

Schiecke, 1975

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Epicaridei finora noti e neopialis n. g., n. sp.) del Golfo

n. 277, 1-7.
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description of a hyperparasitic 158.

di Palermo, Via Archirafi 13.

Pubbl. Staz. Zool. Napoli 39, 169-175 (1975).

First record of *Thambema* (ISOPODA: ASELLOTA) in the Mediterranean: *T. ? amicorum* STEBBING from the Gulf of Naples (Italy), and remarks on the diagnosis of the genus

by

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3 Plates

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Zusammenfassung. Der Fund eines fast unbeschädigten Weibchens von *Thambema*, eines vom Mittelmeer bisher nicht gemeldeten Aselloten, ermöglicht die Vervollständigung und teilweise Korrektur der Originalbeschreibung. Es wird eine neue Gattungsdiagnose gegeben.

Summary. The record of a female specimen of *Thambema*, an Asellota Isopod found for the first time in the Mediterranean Sea, allows the original description to be completed and partly corrected. A new genus diagnosis is given.

Riassunto. Il ritrovamento di un esemplare femmina di *Thambema*, un Isopode Asellote rinvenuto per la prima volta nel Mediterraneo, permette di completare e parzialmente correggere la descrizione originale. Si da una nuova diagnosi del genere.

INTRODUCTION

The family of THAMBEMATIDAE at present comprises two monotypic genera: *Thambema* STEBBING, 1913 and *Microthambema* BIRSTEIN, 1961. Both are known only from abyssal depths of the Atlantic (*Thambema*) and Pacific Ocean respectively and have been exclusively described in the male sex. The record of a female of the first genus in almost perfect state in the Gulf of Naples notably enlarges the known area of distribution and, furthermore, allows the diagnosis to be completed.

MATERIAL

1.8.1970; Secca Lo Bianco (Bay of Naples), top area; mixture of sand and mud; depth 140 m: 1 female and 1 juvenile.

The lack of males in my material, on the one hand, and the imprecise and partially faulty description of *Thambema amicorum* by STEBBING (see also BIRSTEIN 1961, p. 135) as well as the damaged specimens of that author call for caution in the erection of a new species, even if there are certain differences, as in the structure of the first antenna and in the mouth parts. In this respect one must also consider the unknown variability, the good agreement in the remaining important morphological features and the Atlantic origin of almost all elements of the recent Mediterranean marine fauna.

A complete redescription of *T. amicorum* or the erection of a new species are, therefore, postponed till new specimens have been found. The drawings presented here of all body features with the exception of the lacking distal portion of the second antenna ensure, in my opinion, the recognition of the species recorded by me. The following statements are confined to the differences to STEBBING's text and drawings (loc. cit.; p. 237-239, pl. XXVI) accompanied by the description of the so far unknown female pleopods and uropods.

Cephalothorax (Pl. 1, C): in the Mediterranean specimen with the frontal margin more truncate.

First antenna (Pl. 1, C): presents the most notable differences to STEBBING's drawings and descriptions, especially in the distal portion. The specimen from the Gulf of Naples shows an indistinct separation between the third and fourth segments, the fifth is relatively longer than indicated by STEBBING and reaches distally the minute terminal segment which appears to be much smaller than drawn by STEBBING. The last two segments of the flagellum are each furnished with a sensory filament. The first antenna is altogether more robust than in the drawing of the Atlantic specimen.

Second antenna (Pl. 1, C): the most striking feature is the persistence of the original exopodite in the form of a subtriangular scale, neither mentioned nor drawn by STEBBING¹.

Mouth parts. Labrum (Pl. 1, C): with medial portion convex. Mandibles (Pl. 1, D, E): pars incisiva provided with five (STEBBING: four) teeth; lacinia mobilis of the left mandible with five teeth (STEBBING: three) of very different size; spine-row of the left mandible with four (STEBBING: six), that of the right with six (STEBBING: seven) elements; mandibular palp with three (STEBBING: two) stout spines at the margin of the second segment. First maxilla (Pl. 2, A) with five (STEBBING: three) spines on the inner lobe and ten (STEBBING: eight or ten) on the outer. In the second maxilla (Pl. 2, B) the inner of the two distal lobes is relatively shorter than in STEBBING's drawing. Labium (Pl. 2, C) with two stronger spines on the outer distal margin. Maxilliped (Pl. 2, D): in my specimen the epipodite is terminally more rounded and, on the whole, wider, but the

¹ BIRSTEIN's statement (loc. cit., p. 132) with regard to his *Microthambema* (« squama lacking ») may be erroneous.

may be due to first and second STEIN, loc. cit., on the inner distally not ex distal margin of

First peraeon ischium appears STEBBING.

Pleon (Pl. but distinctly first peraeonite; pleon almost parallel as in STEBBING's the border. Pleon then tapering and separated by a following pair of ditate which is present (Pl. 3, H) the exopodite the endopodite

Uropod (Pl. telson, almost half as long as the spine; endopodite bearing some setae

Remarks: Even validity of the MATIDAE. This also according to Wo however, there is of BIRSTEIN (loc. of six segments »

Omitting the there remain, in my

First antenna footnote 1, p. 2 of this feature may with first and second

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may be due to the different position in which it was drawn by STEBBING; the first and second segments of the palp are distinctly separated (see also BIRSTEIN, loc. cit., p. 135), the first less than half as large as the second, provided on the inner and outer border with a terminal seta; third segment of palp distally not expanded (as indicated in STEBBING's drawing), but tapering; the distal margin of the epipodite shows some small appendages of different form.

First peraeopod (Pl. 2, E, F): in the specimen from the Gulf of Naples the ischium appears, in relation to the basis and merus, shorter than indicated by STEBBING.

Pleon (Pl. 3, E): consists of two segments, the first of which is minute, but distinctly free, in dorsal view partly hidden under the tergum of the last peraeonite; pleotelson in the female in dorsal view in the proximal half with almost parallel margins, then notably tapering distally, not regularly rounded as in STEBBING's drawing of the male pleon, subterminally slightly concave at the border. Pleopods: operculum (Pl. 3, E, F) widening in the proximal third, then tapering and with somewhat concave margins, ending in two rounded lobes separated by a deep incision², each of the lobes bears two small setae; the following pair of pleopods (Pl. 3, G) with the exopodite larger than the endopodite which is provided distally with two strong setae; in the penultimate pair (Pl. 3, H) the exopodite is slightly falcate and does not reach terminally the end of the endopodite which bears a strong terminal seta.

Uropod (Pl. 3, E, K): inserted subterminally at the ventral side of the pleotelson, almost half as long as the latter; protopodite stout, longer than wide, as long as the slender exopodite and on its inner margin provided with a short spine; endopodite somewhat less than three times as long as the exopodite, bearing some sensory setae and a terminal tuft of simple setae.

Remarks: Even the corrections and additions presented here confirm the validity of the diagnosis given by WOLFF (1962, p. 49) for the family THAMBEMATIDAE. This also applies to the number of segments in the first antenna (six, according to WOLFF) in the case of *Thambema*. Concerning *Microthambema*, however, there is a contradiction between the text and the respective drawing of BIRSTEIN (loc. cit., p. 133 a. 134). This author noted: «...first antenna... consists of six segments», but his Fig. 2 a clearly shows seven of them.

Omitting the elements of the diagnosis of the family in that of the genus, there remain, in my opinion, the following characteristic features for *Thambema*:

First antenna with six segments; second antenna with squama (but see also footnote 1, p. 2 of this paper). Palp of mandible with the third segment falcate (this feature may apply to all members of this family). Palp of maxilliped with first and second segment wider than the endite (the addition «third seg-

² This feature has to be regarded as a primitive one.

ment narrower than the endite » may be valid only on the species level). First peraeopod is equally formed in both sexes, stronger than the following ones, not clearly subchelate; second thru seventh peraeopod similar in structure to the first and to one another, on all peraeopods the dactylus is provided with one claw only. Pleon, consists of two segments, the first of which is very short. First pleopod of the male with insignificant outer lobe, original third and fourth pleopods biramous; operculum of the female distally bilobous.

ACKNOWLEDGEMENTS

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LITERATURE

- BIRSTEIN, J. A., 1961: *Microthambema tenuis* n.g., n.sp. (ISOPODA ASELOTOTA) and relation of some asellote isopods. *Crustaceana* 2, 2, 132-141.
- STEBBING, T. R. R., 1913: On the Crustacea ISOPODA of the « Porcùpine » Expedition. *Trans. Zool. Soc. Lond.* 20, 4, 231-246.
- WOLFF, T., 1962: The systematics and biology of bathyal and abyssal ISOPODA ASELOTOTA. *Galathea Rept.* 6, 1-320, 184 figs., 19 pls.

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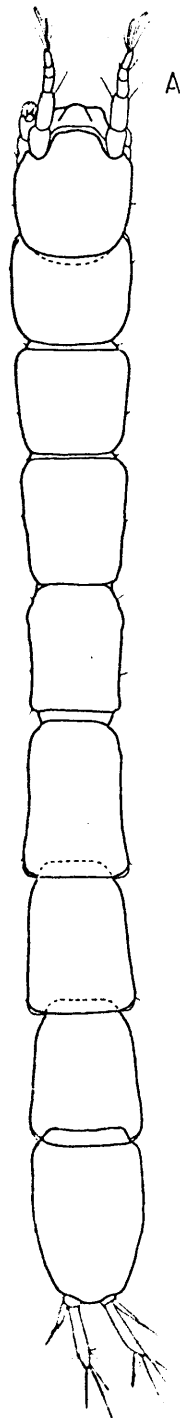


FIGURE 1. *Thambema*
view; C: 1/1

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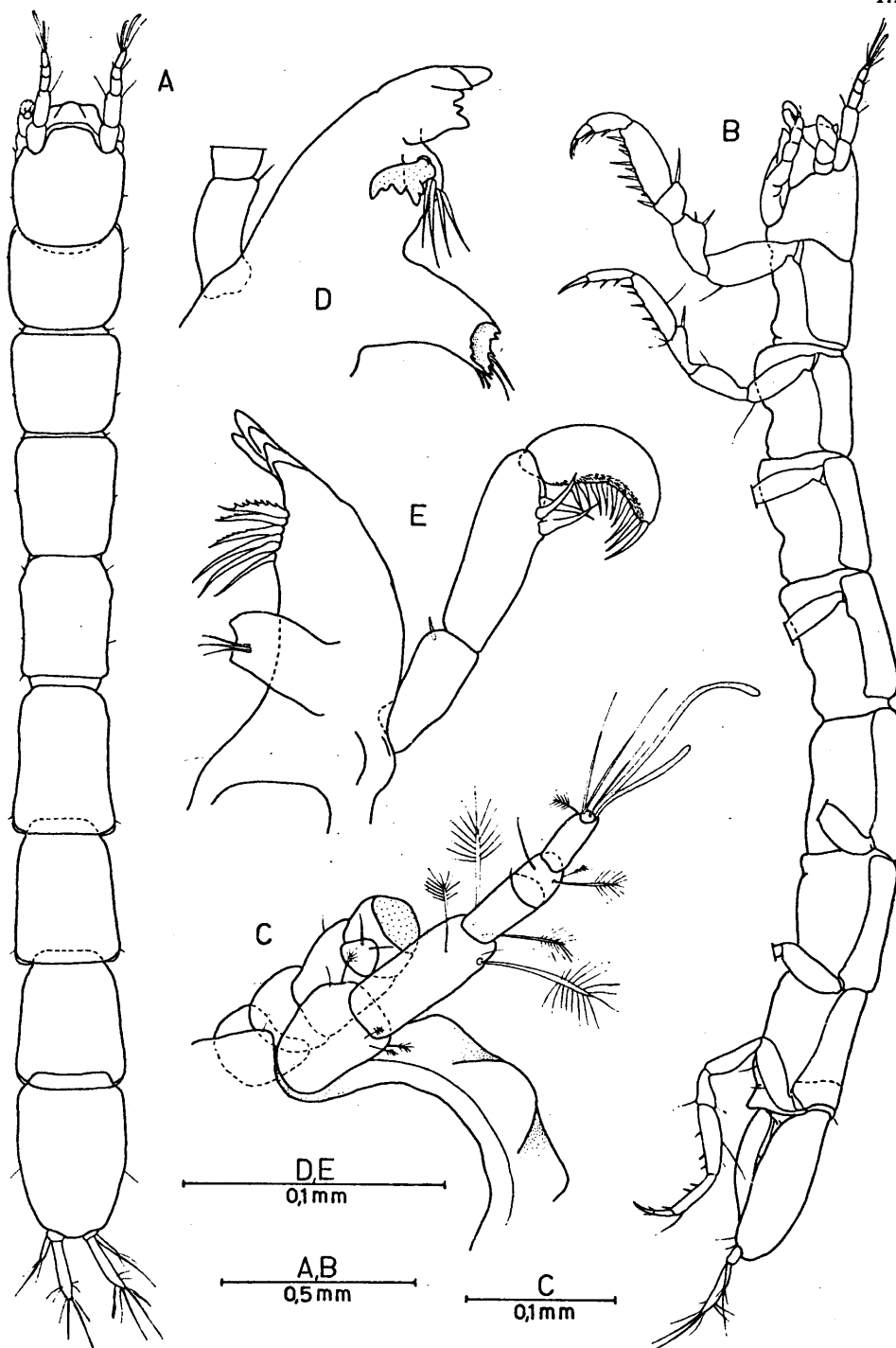


PLATE 1. *Thambema* ? *amicorum* (♀, Gulf of Naples). A: Habitus, dorsal view; B: Habitus, lateral view; C: First and second (proximal portion) antennae; D, E: Left and right mandible.

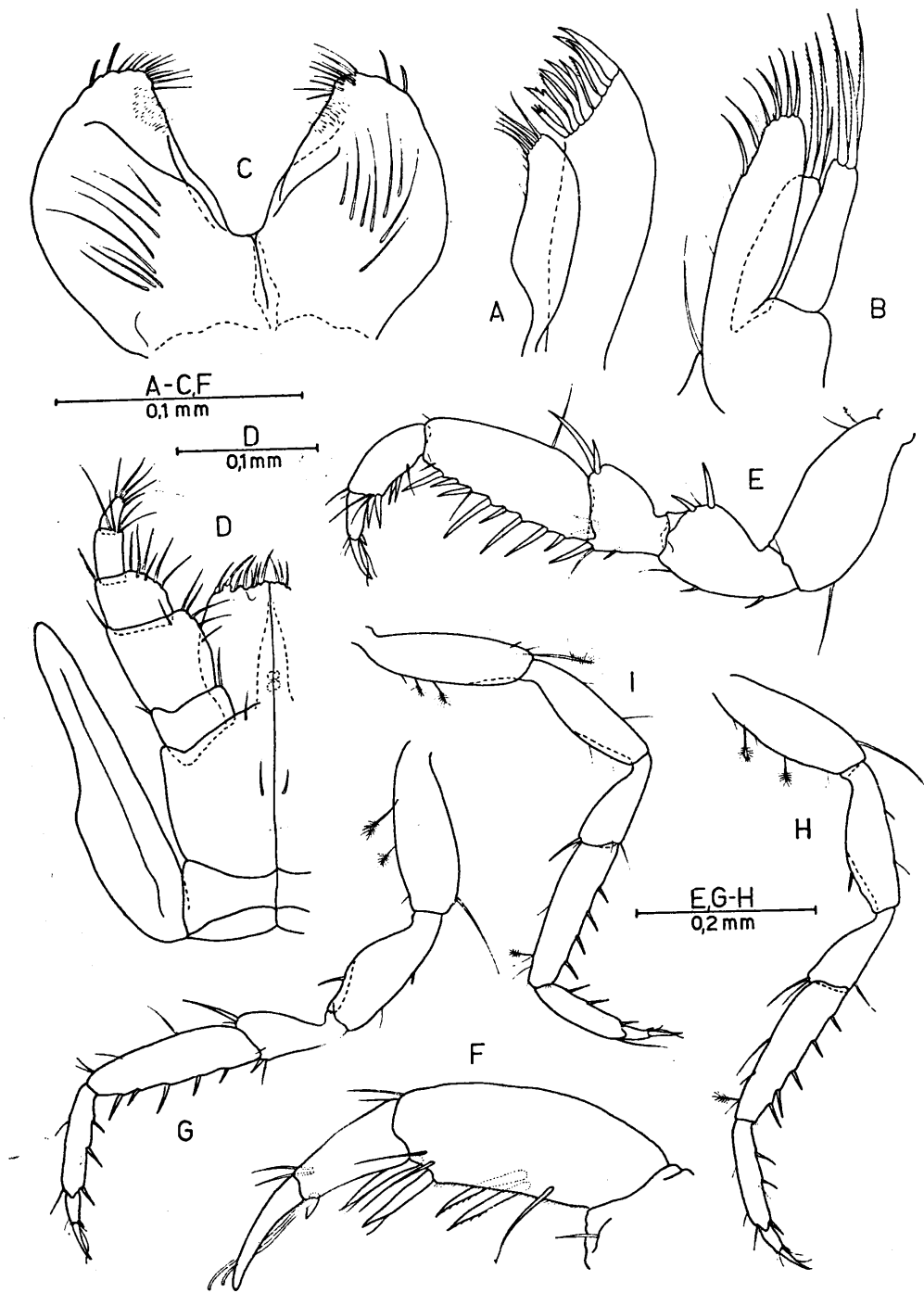


PLATE 2. *Thambema* ? *amicornum* (♀, Gulf of Naples). A: First maxilla; B: Second maxilla; C: Labium; D: Maxilliped; E, F: First peraeopod; G-I: Second to fourth peraeopod.

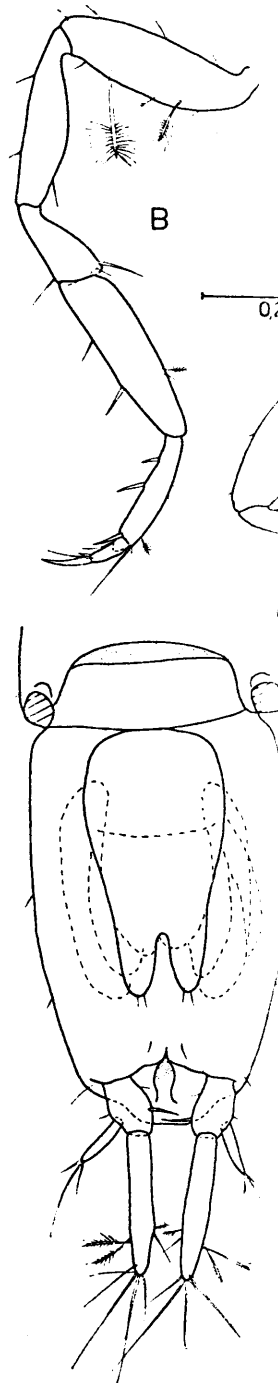


PLATE 3. *Thambema* ? *amicornum* (♀, Gulf of Naples). B: Seventh peraeopod; K: Uropod.

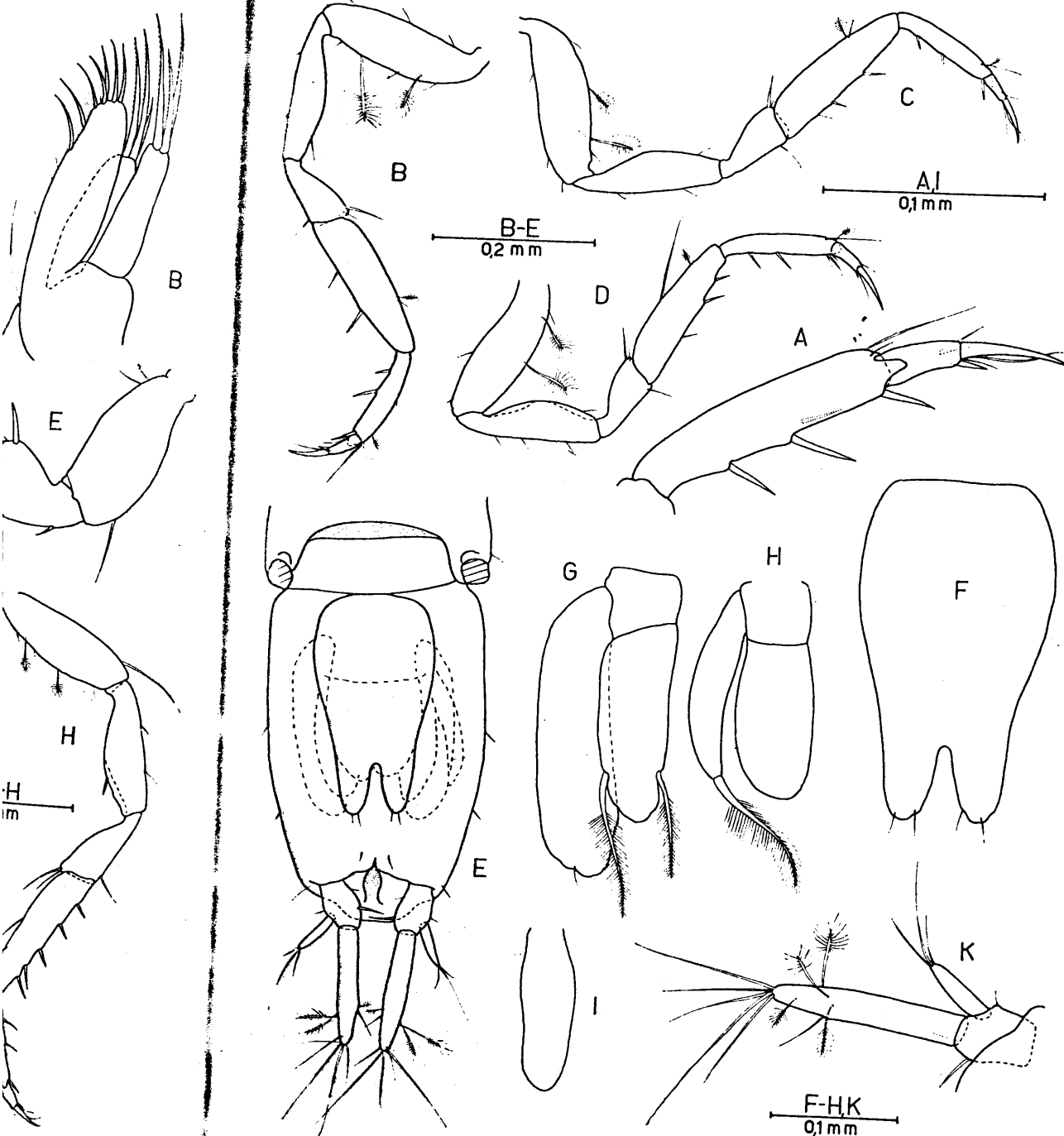


PLATE 3. *Thambema ? amicorum* (♀, Gulf of Naples). A: Second pereopod, distal part; B-D: Fifth to seventh pereopod; E: Pleon. ventral view; F: Operculum; G-I: Third to fifth pleopod, K: Uropod.