsal projections along the body, abdomen with a pair of appendages and the feature of gnathopod 2.

Genus *Pariambus* (Mayer, 1882)

Pariambus sp.

Material: 1 male from Kunduchi.

Remarks

The single specimen examined is in very poor condition. Nevertheless the absence of mandibular palp, the pereopod 5 with 2 articles and the abdomen with 1 pair of appendages rudimentary and 1 plate indicate that it belongs to the genus *Pariambus*.

Genus *Protella* Dana, 1853

Protella similis Mayer, 1903

(Fig. 8)
Protella similis Mayer, 1903
(Fig. 8)

Material: 2 females from corals.

Remarks

This is the third report of *Protella similis*. Since its original description (Mayer, 1903) this species was not found until that Laubitz (1991) studied the material collected by the expeditions to the western Pacific. The two studied females from Tanzania are very similar to the material from western Pacific except for the left *lacinia mobilis* 4-toothed and the 5 denticulate teeth in the outer lobe of maxillae 1.

Genus *Tanzacaprella* n. gen.

Type-species: *Tanzacaprella bacescui* n. sp.

Diagnosis (based on the female holotype). Flagellum of antenna 2 biarticulate, swimming setae absent. Mandibular palp absent. Molar process absent. Outer lobe of maxilliped larger than inner lobe; gills on peronites 3 and 4, pereopods 3 and 4, 2-articulate. Abdomen with a pair of lateral lobes and a single dorsal one.

Etymology. The compound word is derived from "Tanza" as allusion to the collecting place from Tanzania, and "Caprella".
Gender: feminine.

Remarks

The new genus *Tanzacaprella* is closely related to the genus *Paracaprella* Mayer. Nevertheless, *Tanzacaprella* distinctly differs from *Paracaprella* in the absence of molar process and the pereopods 3 and 4 with 3 articles instead 2. In connection with the mandibular palp, it is absent, so far, in the genus *Tanzacaprella* and extremely variable inside the genus *Paracaprella* showing various degrees of reduction (0 to 3 articles) (McCain, 1968; Laubitz, 1993). So this characteristic is not useful to compare both genus. Anyway, the most striking characteristic of the new genus is the combination of these two characters at the same time: absence of molar process and absence of mandibular palp. So far, seven species of *Paracaprella* have been described, all of them carrying molar process well developed: *P. pusilla* Mayer, 1890; *P. dilata* Mayer, 1903; *P. tenuis* Mayer, 1903; *P. banardi* McCain, 1968; *P. digitimanus* de Araújo Quiete, 1971 and *P. insolita* Arimoto, 1980. If we examine the data matrix of 13 generic characters and their status of the Caprellidea included in Takeuchi (1993) we can observed that the

absence of molar process is characteristic of a group of 22 genera all belonging to the family Phisticidae (Takeuchi, 1993) in the line of evolution *Pseudoprotomima-Peroiripus* (*Pseudoprotomima* complex). The other line of evolution revealed by the cladogram obtained from cladistic analysis is the line *Caprogrammatus-Caprella* (*Caprogrammatus* complex). This group consists of the other 38 genera belonging to the Caprogrammatidae, Paracercopidae and Caprellidae. All of these genera (except *Cerops*, *Paracerops* and *Pseudocerops* belonging to the Paracercopidae and *Falotritella* and *Pseudoliroopus* belonging to the Caprellidae) present a molar process in the mandible. According to the lack of molar process, *Tanzacaprella* seems to be close to genera *Falotritella* and *Pseudoliroopus*. However, these two genera present molar palp while in *Tanzacaprella* palp is lacking. McCain (1968) established the genus *Falotritella* based on *F. biscayensis* McCain, 1968 from Brazil. After this, de Araújo Quiteiro (1971a) described *F. montoucheti*. Recently, Müller (1990) described *F. polymesica* from Bora Bora. In disagreement with the generic diagnosis, *F. polymesica* has the molar of the mandible not totally reduced. It is present as a shallow cone with a distal spine. The genus *Pseudoliroopus* was established by Laubitz (1970) based on *Pseudoliroopus vanus* Laubitz, 1970 described with only one specimen, an immature female.

Tanzacaprella bacescui n. sp.

(Figs 9, 10, 11)

Material: Holotype female no. AMP 329; type-locality: Western Indian Ocean, Tanzania, sta. 91, 24.12.1973.

Etymology. The species is dedicated to Acad. Mihai Bacăescu for his contribution to science. He was a famous specialist in Crustacea Peracardia, former director of the "Grigore Antipa" National Museum and scientific leader of the expedition in Tanzania.

Description of holotype female

Body (Fig. 9) smooth on dorsal surface. Head rounded. Cephalon as long as peronite 2. Peronites 3 and 4 subequal. Peronite 5 the longest. Gills oval. Body length: 5.4 mm.

Abdomen (Fig. 10 G) with a pair of lateral lobes and single dorsal lobe with a pair of not plumose setae.

Antenna 1 (Fig. 10 A) a little shorter than half of the body. Flagellum composed of 6 articles.

Antenna 2 (Fig. 10 B) almost as long as peduncle of antenna 1, without swimming setae.

Gnathopod 1 (Fig. 10 C) propodus with a proximal grasping spine; grasping margin with two laminae finely serrated. A row of 4 setae medially. Dactylus provided with two rows of small acute projections.

Gnathopod 2 (Fig. 10 D) inserted in the anterior half of peronite 2. Basis shorter than peronite 2 and with the same length than ischium to carpus combined. Propodus about 1.8 times longer than basis. Length about 2 times width. Palm of bilaminated carrying serriform teeth and 5 setae distally.

Pereopods 3 and 4 subequal (Fig. 10 E, F respectively) reduced, 3-articulate. Length about 4 times width. Distal article carrying 3 setae. Article 2 with the same length than article 1 (proximal) and 3 (distal) together, carrying a seta.

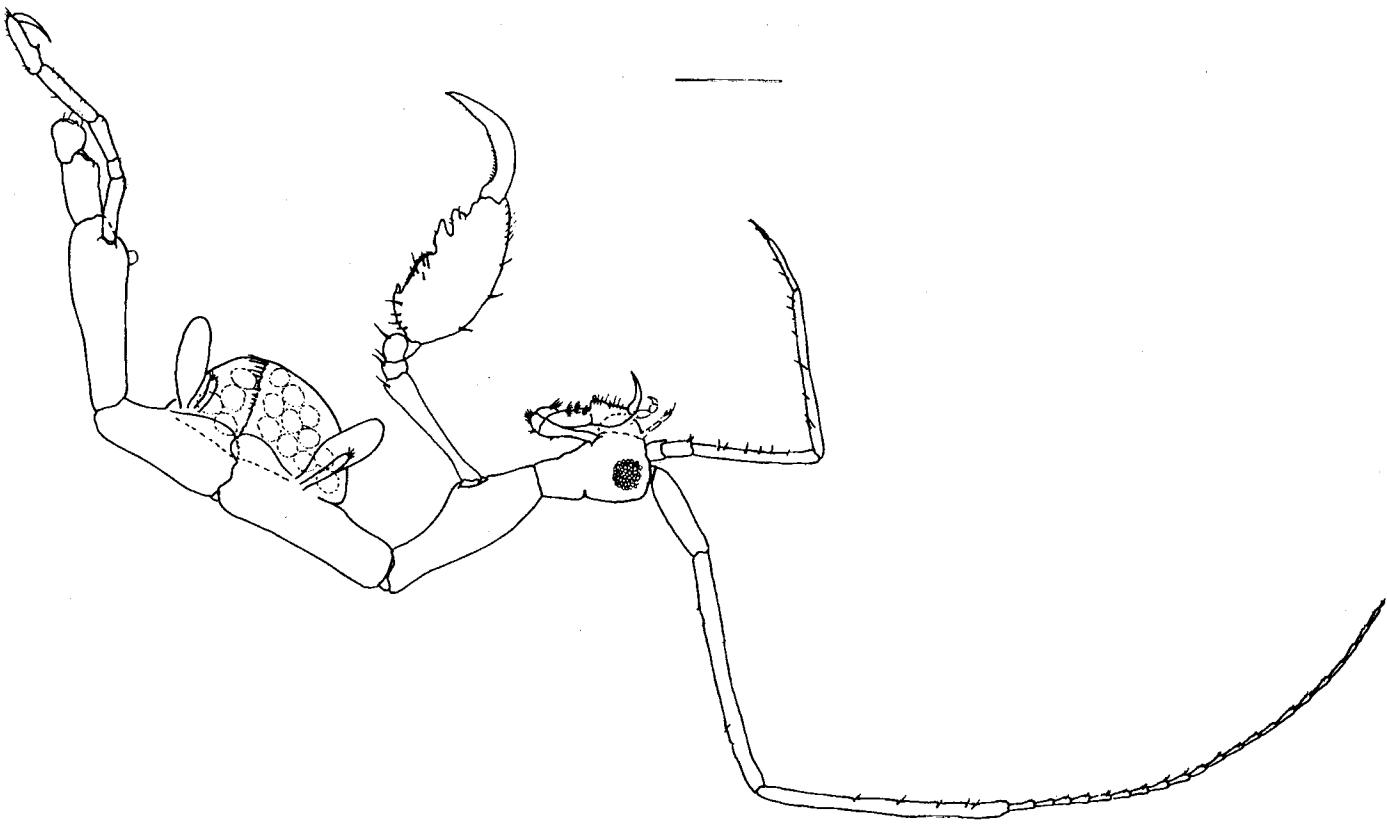


Fig. 8 – *Protella similis* Mayer, 1903. Female lateral view. Scale bar: 1 mm.

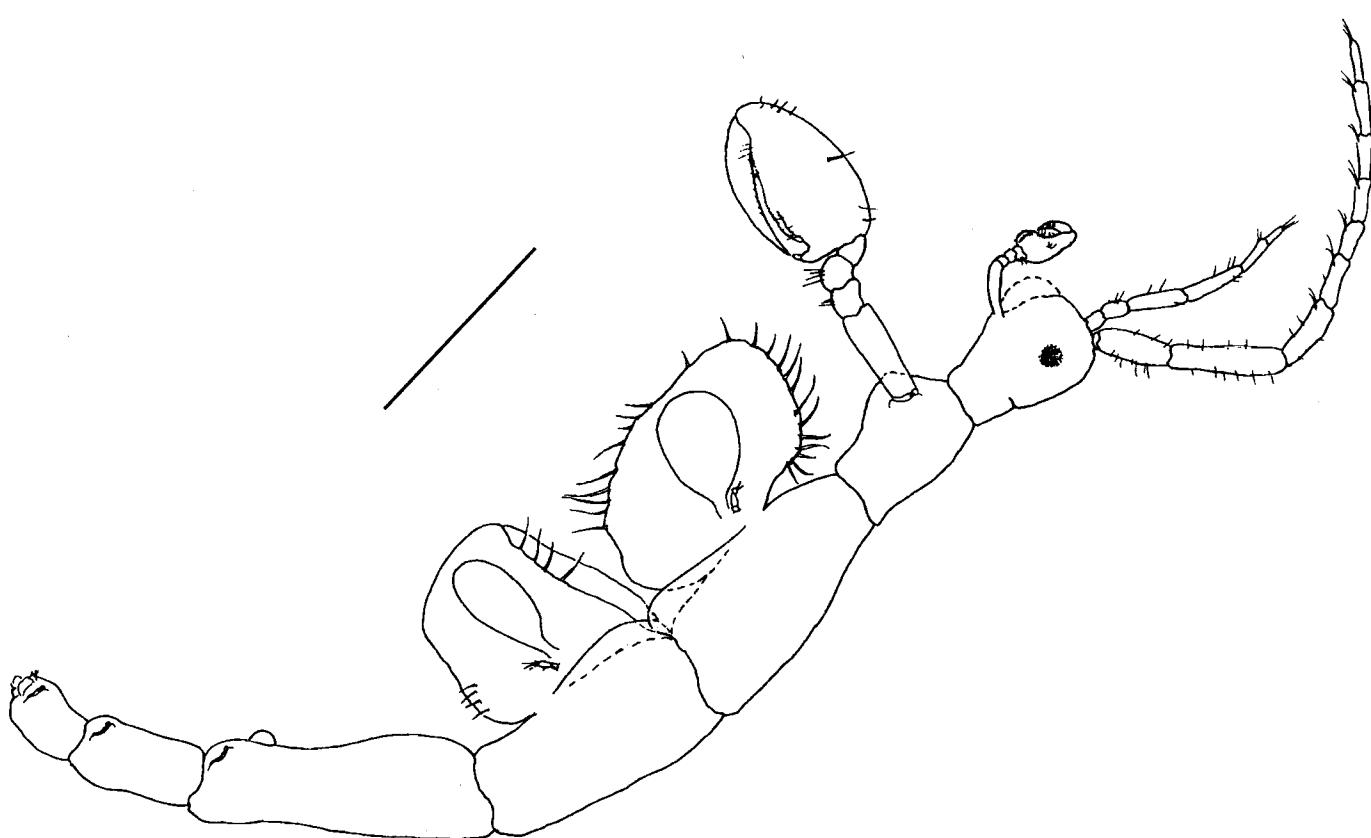
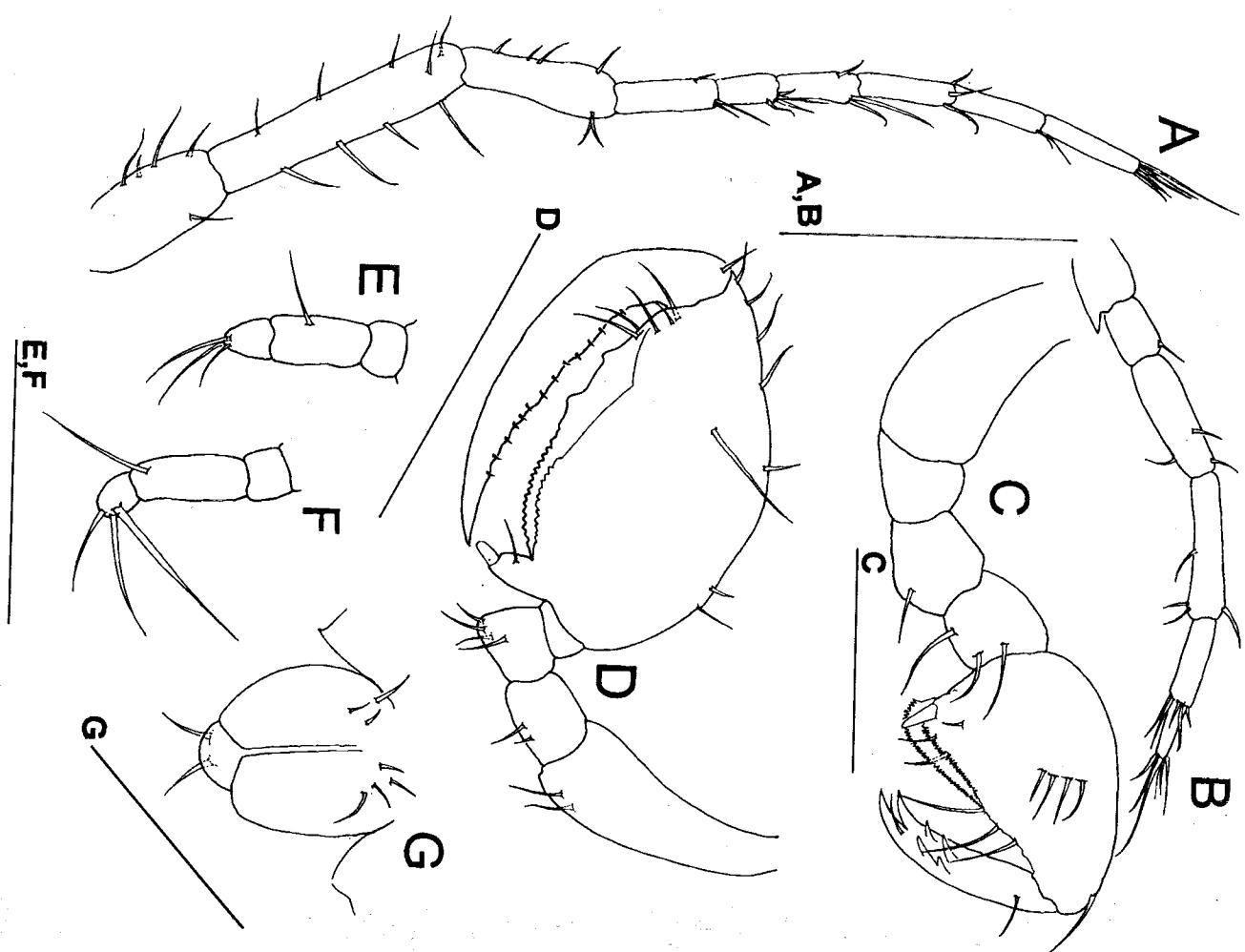


Fig. 9 - *Tanzacaprella bacescui*, n. gen., n. sp. Holotype female. Lateral view. Scale bar: 0.5 mm.

Fig. 10 - *Tanzacaprella bacescui*, n. gen., n. sp. Holotype female. A, antenna 1; B, antenna 2; C, gnathopod 1; D, gnathopod 2; E, perecopod 3; F, perecopod 4; G, abdomen. Scale bars: A,B: 0.3 mm; C, E-G: 0.1 mm; D: 0.3 mm.



Pereopods 5, 6 and 7 missing in holotype, but not reduced (see the insertion in fig. 9).

Upper lip (Fig. 11 B) with inner lobe divided into 2 round lobes.
Maxilliped (Fig. 11 C), inner plate small and slender, length about 3 times width carrying 2 setae on apical end. Outer plate bigger than inner one, carrying 4 setae medially and 2 apically. Article 3 of palp ending on inner side with long tongue shaped process; article 4 with a distal setae.

Left mandible (Fig. 11 D) with incisor and *lacinia mobilis* 6-toothed, followed by three plates. *Right mandible* similar with 2 laminae instead 3.

Maxillae 1. Left maxilla (Fig. 11 E), outer lobe carrying 5 stout apical teeth and another 5 proximally. Distal article of palp with 4 spines on apical end and 3 setae medially.

Maxillae 2 (Fig. 11 F), outer lobe trapezoid carrying 5 setae on apical end. Inner lobe short with 4 setae distally.

Remarks

According to the shape of body in holotype female, *Tanzacaprella bacescui* resembles some species of the genus *Paracaprella*, as *P. digitimanus* (see de Araújo Quite, 1971b). Nevertheless, the feature of gnathopods is very uncommon in *T. bacescui*. Furthermore, the mouthparts are unique inside the Caprellidae. Besides the absence of molar process and palp in the mandible, the species present other striking characteristics. The inner lobes of the lower lip are divided into two lobes. This character is only present, to my knowledge, in other species of the Caprellidae, *Paraprotella saltatrix*, a new species from Thailand (Takeuchi and Guerra-García, in press.). The maxilliped in *T. bacescui* presents a process in article 3 of the palp and a distal seta in the article 4. This apical projection of the palpal article 3 of the maxilliped has been considered to be characteristic of the genus *Metaprotella* (Mayer, 1890; Laubitz, 1991). A consultation of the literature, however, shows that this projection is also found in different genera such as *Paracaprella* and *Triptella* (e.g. McCain, 1968; Laubitz, 1970; Mori, 1996). The maxilliped figured by Cavedini (1982) for *Deutella schiekei* also resembles the maxilliped of *Tanzacaprella bacescui*. The outer lobe of maxillae 2 carries 2 rows of stout teeth. This characteristic is unique inside the Caprellidae. Moreover, McCain (1970) pointed out that the presence or absence of a molar on the mandible is a criterion for separation of the Caprellidea into higher taxa like families. Nevertheless, the present material, only one female, is too limited to suggest a new subfamily or family.

Genus *Triprotella* Arimoto, 1970
Triprotella amica Arimoto, 1970
 (Fig. 12)

Material: 1 male from Mbudya Island sand, 5 m depth, 21.12.1973.

Remarks

Arimoto (1970) described the genus *Triprotella* based on a single specimen collected from the Arabian Sea belonging to the type species *Triprotella amica*. Although the setal formula 1-1-1, the pereopods 3 and 4 with 1 article and the feature of the gnathopod 2 and abdomen indicates that the present specimen belong to the genus *Triprotella*, some slight differences between the present specimen and that described by Arimoto (1970) were found. Eyes are reduced in *Triprotella amica*.

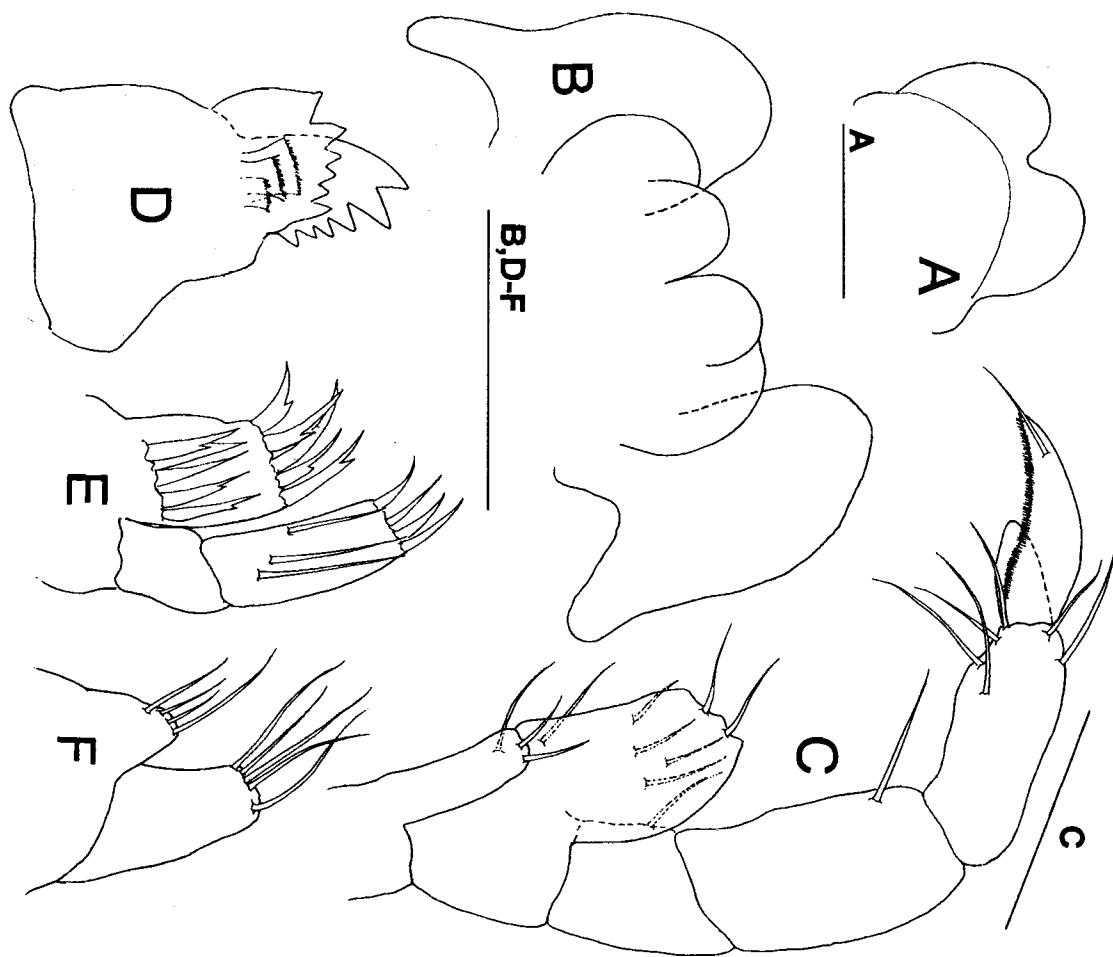


Fig. 11 – *Tanzacaprella bacescui*, n. gen., n. sp. Holotype female. A, upper lip; B, lower lip; C, maxilliped; D, left mandible; E, maxilla 1; F, maxilla 2. Scale bars: 0.05 mm.

from Arabian Sea whereas they are well developed in the specimen from Tanzania. In *T. amica* from Arabian Sea the article 3 of the maxilliped palp has no process and the article 4 is blunt and round distally; specimen from Tanzania has a developed process in the article 3 of the maxilliped and the article 4 is acute distally.

Key to the species of the Caprellidea from Tanzania

(Besides the 11 species of 10 genus collected by the Expedition organized by the "Grigore Antipa" Museum from Bucharest, *Paracaprella pusilla*, found in Tanzania (McCain and Steinberg, 1970) and *Metaprotella ungyja* found in Zanzibar Island (Larsen, 1997) are also included. To my knowledge, these two species were the only 2 caprellids recorded in the area prior this. The key provided is meant as a field guide to be used without dissection. Taking into account that pereopods 5, 6 and 7 are easily removed during the sampling the key has been elaborated without consider this character. *Pariambus* sp. has not been included in the key)

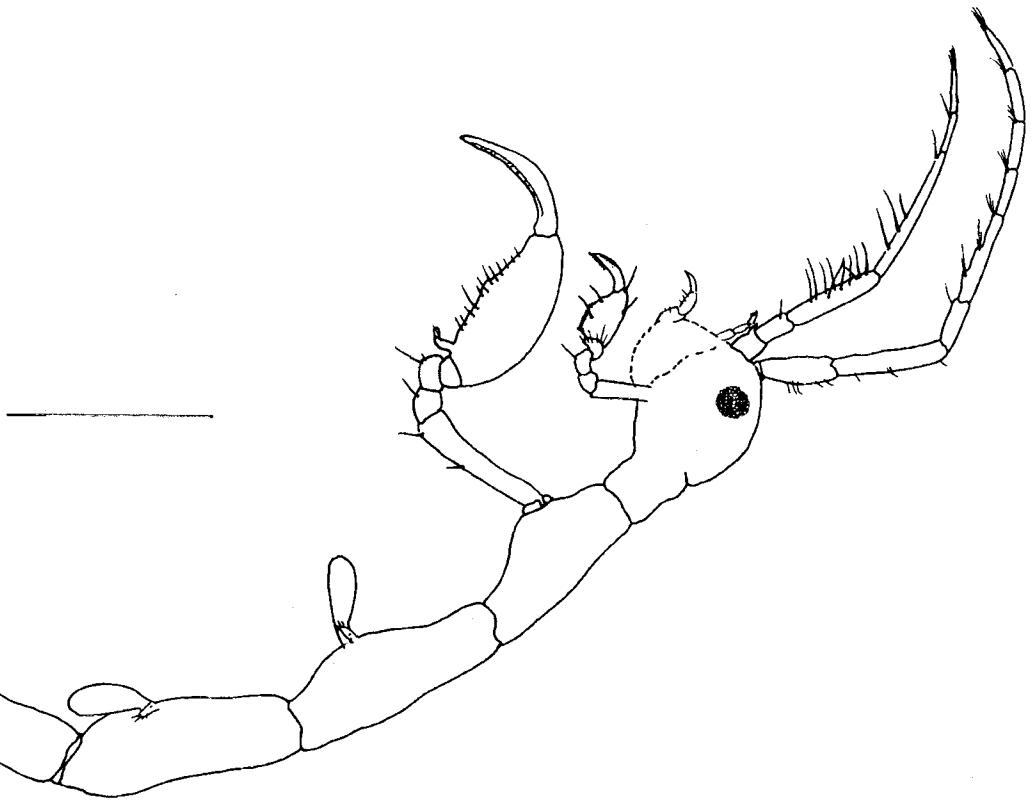


Fig. 12. — *Triprotella amica* Arimoto, 1970. Male lateral view. Scale bar: 0.5 mm.

— Head with a dorsal projection round apically. Propodus of gnathopod 1 carrying a single grasping spine. Pereopods 3 and 4 not so reduced, about 4 times shorter than gills. Gill very elongated, length about 6 times width.....*Paradeutella tanzaniensis* n.sp.

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CAPRELLIDEA (CRUSTACEA: AMPHIPODA) COLECTATE DE EXPEDIȚIA MUZEULUI NAȚIONAL DE ISTORIE NATURALĂ „GRIGORE ANTIPA“ DIN TANZANIA, CU DESCRIEREA UNUI GEN ȘI A DOUĂ SPECII NOI

REZUMAT

Din studiul materialului – 47 exemplare, colectat în timpul expediției Muzeului „Grigore Antipa“ de la coastele Tanzaniei (1973-1974), a rezultat identificarea a 10 genuri și 11 specii: *Falotriella biscayensis* McCain, *Hemiaegina minuta* Mayer, *Metaprotella sandalensis* Mayer, *Protella similis* Mayer, *Pseudocaprella pambanensis* Sundara Raj, și *Triprotella amica* Arimoto, 1970 sunt menționate pentru prima oară din apele Tanzaniei. Sunt descrise un gen nou, *Tanzacaprella* gen. n. și două noi specii, *Tanzacaprella bacecui* sp. n., specia tip pentru noul gen și *Paradeutella tanzaniense* sp. n.

Noul gen, *Tanzacaprella*, este îndepărtoape înrudit cu genul *Paracaprella* Mayer, dar se deosebește în special prin combinația a trei caractere: absența *pars molaris*, a palpului mandibular și percopodele 3 și 4 cu 3 articole.

Tanzacaprella bacecui posedă piese bucale unice în cadrul subordinului Caprellidea, cu labium divizat în 2 lobi și lobul extern al maxilei 1 cu 2 rânduri de dinți puternici. În legătură cu *Paradeutella tanzaniense*, abdomenul pare să fie mai apropiat ca formă de genul *Protella* Dana decât de *Paradeutella* Mayer. Oricum, această specie a fost considerată ca aparținând genului *Paradeutella* în special pe baza formulei setale 1-x-1 de pe articulul 3 al palputui mandibular. Genul *Protella* este caracterizat prin formula 1-x-y-1. Mai mult, forma antenei 1 de *P. tanzaniense*, cu articulul 3 al pedunculului scurt, este foarte asemănătoare cu ale tuturor speciilor de *Paradeutella*. *Paradeutella tanzaniense* se deosebește de restul speciilor genului prin următoarea combinatie de caractere: ochi reduși, prelungiri dorsale rotunjite de-a lungul corpului, abdomenul cu o pereche de apendici și forma gnathopodului 2.

Tot materialul este depozitat în colecțiile de crustacee ale Muzeului Național de Istorie Naturală „Grigore Antipa“ din București.

REFERENCES

- ARIMOTO, I., 1970 - Two new genera and three new species of caprellids (Amphipoda: Caprellidea) from the Arabian Sea. Bulletin of the Biogeographical Society of Japan, 24 (11): 71-78.
- CAVEDINI, P., 1982 - Contributo alla conoscenza dei caprellidi del Mediterraneo (Crustacea, Amphipoda). Bollettino del Museo Civico Storia Naturale Verona, 8: 493-531.
- DE ARAÚJO QUITETE, J. M. P., 1971a - *Falotriella montouchei*, nova espécie de Caprellidae da costa brasileira (Crustacea: Amphipoda). Atas Sociedade Biológica, Rio de Janeiro, 14 (5-6): 189-192.
- DE ARAÚJO QUITETE, J. M. P., 1971b - *Paracaprella digitimanus*, nova espécie de Caprellidae da costa brasileira (Crustacea: Amphipoda). Atas Sociedade Biológica Rio de Janeiro, 14 (5-6): 161-164.

- LARSEN, K., 1997 - A new species of *Metaprotella* (Crustacea: Amphipoda: Caprellidea) from east Africa, with key to the genera of Protellidae and discussion of generic characters. Journal Natural History, 31: 1203-1212.

- LAUBITZ, D. R., 1991 - Studies on the Caprellidea (Crustacea: Amphipoda: Caprellidae: caprellids from the western Pacific (New Caledonia, Indonesia and the Philippines). In: A. Crosnier (ed.), Résultats des Campagnes MUSOROSTOM. Vol. 9, Mémoires du Musée National d'Histoire Naturelle (A), 152: 101-123.

- LAUBITZ, D. R., 1993 - Caprellidea (Crustacea: Amphipoda): toward a new synthesis. Journal Natural History, 27: 965-976.
- MAYER, P., 1890 - Die Caprelliden des Goffes von Neapel und der angrenzenden Meeres-Abschnitte. Fauna und Flora des Golfs von Neapel, 17: 1-55.
- MAYER, P., 1903 - Die Caprelliden der Siboga-Expedition. Siboga Expedite, 34: 1-160.

- MCCAIN, J. C., 1968 - The Caprellidea (Crustacea: Amphipoda) of the Western North Atlantic. Bulletin of the United States National Museum, 278 (1-4): 1-116.
- MCCAIN, J. C., 1970 - Familial taxa within the Caprellidae (Crustacea: Amphipoda). Proceedings Biological Society Washington, 82: 837-842.

- MCCAIN, J. C., J. E. STEINBERG, 1970 - Amphipoda-I. Caprellidae. Crustaceorum Catalogus, 2: 1-78.
- MORI, A. 1996 - A new species of *Orthoprotella* (Crustacea: Amphipoda: Caprellida) from Amakusa, Western Kyushu, Japan. Publications Seto Marine Biological Laboratory, 37: 319-327.

- MÜLLER, H. G., 1990 - New species and records of coral reef inhabiting Caprellidae from Bora Bora and Moorea, Society Islands (Crustacea: Amphipoda). Revue suisse Zoologie, 97 (4): 827-842.

- PETRESCU, I., 1998 - Cumaccans (Crustacea: Cumacea) collected by the expedition of "Grigore Antipa" National Museum of Natural History from the coast of Tanzania (1973-1974). Part 1. Family Bodotriidae. Travaux du Muséum National d'Histoire Naturelle "Grigore Antipa", 40: 227-310.

- SEREJO, C., 1997 - *Hemiaegina costata* Quiette, 1972 is a synonym of *Hemiaegina minuta* Mayer, 1890 (Amphipoda: Caprellidae). Crustaceana, 70 (5): 630-632.

- SUNDARA RAJ, M. A., 1927 - Suborder Caprellidea (Laemodipoda). The littoral fauna of Krusadai Island in the Gulf of Mannar. Bulletin of Madras Government Museum: NS Natural History, 1 (1): 125-128.

- TAKEUCHI, I., 1993 - Is the Caprellidea a monophyletic group? Journal Natural History, 27: 947-964.
- TAKEUCHI, I., J. M. GUERRA-GARCÍA, in press - *Paraprotella saltatrix*, a new species of the Caprellidea (Crustacea: Amphipoda) from Phuket Island, Thailand. Phuket Marine Biological Center Researching Bulletin.

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