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NOTES AND NEWS

NOTES ON AN UNUSUAL SPECIMEN OF *LAURIDROMIA DEHAANI* (RATHBUN, 1923) (DECAPODA, BRACHYURA, DROMIIDAE) FROM HONG KONG

BY

A.-Y. DAI¹⁾ and PETER K. L. NG²⁾

¹⁾ Institute of Zoology, Academia Sinica, Zhongguancun Lu, Beijing 100080, China

²⁾ School of Biological Sciences, National University of Singapore, Kent Ridge,
Singapore 119260, Republic of Singapore

The large sponge crab, *Lauridromia dehaani* (Rathbun, 1923), is a common species which has been reported from Madagascar to Australia (Dai & Yang, 1991; McLay, 1993; see Guinot et al., 1995, on its carrying behaviour). Recently, through the courtesy of Tony Chiu of the Environment Protection Department of the Hong Kong Government, we obtained a male dromiid specimen from Hong Kong which had several very peculiar features, especially with regards to its last two pairs of walking legs. Although we identify this specimen with *L. dehaani*, we felt that a short note was warranted to document its unusual features.

***Lauridromia dehaani* (Rathbun, 1923) (fig. 1)**

Material examined. — 1 male, carapace width 27.0 mm, carapace length 24.2 mm (Institute of Zoology, Academia Sinica, Beijing), station number 028, subtidal waters off eastern Hong Kong, coll. Environment Protection Department of Hong Kong, 1990s.

Remarks. — McLay (1993) established *Lauridromia*, for three species, viz. *L. dehaani* (Rathbun, 1923), *L. indica* (Gray, 1831) and *L. intermedia* (Laurie, 1906) (the type-species). He separated members of *Lauridromia* from the closely allied *Dromia* Weber, 1795, in that their carapace is not much broader than long (vs. distinctly broader than long), the last two male abdominal segments are immovable (free in *Dromia*), the presence of four tubercles on or on the outside of the superior margin of the chelipedal propodus (vs. tubercles small and along the inside of the superior margin), and the ventral margins of the dactyli of the first and second legs having more than seven spines (vs. 5-7 spines) (McLay, 1993: 145, 149).

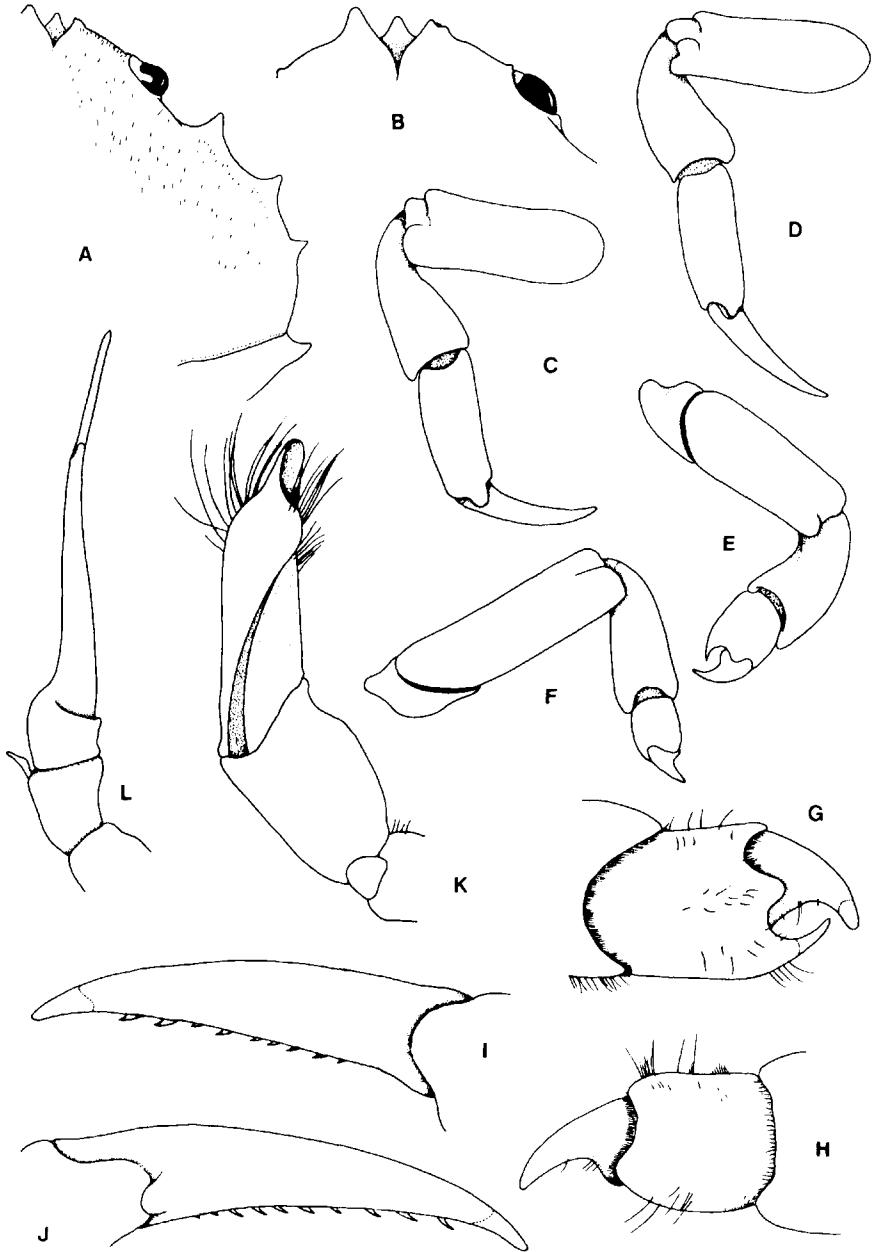


Fig. 1. *Lauridromia dehaani* (Rathbun, 1923), male, carapace width 27.0 mm, Hong Kong. A, right side of carapace (partially denuded); B, rostrum; C, left first walking leg; D, left second walking leg; E, right third walking leg; F, right fourth walking leg; G, propodus and dactylus of right third walking leg; H, propodus and dactylus of right fourth walking leg; I, dactylus of left first walking leg; J, dactylus of left second walking leg; K, ventral view of left male first pleopod; L, left male second pleopod.

Although the male abdomen of the present Hong Kong specimen is missing, it nevertheless possesses almost all the other features of the genus *Lauridromia* and more specifically, *L. dehaani*, viz. the less domed carapace and not strongly inflated branchial regions, coarse and less dense pubescence, the almost straight margin of the rostral lobe, the anterolateral margin with well developed teeth, the dactylus of the first and second legs being armed with 9 or 10 small spines, the unarmed distal part of the propodus of the fourth leg, and the proportionally shorter distal part of the male first pleopod which has a rounded tip.

In the present Hong Kong specimen of *L. dehaani*, the propodus and dactylus of the fourth leg are completely unarmed. Such a condition is very aberrant for a *Lauridromia* (or *Dromia*) species. The propodus of the third and fourth leg of the present specimen also lacks spines on the outer margin. In normal specimens of *Lauridromia*, the propodus of the third leg has a single inner and usually two outer spines, and that of the fourth leg has two inner and three outer spines. There are no signs of injury or damage to these segments, although they appear to have regenerated, being lighter in colour than the rest of the appendages. In *Dromia* species, the propodus of the third leg has a single inner and usually no outer spines, and that of the fourth leg has two inner spines and sometimes a single outer spine.

Compared to equivalently sized specimens of *L. dehaani* from Hong Kong and neighbouring areas, there are a number of differences. The rostrum of the present specimen is proportionally narrower, the rostral lobes being more truncate in shape (fig. 1A, B) (vs. triangular), the last anterolateral tooth is directed slightly obliquely forwards (vs. directed laterally), the dactyli of the first pair of legs are proportionally shorter, being shorter than the propodus (fig. 1D) (vs. dactylus as long as or slightly longer than the propodus), the ventral margins of the dactyli of the third and fourth legs bear 9 or 10 small spines (fig. 1H, I) (vs. 16-20 proportionally smaller spines), the legs of the third pair those of are shorter than the fourth pair (vs. third pair longest), the distal spine on the propodus of the third leg is proportionally smaller (fig. 1F, J), the distal part of the propodus of the fourth leg is unarmed (fig. 1G, K) (vs. propodus with a distinct distal spine), the distal part of the male first pleopod is proportionally shorter and the tip is rounded (vs. longer and the tip sharp), and the male second pleopod is proportionally shorter. None of these differences, however, are very substantial, and may be explained by the small size of the specimen and/or infraspecific variation.

McLay (1993) commented that in male *Lauridromia*, the coxae of the first and second legs have a serrated flange which fits against the lateral margins of the male abdomen (McLay, 1993: 145). In *Dromia*, however, this serrated flange

is supposedly present only on the coxae of the first leg (McLay, 1993: 149). In specimens of *L. dehaani* and *L. indica* that we have examined, the serrated flange is obvious only on the coxa of the first leg. The value of this character to differentiate the genera is thus questionable.

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