

The Freshwater Crab Fauna (Crustacea, Brachyura) of the  
Philippines. III. The Identity of *Telphusa cumingii*  
MIERS, 1884, and its Placement in the Genus  
*Ovitamon* NG et TAKEDA, 1992  
(Family Potamidae)

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**Abstract** The identity of the poorly known Philippine freshwater crab, *Telphusa cumingii*, is clarified on re-examination of the type in the British Museum. The species, briefly described by MIERS in 1884 and never reported since, has been regarded as belonging to the superfamily Gecarcinucoidea, and allied to species like *Sundathelphusa picta* and *Holthuisana transversa*. *Telphusa cumingii* in fact, belongs to the superfamily Potamoidea, family Potamidae, in the recently established genus *Ovitamon* NG et TAKEDA, 1992.

Family Potamidae

Genus *Ovitamon* NG et TAKEDA, 1992

*Ovitamon cumingii* (MIERS, 1884), comb. nov.

(Figs. 1, 2)

*Telphusa Cumingii* WHITE, 1847: 30 (*nomen nudum*).

*Telphusa Cumingii* MIERS, 1884: 236 (Philippines).

*Telphusa Cumingii* — DE MAN, 1892: 240 (no new locality).

*Potamon (Geothelphusa) pictum* — ORTMANN, 1897: 314 (no new locality, part).

*Potamon Cumingii* — DE MAN, 1898: 436 (list).

*Potamon (Geothelphusa) cumingii* — RATHBUN, 1905: 202 (key), 216 (no new record).

MIERS (1884: 236) in his report on the decapod crustaceans of the “Alert”, made a brief comment when discussing the freshwater crab, *Telphusa crassa*: “Specimens are in the British-Museum collection from the Philippines, R. Naga or Bicol (*Cuming*), which belong to *T. crassa* or to a closely allied species; in the male the larger chelipede has the

mobile finger arcuated, both are rather strongly denticulated on their inner margins, and have between them, when closed, a wide interspace. These specimens were designated by White *T. obesa* (in manuscript); but this name has been applied by Prof. A. Milne-Edwards to a very nearly allied form from Zanzibar, which differs apparently only in having an even more distinct postfrontal crest, and yet more strongly arcuated and dentated fingers to the larger chelipede. If distinct, the Philippine examples may be designated *T. cumingii*."

*Telphusa cumingii* MIERS, 1884, is a very poorly known species and the specimens on which the name is based have not been examined since the original description. Neither has fresh specimens of the species been reported again since. DE MAN (1892: 140) noted that "*Telphusa Cumingii* Miers . . . from the Philippines, is quite imperfectly characterized, so that it is impossible to recognize this species which may be allied to *Geotelphusa picta*". Authors (e.g. MIERS, 1884: 236; DE MAN, 1892: 240) have allied *T. cumingii* with species like *Sundathelphusa picta* (VON MARTENS, 1868) and *Thelphusa crassa* A. MILNE EDWARDS, 1869 (synonymised with *Holthuisana (Australothelphusa) transversa* (VON MARTENS, 1868) by BOTT, 1970: 94), and its classification was presumably in the Parathelphusidae ALCOCK, 1910, superfamily Gecarcinucoidea RATHBUN, 1904. The species was listed by RATHBUN (1905: 216) (as *Potamon (Geotelphusa) cumingii*) but not treated by BOTT (1970) in his revision of the Old World fauna, and its position has always been uncertain.

The authors have been engaged in a systematic revision on the Philippine freshwater crabs (see NG & TAKEDA, 1992, 1993), and are currently working on the genus *Sundathelphusa* BOTT, 1969. BOTT (1970) referred *Sundathelphusa* and its allied genera to a new family, Sundathelphusidae, but this is here regarded as a junior synonym of Parathelphusidae ALCOCK, 1910 (see NG, 1988: 84). In conjunction with this, and the presumed relationship of *Telphusa cumingii* to Philippine species like *S. picta*, the types of *T. cumingii* were sought.

Paul CLARK kindly sent us excellent photographs of the largest type specimen of *Telphusa cumingii* in the British Museum (Natural History) (BMNH), London. The type is dried and very delicate. As MIERS (1884) did not indicate how many specimens he had examined, all his specimens are thus syntypes. WHITE (1847: 30) listed a male and a female (as *Telphusa Cumingii*), and as MIERS (1884) indicated that he had referred to and used WHITE'S specimens, both of these specimens would presumably be the syntypes of *Telphusa cumingii*. The two syntypes however, appear to be from different locations. The male was from "Philippine Islands (Guimaras)" whereas the female was from "Philippine Islands. River Naga or Bicol, Camarines South" (WHITE, 1847: 30). Both were from CUMING'S collection. The male photographed, 38.0 by 28.9 mm, BMNH 1843.6, from Guimaras, is here designated the lectotype of the species. The female specimen cannot be located (P. CLARK, pers. comm.). It cannot be ascertained if the male and female specimens are conspecific. Guimaras is a small island south of Panay (ca. 10.35°N 122.35°E) and some distance from River Naga, Camarines South (ca. 13.36°N 123.12°E), and there is every chance that the two type specimens

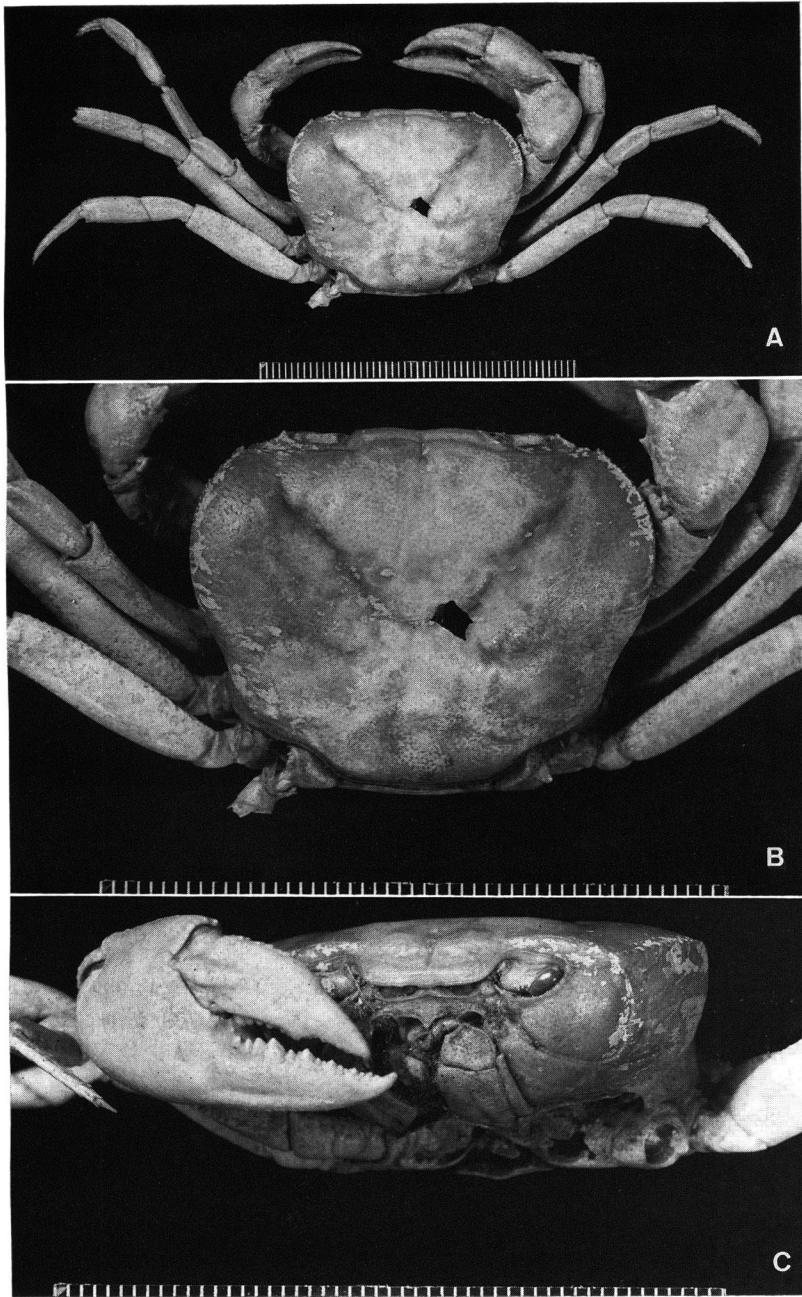


Fig. 1. *Ovitamon cumingii* (MIERS, 1884). Lectotype male, 38.0 by 28.9 mm, BMNH 1843.6.  
A, general view; B, dorsal view of carapace; C, frontal view.

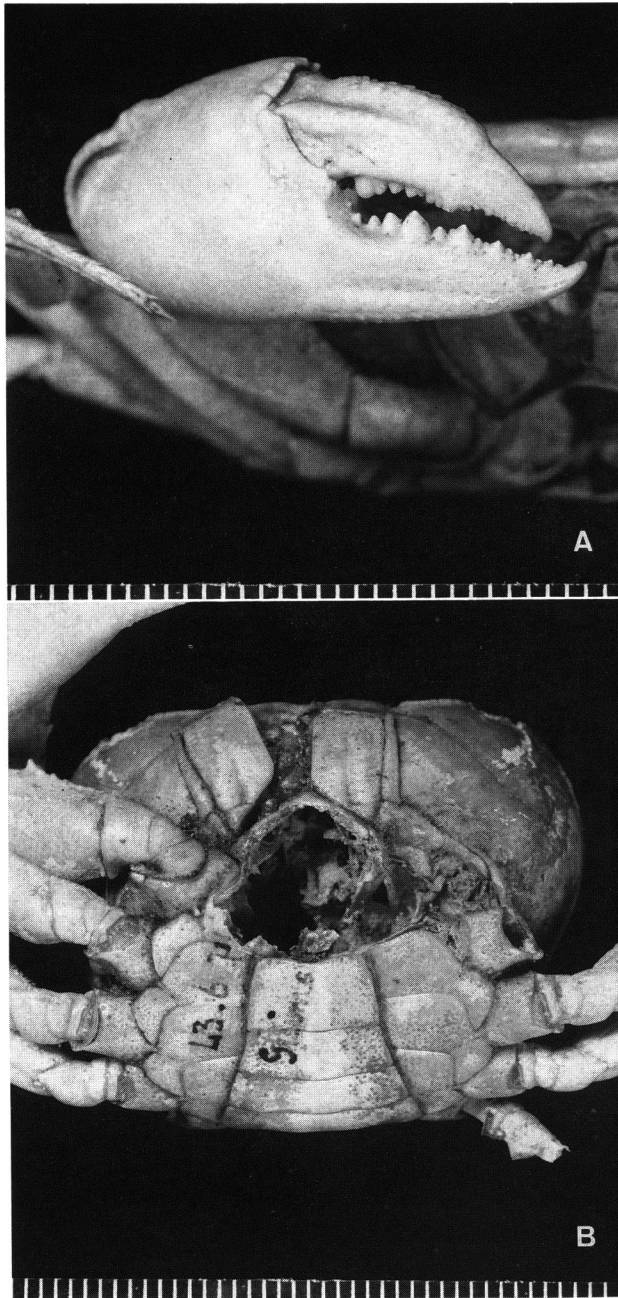


Fig. 2. *Ovitamon cumingii* (MIERS, 1884). Lectotype male, 38.0 by 28.9 mm, BMNH 1843.6. A, right chela; B, sternum and abdomen.

are not conspecific.

The photographs (Figs. 1, 2) show clearly that *Telphusa cumingii* is not a parathelphusid or gecarcinucoid but a potamid (Potamoidea) instead. Although the taxonomically important mandibular palps and gonopods could not be examined, the condition of the male abdomen and chelipeds are diagnostic for potamids, at least for the Asian fauna. The male abdomen is distinctly triangular, with a slight constriction between segments 4 and 5, and has the typical shape of the group. In parathelphusids from Southeast Asia, the abdomen is distinctly T-shaped in males, whilst broadly triangular in young and round in adult females. The form of the chelae, especially the serrated dorsal margins and strong carinae on the outer surfaces of the fingers is a typical feature of potamids. The parathelphusids (at least from the Philippines) do not have such chelae. The anterior sternal segments, including the telson are absent in the specimen, and as such, even if the specimen is rehydrated, the G1 terminal segments, invaluable in potamid crab taxonomy, are probably badly damaged or lost.

The external features of *Telphusa cumingii* agree very well with what has been diagnosed as *Ovitamon* NG et TAKEDA, 1992. *Telphusa cumingii* however, cannot be assigned to any of the species of *Ovitamon* known thus far (*O. artifrons* (VON MARTENS, 1868), *O. tomaculum* NG et TAKEDA, 1992, or *O. arcanus* NG et TAKEDA, 1992, *vide* NG & TAKEDA, 1992), and is the fourth member of the genus. The frontal regions of *O. cumingii* are very narrow and the external orbital angle much broader and more sinuous than any of the other species known thus far. *Ovitamon cumingii* is the largest known species of *Ovitamon*, the other known species being substantially smaller.

### Acknowledgements

Paul CLARK kindly searched the BMNH shelves for the specimens in question, and kindly arranged for the photographs of the species to be taken and sent to the first author. His help is very much appreciated. Phil HURST of the BMNH Photograph Unit took the excellent photographs. The first author was partly supported by the JSPS (Japanese Society for the Promotion of Science) Programme with the National University of Singapore, and by a research grant, RP 900360, from the latter institute.

### References

- BOTT, R., 1970. Die Süßwasserkrabben von Europa, Asien, Australien und ihre Stammesgeschichte. Eine Revision der Potamoidea und Parathelphusoidea (Crustacea, Decapoda). *Abh. Sencken. Naturf. Ges., Frankfurt*, **526**: 1–338, pls. 1–58.
- MAN, J. G., DE, 1892. Carcinological studies in the Leyden Museum. No. 6. *Notes Leyden Mus.*, **14**: 225–264, pls. 7–10.
- MAN, J. G., DE, 1898. Viaggio di Leonardo Fea in Birmania. *Ann. Mus. Civ. Stor. Nat. Genova*, (2), **19**: 284–440.
- MIERS, E. J., 1884. Crustacea. In: Report on the Zoological Collections made in the Indo-Pacific

- Ocean during the Voyage of the H.M.S. "Alert", 1881. London, pp. xxv+684, pls. 1-54.
- NG, P. K. L., 1988. The Freshwater Crabs of Peninsular Malaysia and Singapore. Dept. Zool., Natn. Univ. Singapore, Shinglee Press, Singapore, pp. viii+156, 4 colour plates.
- NG, P. K. L. & M. TAKEDA, 1992. The freshwater crab fauna (Crustacea, Brachyura) of the Philippines. I. The family Potamidae ORTMANN, 1896. *Bull. Natn. Sci. Mus., Tokyo*, (A), **18**: 149-166.
- NG, P. K. L. & M. TAKEDA, 1993. The freshwater crab fauna (Crustacea, Brachyura) of the Philippines. II. The genus *Parathelphusa* H. MILNE EDWARDS, 1853 (Family Parathelphusidae). *Ibid.*, (A), **19**: 1-19.
- ORTMANN, A., 1897. Carcinologische Studien. *Zool. Jb. (Syst.)*, **10**: 256-372, pl. 17.
- RATHBUN, M. J., 1905. Les crabes d'eau douce. *Nouv. Arch. Mus. Hist. Nat., Paris*, (4), **7**: 159-323, pls. 13-22.
- WHITE, A., 1847. List of the Specimens of Crustacea in the Collection of the British Museum. London, pp. 143.