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TANAPSEUDES GUTUI, A NEW SPECIES OF APSEUDOMORPHAN TANAIDACEA (CRUSTACEA: PERACARIDA) FROM THE CARIBBEAN SEA AND THE TAXONOMIC STATUS OF THE FAMILY TANAPSEUDIDAE BĂCESCU, 1978

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ABSTRACT Tanapseudes gutui, n. sp., is described from depths of 3–34 m off San Juan, Puerto Rico, and 4–5 m off Goat Island, Tobago. *Tanapseudes sinensis* Bamber from Hong Kong waters is re-examined and determined to represent a junior synonym of the type species *T. ormuzana* Băcescu which was originally collected in the Straights of Hormuz off Iran. *Tanapseudes gutui* can be distinguished from *T. ormuzana* by several characters including details of the mouth parts, the presence of a reduced spiniform seta on the distotergal margin of the propodus of pereopod 1, pereonites 3–6 with rounded anterior margins, and a pleotelson lacking a mid-lateral lobe. A neotype is established for *T. ormuzana* based on a specimen collected from near the original type locality, and its mouth parts and pereopod 1 are illustrated. Largely based on the absence of a palp on the maxillule and the presence of a bifurcate seta on the dactyl of pereopod 1, the family Tanapseudidae Băcescu is now considered a subfamily within the family Kalliapseudidae Lang *sensu* Guţu. The genus *Paradoxapseudes* Guţu, formerly within the family Tanapseudidae *sensu* Guţu, is tentatively transferred to the family Apseudidae Leach.

INTRODUCTION

The apparent absence of the inner antennular flagellum led Băcescu (1978) to create the monotypic family Tanapseudidae Băcescu to receive *Tanapseudes ormuzana* Băcescu, 1978. His description was based on two adult specimens, a female (holotype) and a male (paratype) collected from the Ormuz Straights (eastern Persian Gulf). A second monotypic genus, *Paradoxapseudes* Guţu, 1991 (type species: *P. cubensis*), described from Cuban waters, was placed in the family by Guţu (1991). Bamber (2000) described a second species of *Tanapseudes* Băcescu,1978, *T. sinensis* Bamber, 2000 from off Hong Kong. He reduced the family Tanapseudidae to a subfamily within the family Sphyrapidae Guţu, 1980 and indicated that the family status of *Paradoxapseudes* was uncertain, but that the genus was not referable to the Sphyrapidae.

During the examination of Tanaidacea collected from the near-shore waters of Puerto Rico and Tobago, we discovered a small apseudomorphan with a vestigial, uniarticulate, inner antennular flagellum. Except for the absence of a maxillular palp and the presence of a bifurcate seta on the dactyl of the first pereopod, the new species appeared to be very similar to the two described species of *Tanapseudes: T. ormuzana* and *T. sinensis*.

Unfortunately, the type material of *T. ormuzana* is lost (M. Guţu, personal communication, "Grigore Antipa" National Museum of Natural History, Bucharest, Romania); however, we have located in the collections of the Natural History Museum, London, two specimens referable to *T. ormuzana* from near the type locality. In this paper we describe the new Caribbean species of *Tanapseudes*, re-examine *T. ormuzana* and *T. sinensis*, and present observations on the systematic and taxonomic status of *Tanapseudes* and the family Tanapseudidae.

Type material has been deposited in the National Museum of Natural History, Washington, DC, USA (USNM); the Natural History Museum, London, UK (NHM), the Gulf Coast Research Laboratory Museum, Ocean Springs, MS, USA (GCRL), and "Grigore Antipa" National Museum of Natural History, Bucharest, Romania (MNINGA). Other abbreviations used are: EPA for US Environmental Protection Agency, TL for total length (tip of rostrum to tip of pleotelson), CL for carapace length (tip of rostrum to mid-dorsal posterior margin). In this report we follow Bamber (2000) in designating the thoracic appendage (fossorial leg) on the first unfused pereonite as pereopod 1.

RESULTS

Tanaidacea Dana, 1849
Apseudomorpha Sieg, 1980
Kalliapseudidae Lang, 1956
Tanapseudinae Băcescu, 1978
Tanapseudes Băcescu, 1978

Type species. *Tanapseudes ormuzana* Băcescu, 1978
Synonym. *T. sinensis* Bamber, 2000
Other species. *Tanapseudes gutui*, n. sp.

Revised diagnosis. Body small, length less than 3 mm, lacking hyposphenia. Carapace without eyes. Rostrum rounded. Antennule with vestigial, uniarticulate inner flagellum. Mandibular palp uniarticulate. Maxillule lacking palp. Cheliped and pereopod 1 lacking exopods. Cheliped sexually dimorphic with female fixed finger triangular and shortened. Male with "hammer-shaped" cheliped. Pereopod 1 with a bifurcate seta on outer margin of dactylus. Pereonites 3–5 with glandular-like clusters. Oostegites, 4 pairs on pereonites 2–5. Pleopods 5 pairs.

Taxonomic and systematic remarks. Based on an examination of two male specimens attributable to *T. ormuzana* from the eastern Persian Gulf near the Straits of Hormuz, we have determined that the genus is characterized by: 1) a uniarticulate mandibular palp with long terminal seta, 2) no maxillular palp, 3) a bifurcate seta on the dactyl of the first pereopod, and 4) apparent glandular areas on the body and pereopods.

Bamber (2000) reassigned *Tanapseudes* to the family Sphyrapidae based on the original description of *T. ormuzana* and on the observed morphology of *T. sinensis*, but he also pointed out a number of morphological features that are consistent with the kalliapseudid genus *Psammokalliapseudes*. Although *Tanapseudes* had not been reported to have bifurcate "sensory" setae on the dactyl of the first pereopod, he suggested that the Kalliapseudidae and Sphyrapidae may be closely allied.

Following the discovery that the Caribbean species lacked a maxillular palp and had a small bifurcate seta on the dactyl of pereopod 1, the type material of *T. sinensis* was reexamined. The holotype was found to lack a true maxillular palp and to possess a similar bifurcate dactylar seta (Figure 1J). This minute seta can be easily overlooked, and its tip is broken off on both dactyls of first pereopods on the "allotype." An examination of the material of *T. ormuzana* from the Persian Gulf also revealed the presence of this small bifurcate seta on the dactyl of pereopod 1 and the absence of a maxillular palp. Since Bamber excluded Tanapseudes from the Kalliapseudidae only because these two features were supposedly absent, we herein reassign the subfamily Tanapseudinae to the Kalliapseudidae sensu Guţu (1972, 1996).

Tanapseudes is distinguished from all other kalliapseudid genera by having the inner antennular flagellum reduced to a single small article. We thus follow Bamber and retain the subfamily Tanapseudinae to accommodate this apparently highly derived genus. The body forms of genera belonging to the Hemikalliapseudinae Guţu, 1972 (*Bacescapseudes* Guţu, 1981; *Hemikalliapseudes* Lang, 1956; *Paraleiopus* Brum, 1978) are superficially similar, but members of this subfamily have a mandibular palp composed of 3 articles and an exopod on the first pereopod, unlike the species of *Tanapseudes*, which have an uniarticulate palp and pereopod 1 without an exopod.

Tanapseudes appears to be intermediate between *Kalliapseudes* Stebbing, 1909 and *Psammokalliapseudes* Lang, 1956. As in the genus *Kalliapseudes sensu lato*, the outer margin of the mandibular palp of *Tanapseudes* bears a row of dense setae, but they are not long nor modified for filtering. In other respects, *Tanapseudes* resembles the genus *Psammokalliapseudes* as follows: 1) the antennal peduncle is sparsely setose, 2) chelipeds lack a row of long plumose setae along the carpus, and 3) dactyl of pereopod 1 bears a small bifurcate seta. This bifurcate or "sensory seta" is, however, unlike those of *Kalliapseudes* and *Psammokalliapseudes*, which bear numerous curls bundled together with a single stalk-like base.

Besides *Tanapseudes ormuzana* (=*T. sinensis*), and the new species described herein from the tropical northwestern Atlantic, only two other apseudomorph species, *Sphyrapus maleollus* Norman and Stebbing, 1886 and *Paradoxapseudes cubensis* Guţu, 1991, are known currently to lack or have a vestigial accessory antennular flagellum. Bamber considered that the monotypic genus *Paradoxapseudes* was systematically far removed from *Tanapseudes*. We tentatively assign *Para-doxapseudes* to the family Apseudidae Leach, 1814. The only major character distinguishing it from other apseudids is the apparent absence or great reduction of the accessory flagellum of the antennule, which, as previously mentioned, is an apparently highly derived condition that also has occurred independently within the families Kalliapseudidae and Sphyrapidae.

As suggested by Bamber, the families Kalliapseudidae and Sphyrapidae may be related. They share one important condition unknown in any other families of the order: at least some kalliapseudid and sphyrapid genera bear exopods on the fourth and fifth

legs in the manca (Lang 1956, Guţu 1981, M. Guţu, R. Heard, and T. Hansknecht, personal observations). These two segmented exopods were also found in the brood pouch mancae of *Tanapseudes gutui* (present study). Whether this apparently plesiomorphic condition has been retained, or these two families are much more closely related than previously thought, awaits a study of their molecular systematics.

Tanapseudes ormuzana Băcescu, 1978

Figures 1A–J

Material examined. Neotype male, NHM 2001.6823, Station 58, Persian Gulf, 26°45'N, 52°13'E, depth 63 m.—1 male, NHM 2001.6824, Station 28, Persian Gulf, 26°46'N, 52°19'E, depth 69.3 m.

Tanapseudes sinensis Bamber, 2000: holotype male, NHM 1998.2550, allotype female (NHM 1998.2551), Tai Tam Bay, Hong Kong, ca 22°13'N, 114°14'E, July 1993; 10–30 m depth, mud to muddy sand.

Supplemental description. Accessory flagellum of antennule represented by small tubercle bearing 3 setae. Antenna with squama bearing 2 distal setae. Mouthparts (based on dissection of a male from the Persian Gulf and paratype of *T. sinensis*). Cheliped having carpus with sternal apophysis in larger males (adjacent to distal extension of merus, giving appearance of notch as described by Băcescu, 1978). Pleopods well-developed, with basis bearing 2 plumose setae.

Mandible (as figured by Bamber 2000: Figure 4E) having palp uniarticulate with long terminal seta, inner margin with dense row of fine setae, outer margin lacking setae.

Labium (Figure 1D) with palp having 1 (Hong Kong: Bamber, 2000: Figure 4F) or 2 subdistal setae and a distal projection. Maxillule (Figures 1C, I) with inner endite (lobe) bearing 2–3 terminal setae; outer fixed endite with 8–9 short, spiniform terminal setae and 2 simple subterminal setae. Palp absent. Maxilla (Figures 1B, H) with inner rostral margin having row of 6 setae in Persian Gulf specimen and 4 setae in Hong Kong specimen respectively. Epignath (Figure 1E) slender, entire margin finely setose. Distal seta on dactyl of pereopod 1 minutely bifurcate (Figure 1G). For other morphological aspects of the species see Bamber (2000: p. 45–49).

Remarks. In the absence of the type material of *T. ormuzana*, Bamber distinguished *T. sinensis* by comparison with the original description and figures of Băcescu (1978) which indicated: 1) no accessory or inner flagellum on the antennule, 2) 3 articles on the main or outer flagellum of the antennule, 3) 4 setae on the squama of the antenna, 4) a short inner spine on article 4 of antennal peduncule, and 5) no setae on the basis of the pleopod. The two specimens from the Persian Gulf have an antennule with a small accessory flagellum, 3 articles on the outer flagellum, 2 setae on the squama of the antennae, no inner spine on the fourth peduncular antenna article, and 2 plumose setae on the pleopod basis. The antennular accessory flagellum and the 3 outer antennal flagellar articles are identical to those depicted in Figures 4B, C of Bamber (2000) for *T. sinensis*.

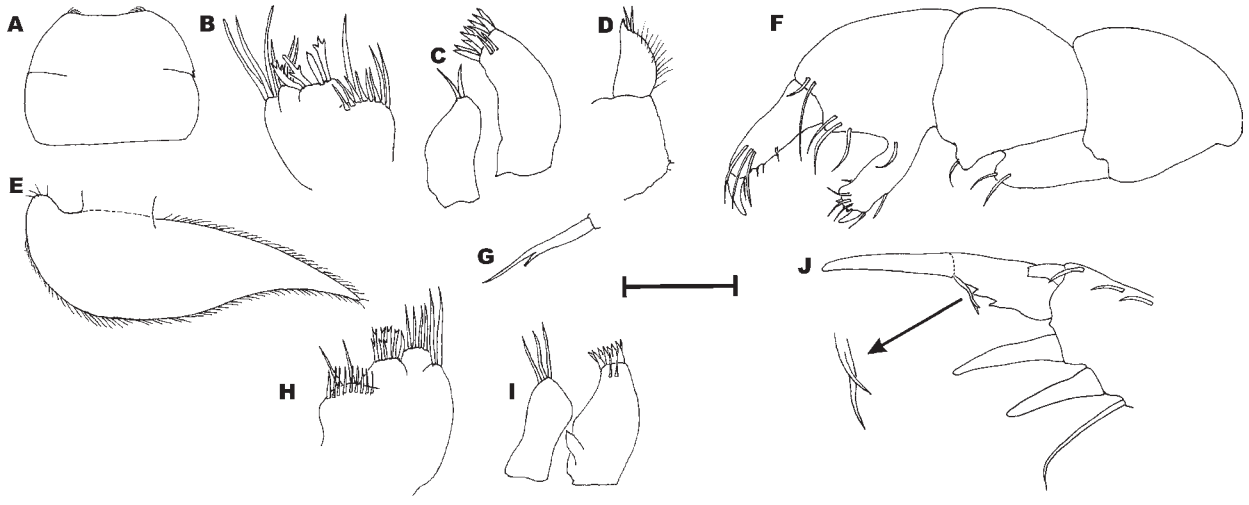

Figure 1. ***Tanapseudes ormuzana*** **(Neotype), adult male: (A–G): (A) labrum; (B) maxilla; (C) maxillule; (D) labium; (E) epignath; (F) cheliped, left; (G) sensory seta pereopod 1.** ***Tanapseudes ormuzana*** **(Hong Kong), adult female (H–J): (H) maxilla; (I) maxillule; (J) pereopod 1 with sensory seta. Scales = 0.1 mm(A–F, H, I); 0.02 mm (G); 0.05 mm (J).**

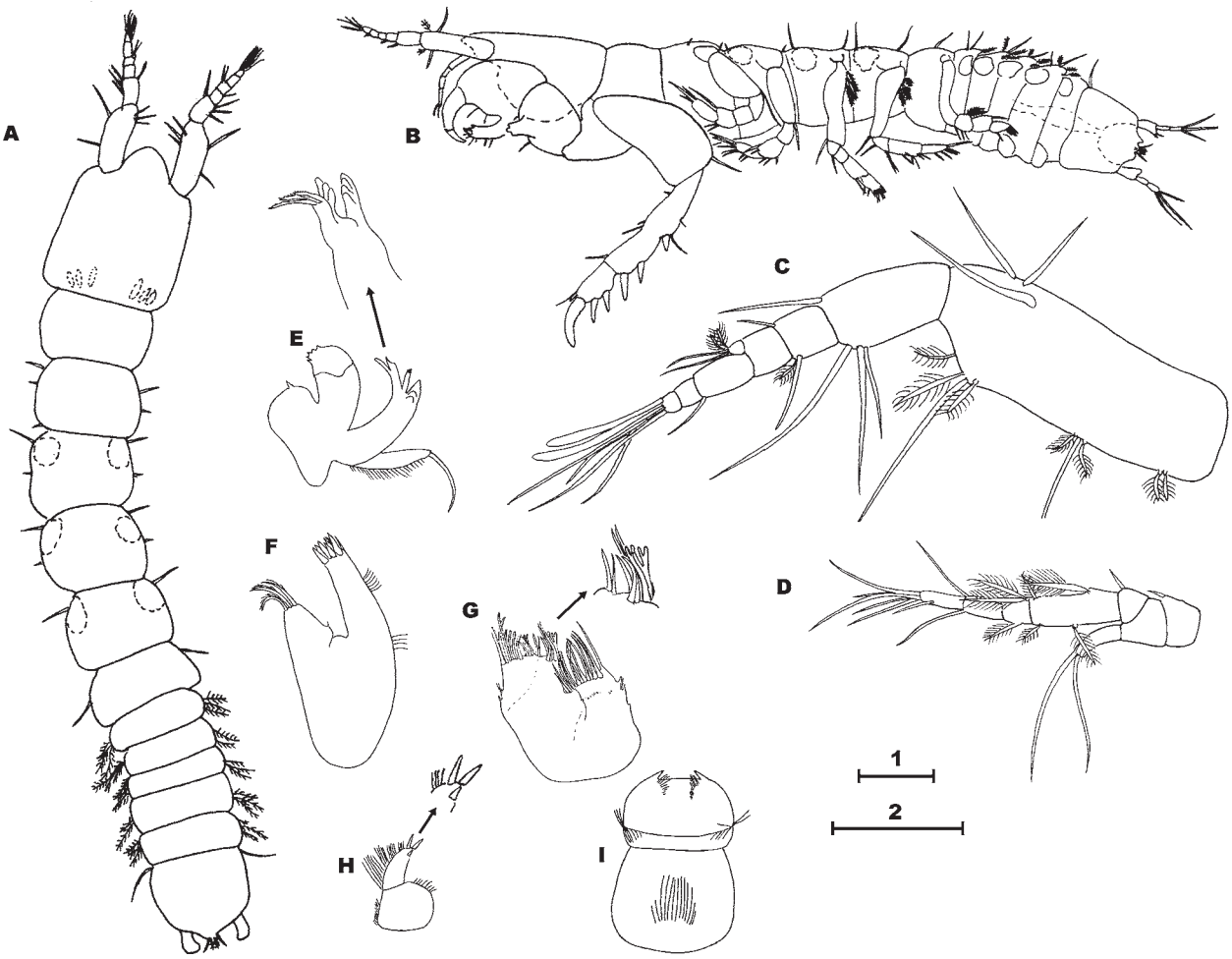

Figure 2. ***Tanapseudes gutui*** **n. sp., adult male: (A) dorsal view; (B) lateral/ventrolateral aspect; (C) antennule; (D) antenna; (E) left mandible with enlargement of pars incisiva showing lacinia; (F) maxillule; (G) maxilla, with enlargement of middle endite; (H) labium; (I) labrum. Scale 1 = 0.2 mm (A, B); Scale 2 = 0.1 mm (C–I).**

Except for the better developed sternal apophysis on the carpus of the cheliped (Bamber: Figures 1F, 5A), no significant differences could be found between the Persian Gulf specimens and type material of *Tanapseudes sinensis*. The possibility that *T. sinensis* occurs both off Hong Kong and sympatrically with *T. ormuzana* in the Persian Gulf is not likely; instead, we conclude that the original description of *T. ormuzana* was erroneous in some details and that these two species should be synomynized. We herein designate the male from the Persian Gulf (close to the type locality), which has an attached antennule, as the neotype of *T. ormuzana* (NHM 2001.6823).

Bamber's figures for *T. sinensis* are entirely appropriate for *T. ormuzana*. In addition, circular clusters of glandular tissue were observed at the anterolateral corners of pereonites 3 and 4 (Persian Gulf specimens) or 3 to 5 (Hong Kong specimens).

***Tanapseudes gutui*, n. sp.**

Figures 2, 3

Material examined. Holotype.—Adult male, TL 2.2 mm, CL 0.54 mm, USNM 1001787, CH2M HILL Carolina Waste Water Treatment Plant (WWTP), Puerto Rico, Station C1-2, 18°27.797'N, 65°53.439'W, 30 October 1999, depth 34 m, sandy clay.

Paratypes. Puerto Rico: 2 males, 1 ovigerous female, USNM 1001788, same data as holotype; 1 male, 1 ovigerous female, GCRL 2038, CH2M HILL Carolina WWTP, Station C1-3, 18°27.797'N, 65°53.439'W, 30 October 1999 depth 34 m, sandy clay; 1 male (dissected) MNINGA 250.181, 2 ovigerous MNINGA 250.180; 1 male NHM 2001.6903, 1 female NHM 2001.6904, EPA, Puerto Rico, Station PR-44, 17°57.80'N, 66°21.68'W, 4 August 2000, depth 3 m, sandy mud.

Additional material. Puerto Rico: 2 males, 9 females (7 ovigerous), EPA, Station PR-44, 17°57.80'N,

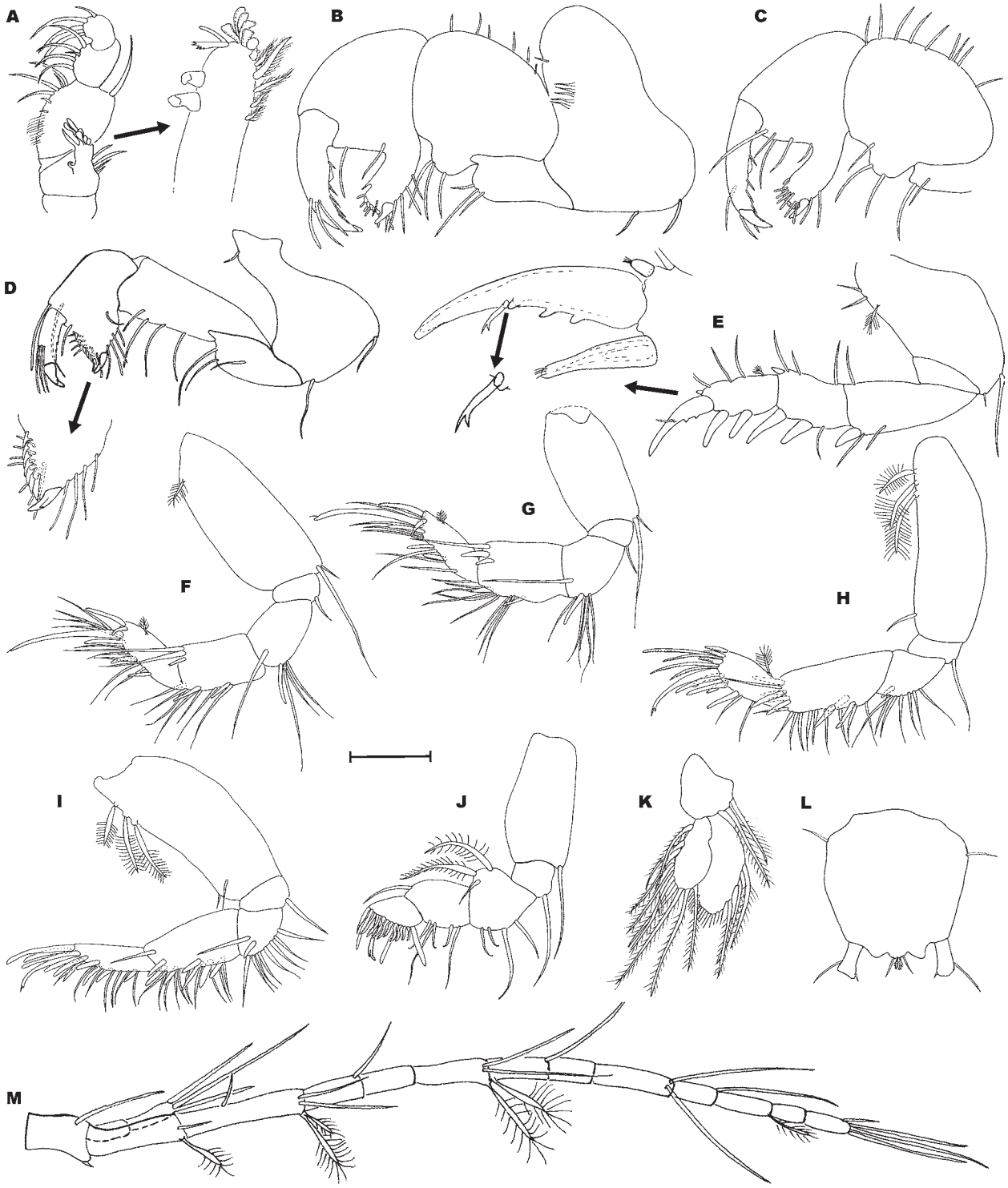

Figure 3. ***Tanapseudes gutui*** **n. sp.: (A) maxilliped with enlargement of endite; (B) male cheliped, lateral aspect; (C) same, inner aspect; (D) female cheliped, lateral view with enlargement of propodal fixed finger; (E–J) male pereopods 1–6, respectively, pereopod 1 with enlargement of dactylus; (K) male pleopod 2; (L) male pleotelson; (M) uropod, inner aspect. Scales = 0.1 mm (A–L); 0.5 mm (M).**

66°21.68'W, 4 August 2000, depth 3 m, sandy mud. CH2M HILL Carolina WWTP: 1 male, 3 ovigerous females, Station C5-1, 18°27.70'N, 65°52.24'W, 11 July 1999, depth 24 m.—3 spec., Station C5-2, 18°27.70'N, 65°52.24'W, 23 April 1999, depth 25 m.—2 spec., Station C5-1, 18°27.70'N, 65°52.24'W, 11 July 1999, depth 24 m.—1 male, 3 ovigerous females, Station C5-2, 18°27.70'N, 65°52.24'W, 11 July 1999, depth 24 m.—2 spec., Station C1-1, 18°27.797'N, 65°53.439'W, 30 October 1999, depth 34 m, sandy clay.—5 males, 3 ovigerous females, 11 subadults, Station C1-2, 18°27.797N, 65°53.439'W, 30 October 1999, depth 34 m, sandy clay.—1 spec., Station C1-3; 18°27.797'N, 65°53.439'W, 30 October 1999, depth 34 m, sandy clay.—3 spec., Station C3-3, 18°27.729'N, 65°53.092'W, 30 October 1999 30 m, clayey sand.—13 spec., Station C6-2, 18°27.739'N, 65°53.399'W, 30 October 1999, depth 33 m, sandy gravel.—1 spec., Station C6-3, 18°27.739'N, 65°53.399'W, 30 October 1999, depth 33 m, sandy gravel.

Tobago: 3 males, 7 females (2 ovigerous), 1 subadult male, Goat Island, 11°15'N, 60°30'W, 14 January 93, depth 4–5 m, sand, collected by R.W. Heard, handheld suction pump.

Diagnosis. Pereopod 1 with spiniform seta (with distal setule) on distotergal (extensor) margin of propodus reduced, length less than one fifth of dactylus; pereonites 4–6 with rounded anterolateral margins. Cheliped of mature male with tooth on dactylus. Pleotelson with lateral margins entire.

Description. Adult male (Figure 2A, B). TL 2.2 mm. Hyposphenia absent.

Carapace approximately 1.2 times longer than wide, slightly longer than combined lengths of first 2 pereonites; rostrum wider than long, rounded anteriorly, not extending beyond midpoint of first peduncular article of antennule; eye lobes weakly developed, eyes absent.

Pereon with all 6 free pereonites wider than long, rounded laterally; 2–4 with several lateral setae; 3, 4, and 5 largest with paired glands evident on anterolateral margins after staining with Rose Bengal (Figure 2A).

Pleon (Figure 1A) with all 5 pleonites much wider than long, with paired plumose setae on lateral margins.

Pleotelson (Figure 3L) nearly as wide as long, entire; lateral margins smooth, rounded.

Antennule (Figure 2C) with peduncle having 4 articles; article 1 large, longer than other articles combined. Outer flagellum with 3 articles; article 1 longer than 2 and 3 combined; article 3 terminating with 4 simple setae and with 2 subterminal linguiform aesthetascs on inner margin. Inner flagellum vestigial, represented by single reduced, nub-like article bearing 1 pair of broom and 1 pair of simple setae distally.

Antenna (Figure 2D). Peduncle with 4 articles; articles 1 and 2 reduced, obscure (not illustrated); article 3 with stout seta on inner distal margin; article 4 with inner margin reduced, lacking setae. Flagellum with 5 articles; article 1 triangular with seta on inner distal margin; article 2 with large broom setae on inner margin in proximal third, and smaller broom setae on distal margin; article 3 lacking setae; article 4 with long setae on inner and outer distal margins; article 5 with 5 terminal setae, and 1 subapical seta on outer margin. Squama bearing 2 distal setae.

Labrum (Figure 2I) with pair of hornlike projections distally; setules on basal portion, mid-lateral margin, and just proximal to horns.

Mandibles. Left mandible (Figure 2E) with pars molaris having several spiniform teeth on outer margin; pars incisiva with 4 prominent teeth; lacinia mobilis having 4 (3 prominent and 1 small) teeth with 3 associated palmate, spiniform setae. Right mandible with pars incisiva having 4 to 5 teeth and cluster of spiniform setae. Palp uniarticulate with short setules on outer margin; inner margin lacking setae; 1 large curved "falcate" terminal seta approximately two thirds length of palp.

Labium (Figure 2H). Basal article with numerous setules on inner distal corner and outer margin. Palp with numerous long setules on outer margin; 2 terminal and 1 subterminal stout setae.

Maxillule (Figure 2F). Inner endite with 11 short, stout setae apically and 2 small simple setae subapically. Outer endite with 3 long, curved setulose setae. Palp lacking.

Maxilla. (Figure 2G). Basal region with spinous processes on inner and outer margin; outer endite with 10 comb-like setae; middle endite with 1 trifid, 1 bifid, and 4 simple setae on inner corner along with 4 curved setae; inner endite with row of 13 basally swollen, comb-like setae; and 1 long seta on inner distal margin.

Maxilliped (Figure 3A). Coxae short, wider than long, without setae; basis with palp and inner endite. Palp, article 1 without setae; articles 2–3 with long curved setae on inner margins; article 4 terminating in 4 curved setae. Inner endite (Figure 3A, enlargement) lobate, longer than wide; inner margin with 5 plumose setae; outer margin with 2 coupling hooks, 7 broad apically truncate setae, 1 subapical palmate seta, and 1 truncated seta.

Epignath. Not recovered.

Cheliped (Figure 3B, C). Basis short, widest distally, with sternal margin bearing 2 setae, and 1 seta on

proximal tergal margin. Merus longer than wide, with cluster of 3 setae on distal sternal corner. Carpus short, with sternal lobe bearing 3 setae; tergal margin with row of about 9 setae. Propodus with fixed finger relatively short, distally truncate; sternal margin with 2–4 blunt setae and short inwardly directed spine; distal margin with subterminal dorsal spinous process and terminal cutting edge armed with 5 distal oval pectinate setae; 5 blunt setae on inner margin, and 5 subdistal setae. Dactyl longer than fixed finger, with moniliform tooth at mid-region of cutting edge; 4–5 serrate setae on sternal margin with first located proximal to tooth; outer margin with 3 setae proximal to claw.

Pereopod 1 (Figure 3E) fossorial, approximately twice size of other pereopods. Basis with distal two-thirds of extender margin swollen to form shallow lobe. Ischium short, triangular in shape. Sternal margins of merus, carpus, and propodus bearing 1, 2, 2 large conical spiniform setae, respectively. Merus with 1 long seta on outer margin. Carpus and propodus each with short distal spiniform seta on tergal margin. Dactyl with 2 teeth on proximal sternal margin; outer margin bearing 1 bifid seta (Figure 3E, enlargement). Exopod lacking.

Pereopod 2 (Figure 3F). Basis approximately twice as long as wide, with distal sternal margin bearing 1 long and 1 short seta; proximal tergal margin with small broom seta. Ischium short, with sternal margin bearing single seta. Merus with 4 long setae and 1 spiniform seta on distal sternal margin. Carpus with 2 spiniform setae on sternal margin and several simple setae; distotergal margin with 1 spiniform and 2 long setae. Propodus with broom seta near middle of article, distal margin with 1 long blunt seta and 1 curved spiniform seta; sternal margin with 3 spiniform setae and many setae with attenuated tips. Dactyl longer than propodus, with single hair-like seta on distal margin.

Pereopod 3 (Figure 3G). Basis without broom setae, ischium, as in pereopod 2. Merus with distal sternal margin bearing 5 long setae and 1 spiniform seta. Carpus with distotergal margin bearing1 simple and 2 spiniform setae; sternal margin with 2 spiniform and several attenuate setae. Propodus with 1 broom seta on distal third of article; distotergal lobe with 2 spiniform setae (l long and 1 curved); sternal margin with 3 spiniform and several attenuated setae. Dactyl longer than propodus, with distal hair seta as in pereopod 2.

Pereopod 4 (Figure 3H). Basis much longer than wide, with 3 large broom setae on proximotergal margin. Ischium and merus as in pereopod 3. Carpus with 3 sternal spiniform setae and several attenuate setae; outer margin with 2 distal spiniform setae and single long seta. Propodus with proximal broom seta and 3 comb-like setae on distal tergal margin; sternal margin with 5 spiniform setae. Dactyl subequal to propodus length, with bifid tip.

Pereopod 5 (Figure 3I). Basis as in pereopod 4. Merus, outer margin with 1 long and 1 short seta, with sternal row of 8 simple setae. Carpus with 7 sternal spine setae and several attenuate setae. Propodus, tergal margin with 3 spiniform setae above dactylus; sternal margin with 7 spiniform setae and attenuate setae. Dactyl nearly length of largest tergal propodal spine, shorter than propodus; tip bifid.

Pereopod 6 (Figure 3J). Smaller than other pereopods; merus, carpus, and propodus relatively broad. Basis quadrate, with 1 long simple seta on distosternal margin. Ischium rectangular, with 1 sternal seta. Merus wider than ischium, with medial tergal lobe bearing 2 large broom setae and 1 external seta; sternal margin with 2 long proximal setae and 2 hooked distal setae. Carpus with 1 tergal seta and 5 sternal setae, 2 simple and 3 hooked. Propodus with 10 comb-like setae, decreasing in size from dorsal to ventral margin, 1 flattened spiniform seta above dactylus; sternal margin with 2 large truncate spiniform setae. Dactyl shorter than propodus, with asymmetrically bifurcate tip.

Pleopods (Figure 3K). All 5 pairs similar. Basis with 2 plumose setae on outer margin. Rami with long plumose setae on outer and distal margins.

Uropod (Figure 3M). Peduncle with 1 long and 1 short seta on outer and inner distal margins, respectively. Endopod with 10–12 apparent articles; article 2 longest. Anteromedial margin of articles 1, 2, 5, and 10 with broom setae, last article with 4 terminal setae. Endopod much longer than exopod. Exopod biarticulate; proximal article lacking setae; distal article with 3 terminal setae, middle seta longest, about 1.5 times length of exopod.

Female. Same characters as male except for the form of the sexually dimorphic chelipeds.

Cheliped (Figure 3D). Carpus much longer in female, lacking dorsal setal row and sternal lobe. Fixed finger not strongly developed, appearing as triangular prolongation of propodus (not truncate distally as in male); dorsal margin with row of 6 triangular teeth and row of 7 blunt setae on inner margin; nail with subapical bifurcation. Dactyl without ventral tooth and lacking ventral serrate setae.

Oostegites. On pereopods 1–4, lacking fringing setae.

Manca stages. Pereopods 4 and 5 bearing relatively large 2 articulate exopods.

Etymology. The specific name is in honor of the eminent tanaidacean researcher Modest Guţu of the

"Grigore Antipa" National Museum of Natural History, Bucharest, Romania.

Habitat. Carbonate sand, sandy clay, clayey sand, sandy mud or sandy gravel substrata in depths ranging from 3–34 meters.

DISCUSSION

The Caribbean specimens of *Tanapseudes gutui*, n. sp., from Puerto Rico and Tobago appear quite similar to the type species *Tanapseudes ormuzana*. Specific differences distinguishing the new Caribbean species from *T. ormuzana* include: 1) labium with 2 terminal and 1 subterminal spiniform setae, while in *T. ormuzana* only 1 or 2 subterminal setae are present, 2) hornlike projections on the labrum,absent in *T. ormuzana*, 3) propodus of pereopod 1 having a reduced spiniform seta on the upper distal margin near the articulation with the dactylus, while in *T. ormuzana* this seta is well-developed and extending well beyond the first dactylar tooth, 4) pereonites 3–6 with anterior margins rounded, while in *T. ormuzana* they are produced, and 5) lateral margin of pleotelson entire and gently rounded, not having a subacute lateral lobe as in *T. ormuzana*.

In the fully developed male of *T. gutui*, the dactyl of the cheliped is armed with a translucent subacute tooth midway on the cutting edge along with a shallow trilobed carpal process (Figures 3B, C). Although these characters were not evident in the limited number of *T. ormuzana* males examined during our study, their absence may reflect a stage of development rather than a reliable taxonomic character.

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