



Two new species of *Glyphocrangon* (Decapoda: Caridea: Glyphocrangonidae) from the East China Sea and the Philippines

QINGXI HAN¹ & XINZHENG LI^{2,3}

¹School of Marine Sciences, Ningbo University, Ningbo, Zhejiang Province 315211, PR China

²Institute of Oceanology, Chinese Academy of Sciences, Qingdao 266071, PR China

³Corresponding author. E-mail: lixzh@qdio.ac.cn

Abstract

The present paper reports two new species of *Glyphocrangon* (Crustacea, Caridea, Glyphocrangonidae) collected respectively from the East China Sea and the Philippines. *G. singularis* **sp. nov.**, from the East China Sea, is similar to *G. fimbriata* Komai & Takeuchi, 1994 with the presence of fringe of setae on dactyl of the third to fifth pereopods, but differs from *G. fimbriata* by the rostrum shape and the armature on the carapace; *G. denticulata* **sp. nov.**, from the Philippines, is similar to *G. pugnax* De Man, 1918 with the entire anterior third carina, but differs from *G. pugnax* by armatures of the antennal scaphocerite and carapace, the lengths of rostrum and the spines of fifth abdominal somite, and the colouration of carapace.

Key words: Crustacea, Decapoda, Caridea, Glyphocrangonidae, *Glyphocrangon*, East China Sea, Philippines, new species

Introduction

The caridean genus *Glyphocrangon* A. Milne-Edwards, 1881 is the only one genus of the family Glyphocrangonidae Smith, 1884. *Glyphocrangon* is one of the biggest genera in the Caridea, and there have been 89 known species in the world (De Grave & Fransen, 2011; Komai, 2011). The genus is distributed exclusively in deep waters of tropical and warm parts of the Atlantic, Indian and Pacific oceans from 153 m to 6373 m (Komai, 2004). With more and more deep-sea researches in the world, more and more *Glyphocrangon* species were found and described. Before Komai (2004), 45 species of the genus had been known throughout the world (Komai, 2004), this means about half (44) species of the genus were found and described during 2004–2011.

Recently, when we sorted and checked the *Glyphocrangon* material deposited in the Marine Biota Museum of the Chinese Academy of Sciences (MBMCAS) in the Institute of Oceanology of the Chinese Academy of Sciences (IOCAS), and the shrimp specimens collected by the PANGLAO 2005 from the Philippines, one specimen from the East China Sea and four specimens from the Philippines, which represent different undescribed species respectively, were separated out. We describe them as two new species in science herewith.

Carapace length (cl) refers to the length from the level of posterior margin of the orbit to the level of midpoint of the posterior margin of the carapace; MBMxxxxxx is the registration number in the MBMCAS; AT = Agassiz Trawl; stn = station.

Taxonomy

Family Glyphocrangonidae Smith, 1884

Genus *Glyphocrangon* A. Milne-Edwards, 1881

Acknowledgments

We thank Drs. T.-Y. Chan (National Taiwan Ocean University) and P.K.L. Ng (National University of Singapore) for their permission and help so that we may approach the specimens of PANGLAO 2005. Thanks are due to Drs. T.-Y. Chan and T. Komai (Natural History Museum and Institute, Chiba) for their help to copy some references. Dr. Chan also provided the photo of fresh paratype ovigerous female specimen of *Glyphocrangon denticulata* **sp. nov.** This study is supported by the National Natural Science Foundation of China (nos. 40676088 and 30499340) and the IOCAS (no. 2012IO060105).

References

- Chace, F.A. Jr. (1984) The caridean shrimps (Crustacea: Decapoda) of the Albatross Philippine Expedition, 1907–1910, Part 2: families Glyphocrangonidae and Crangonidae. *Smithsonian Contributions to Zoology*, 397, 1–63.
<http://dx.doi.org/10.5479/si.00810282.397>
- De Grave, S. & Franssen, C.H.J.M. (2011) Carideorum Catalogus: The Recent Species of the Dendrobranchiate, Stenopodidean, Procaridean and Caridean Shrimps (Crustacea: Decapoda). *Zoologische Mededelingen*, 85, 195–589.
- De Man, J.G. (1918) Diagnoses of new species of macrurous decapod Crustacea from the Siboga Expedition. *Tijdschrift der Nederlandsche Dierkundige Vereeniging*, Series 2, 16, 293–306.
- De Man, J.G. (1920) The Decapoda of the Siboga Expedition. Part IV. Families Pasiphaeidae, Styrodactylidae, Hoplophoridae, Nematocarcinidae, Thalassocaridae, Pandalidae, Psalidopodidae, Gnathophyllidae, Processidae, Glyphocrangonidae and Crangonidae. *Siboga Expeditie*, 39a3, 1–318.
- Han, Q. & Li, X. (2007) An account of the *Glyphocrangon* shrimps (Decapoda, Caridea) in the collections of the Institute Of Oceanology, Chinese Academy of Sciences. *Crustaceana*, 80, 545–553.
- Jones, D.S. & Morgan, G.J. (2002) *A field guide to Crustaceans of Australian waters*. Reed New Holland, Sydney, 224 pp.
- Komai, T. (2004) A review of the Indo-West Pacific species of the genus *Glyphocrangon* A. Milne Edwards, 1881 (excluding the *G. caeca* species group) (Crustacea: Decapoda: Caridea: Glyphocrangonidae). *Mémoires du Muséum national d'Histoire naturelle*, 191, 375–610.
- Komai, T. (2011) Further records of deep-sea shrimps of the genus *Glyphocrangon* (Crustacea: Decapoda: Caridea: Glyphocrangonidae) from the southwestern Pacific, with descriptions of two new species. *Species Diversity*, 16, 113–135.
- Komai, T. & Chan, T.-Y. (2008) Further records of deep-sea shrimps of the genus *Glyphocrangon* A. Milne-Edwards, 1881 (Crustacea: Decapoda: Caridea) from the Philippines, with descriptions of three new species. *Raffles Bulletin of Zoology*, Supplement 19, 39–62.
- Komai, T. & Takeuchi, I. (1994) *Glyphocrangon fimbriata*, a new species of caridean shrimp (Crustacea: Decapoda: Glyphocrangonidae) from Sio Guyot, Mid-Pacific Mountains. *Proceedings of the Biological Society of Washington*, 107, 458–464.