

Fig. 7.

Paraleptosphaeroma indica sp. nov., female. A. pleopod I; B. pleopod II.

member of the genus, Paraleptosphaeroma glynni Buss & Iverson, 1981; anterodistal corner of merus with two short, serrated spines; posterior margin of ischium with row of short simple setae; anterior margin of ischium with 6 very short spines and a simple seta (Fig. 3D); pereopod III similar to pereopod II; however, only distal third of posterior margin of carpus bearing three membranous, spine-like structures (Fig. 4A). Pereopod VII, carpus distally with 3 strong, plumose and serrated spines, together with one feathered sensory seta; anterodistal corner of merus with single serrated spine (Fig. 4B). Pereopods IV-VII quite similar to each others. Penes about 6.9 times longer than width at base, tapering to narrow rounded apex in distal half (Fig. 4C). Pleopod I, exopod about

three times longer than wide, with 9 distal plumose setae; endopod totally reduced; medial margin of basis strongly produced into narrow process bearing two retinaculae (Fig. 5A). Pleopod II, exopod two times longer than wide, with one plumose seta at ectal margin and 9 plumose setae distally; endopod narrow, 3.2 times longer than wide, about 0.8 times the length of exopod; five plumose setae along ectal and distal margin; appendix masculina curved and distally rounded, extending beyond distal margin of endopod; basis of pleopod II produced into narrow medial process with two distal retinaculae; this process more robust than in pleopod I (Fig. 5B). Pleopod III with oval exopod bearing 6 plumose setae along ectal margin; endopod somewhat larger than exopod, with 8 distal plumose setae; inner margin of basis with rounded lobe bearing 2 retinaculae (Fig. 6A). Pleopod IV, endopod oval without any setae; oval exopod tapering into short narrow process at apex, bearing row of about 15 short setules (Fig. 6B). Shape of both pleopod V exopod and endopod roughly elongate-oval; endopod with two distal rounded bosses bearing scale-like structures (Fig. 6C). Uropods twice as long as wide, both rami flattened; endopod extending beyond apex of pleotelson; exopod of half length of the endopod; ectal margins of both endopod and exopod with membrana cingula (Fig. 1A).

Female. Quite similar to male in general habitus and size, except of sexual characters. Exopod of first pleopod with 8 distal plumose setae (Fig. 7A). Pleopod II, exopod slightly narrower than in male; endopod about 2/3 length of exopod, about three times longer than wide, bearing 4 plumose setae in distal half (Fig. 7B).

Remarks. The present new species, *P. indica* is quite similar in its general habitus and shape of appendages to *P. glynni* Buss & Iverson, 1981 from Panamá Pacific (Buss & Iverson 1981) and the caribbean island Dominica (Kensley 1987: 576), implying that both are sister species. The most reliable feature to distinguish these species is the shape of the endopod of the second male pleopod. In *P. glynni* the endopod is about 2.3 times longer than wide and shorter than half the length of the exopod. Also, the distal lobe of the endopod bears only 3-5 short, simple setae (see Buss & Iverson 1981: 5, Figs 2H, J). As pointed out in the description of *P. indica*, the endopod of the second male pleopod is 3.2 times longer than wide and has about 0.8 times the length of the exopod. Contrary to *P. glynni* it bears 5 plumose setae which are much longer than in that species. Several males of *P. indica* have been examined and it seems that the shape of the endopod of the second male pleopod and its length ratio to the exopod are constant characters without recognizable variability. Females are distinguishable through the setation of the second pleopodal endopod, bearing two plumose setae in *P. glynni* and four plumose setae in *P. indica*.

The new species is a common member of the reef community at Réunion island where it has been found more numerous in the reef-lagoon near la Saline-les-Bains shortly after the strong cyclon "Firinga". Nearly all of the specimens have been found associated with dead coral substratum.

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REFERENCES

- Buss, L. W. & E. W. Iverson. 1981. A new genus and species of Sphaeromatidae (Crustacea: Isopoda) with experiments and observations on its reproductive biology, interspecific interactions and color polymorphisms. *Postilla*, 184: 1-24.
- KENSLEY, B. 1987. Further records of marine isopod crustaceans from the Caribbean. *Proc. biol.* Soc. Wash., 100 (3): 559-577.
 - 1988. Preliminary observation on the isopod crustacean fauna of Aldabra Atoll. Bull. biol. Soc. Wash., 8: 40-44.
- MONOD, T. 1971. Sur quelques crustacés de Tulear (Madagascar). Tethys, suppl. 1: 165-192.