

A RANGE EXTENSION TO THE NORTH FOR *MACROCHIRIDOTEA GIAMBIAGIAE* TORTI AND BASTIDA (CRUSTACEA: ISOPODA: VALVIFERA)

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Abstract.—*Macrochiridotea giambiagiae* is reported from Rio de Janeiro, Brazil, and slight differences from the original description by Torti and Bastida (1972) are noted. This new record extends the known range of the species more than 1000 km to the north.

The genus *Macrochiridotea* Ohlin, 1901 comprises 11 species confined to the Southern Hemisphere (New Zealand, Falkland Islands, east and west coasts of South America from 23°12'S to 49°29'S): *M. michaelseni* Ohlin, 1901, *M. stebbingi* Ohlin, 1901, *M. kruimeli* Nierstrasz, 1918, *M. setifer* Menzies, 1962, *M. uncinata* Hurley & Murray, 1968, *M. robusta* Bastida & Torti, 1969, *M. giambiagiae* Torti & Bastida, 1972, *M. marcusii* Moreira, 1973, *M. lilianae* Moreira, 1973, *M. mehuinensis* Jaramillo, 1977, *M. australis* (Richardson, 1911) (transferred from *Chiriscus* by Poore 1984). It has been found at depths ranging from the intertidal to 309 meters, and on substrates varying from mud with fine sand to coarse quartz and calcareous sands. Specimens of this genus may reach 15 mm in length. Moreira (1973) reviewed the genus and provided a revised diagnosis which includes the statement that the inner lobe of maxilla 1 bears 2 apical setae. In fact this lobe bears a single seta in *M. giambiagiae* and the number of setae is unknown in *M. kruimeli*, *M. michaelseni*, *M. setifer*, and *M. stebbingi*. The remaining 6 species all have 2 setae.

We report herein a new record for *M. giambiagiae*, which extends this species' known range north by about 5° (1000 km), and slightly increases the known depth range, from 2 to 7 m. Its distribution thus extends from the northern to the southern limits of the Eastern South American Warm Tem-

perate Region as defined by Briggs (1974). It is the most northerly occurring member of the genus.

It is somewhat surprising that *M. giambiagiae*, published in 1972 and recorded in the Zoological Record for that year (published in 1978), is not listed in subsequent papers on *Macrochiridotea* by other authors (Moreira 1973, Epelde-Aguirre & Lopez 1975, Jaramillo 1977, Poore 1984), and is not included in Moreira's 1972 review of the genus.

Macrochiridotea giambiagiae

Torti & Bastida

Fig. 1

Macrochiridotea giambiagiae Torti & Bastida, 1972: passim. (Mar del Plata, Argentina; Chuy, Uruguay; Cassino, Brazil).

Material.—Copacabana Beach, Rio de Janeiro, Brazil, 150–300 m from shore in coarse quartz sand, 5–7 m, leg. James D. Thomas, 3–4 May 1985, 1 ♂ (3.5 mm), 2 ♀♀ (1 ovigerous—4.5 mm, 1 non-ovigerous—5.5 mm), 4 juveniles, USNM 241981.—Villa Gesell, Buenos Aires, Argentina, ♀ paratype of *M. giambiagiae* (5.5 mm), USNM 139314.

Description.—Length 1.75 to 5.5 mm. Our specimens have the features diagnostic of *M. giambiagiae*, i.e., dorsal surface of body smooth; head without tubercles, setose on lateral margins, slightly convex dorsally,

lateral incisions shallow, eyes small, faintly pigmented (Fig. 1a); 1 seta on endopod of maxilla 1 (Fig. 1c); pereopods 2 and 3 without dactyl (Fig. 1g); male pleopod 2 like that shown by Torti & Bastida (Fig. 1i).

Our material differs from Torti & Bastida's description as follows: article 4 of antenna 1 about $\frac{3}{4}$ rather than $\frac{1}{2}$ as long as article 2 and with 4 rather than 2 setae on distal margin (Fig. 1b); terminal article of flagellum with 3 rather than 2 apical setae. Exopod of maxilla 1 with 12 spines (Fig. 1c), type material with 9. Palp of maxilla 2 with 5 setae (Fig. 1d), type material with 4; endopod with 8 setae, type material with 6. Tip of pleotelson with 2 small setae medial to posterior pair of long setae (Fig. 1h). The small setae are not shown by Torti & Bastida and could not be seen in our paratype.

Torti & Bastida (1972:21–22) mention that pleonite 1 of *M. giambiagiae* tends to telescope into pereonite 7 and may not be visible in dorsal view. This was true for the 2 largest (4.5 and 5.5 mm) specimens from Rio de Janeiro, but the first segment was visible on the smaller specimens (1.75–3.5 mm).

Torti & Bastida did not note any sexual dimorphism in their 19 females and 3 males, except the appendix masculina on the male pleopod 2, nor did they note any differences between the adult male holotype and another adult male and juvenile male included with their material.

The female paratype of *M. giambiagiae* (USNM 139317, 5.5 mm) from Villa Gesell, Province of Buenos Aires, Argentina (37°28'S, 57°07'W) appears to conform to the description and figures of Torti & Bastida except that the distal process of the carpus of pereopod 1 bears several articulated setae as do our Rio de Janeiro speci-

mens (Fig. 1f). Torti & Bastida's illustrations, which depict the holotype male (4.3 mm) collected at Mar del Plata, Argentina (38°03'18"S, 57°32'30"W), show nonarticulated setae. Our male (3.5 mm) bears articulated setae, thus this characteristic does not appear to be size/age/sex related.

The differences between our specimens and those of Torti & Bastida are slight compared to those separating species of *Macrochiridotea*. If, however, additional collections should show them to be constant, the possibility of assigning distinct specific or subspecific status to the Rio de Janeiro form would have to be considered.

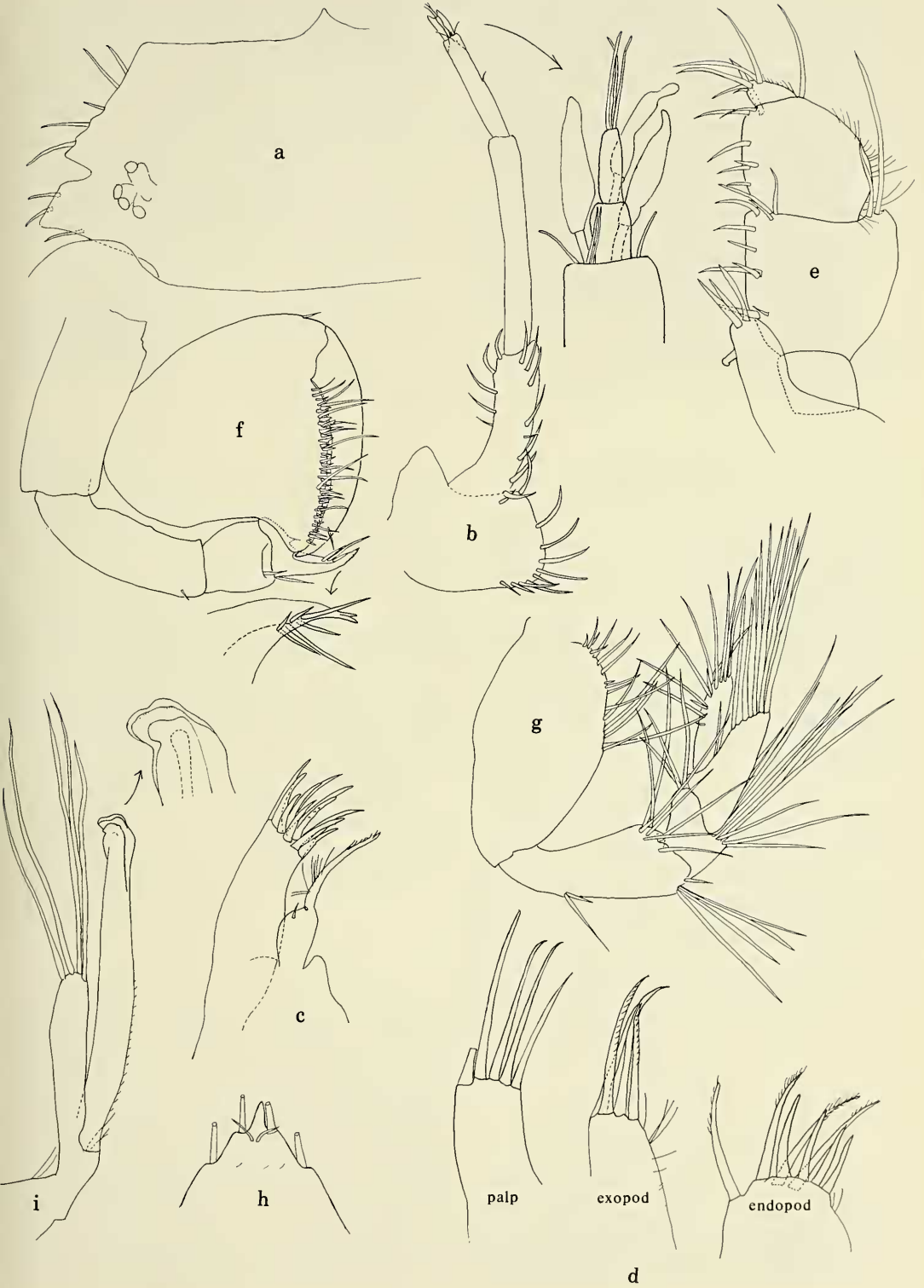
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Fig. 1. *Macrochiridotea giambiagiae*, female, USNM 241981: a, Head, dorsal view; b, Antenna 1; c, Maxilla 1; d, Maxilla 2; e, Maxilliped; f, Pereopod 1, tip of carpus enlarged (medial view); g, Pereopod 2; female, USNM 241982; h, Tip of pleotelson; male, USNM 241983; i, Pleopod 2, endopod with appendix masculina.



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