

Article



On the taxonomy of *Palaemon javanicus* Heller, 1862, and *Palaemon sundaicus* Heller, 1862, with description of a new species of *Macrobrachium* Bate, 1868 (Crustacea: Decapoda: Caridea: Palaemonidae) from Southeast Asia*

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Abstract

Re-examination of the type material of *Palaemon javanicus* Heller, 1862, shows that the current concept of the species is wrong. This species is in fact a senior subjective synonym of a widespread Southeast Asian species now known as *Macrobrachium trompii* (De Man, 1898). The species now commonly referred to as "*Macrobrachium javanicum*" following De Man (1879) from Southeast Asia is in fact, undescribed, and is here named *Macrobrachium duri* spec. nov. *Macrobrachium duri* spec. nov. can easily be distinguished from *M. javanicum sensu stricto* by the presence of a small triangular median process on the fourth thoracic sternite, possessing spinulate third to fifth pereiopods, having both second periopods covered with spines and few scattered short stiff setae, and the eggs been small and numerous. To add to the confusion, *Palaemon javanicus* Heller, 1862, is also synonymous with *P. sundaicus* Heller, 1862, and both were described by Heller (1862) in the same paper, making both names simultaneously available. As first revisors, we hereby choose *P. sundaicus* Heller, 1862, to have priority over *P. javanicus* Heller, 1862, when the two names are considered to be synonyms. *Palaemon sundaicus* Heller, 1862, is therefore also the senior synonym of *Macrobrachium trompii* (De Man, 1898).

Key words: Crustacea, Decapoda, Palaemonidae, *Macrobrachium duri*, spec. nov., *Macrobrachium sundaicum*, *Macrobrachium javanicum*, taxonomy

Introduction

Macrobrachium javanicum (Heller, 1862) is a freshwater prawn that is widely reported to occur throughout the Sunda Shelf (Heller 1862; De Man 1879; Nobili 1900; Roux 1932; Holthuis 1950; Johnson 1960; Chace & Bruce 1993; Wowor & Choy 2001; Wowor et al. 2004). This species is usually found in lowlands but is rarely abundant. The closely allied M. neglectum (De Man, 1905), on the other hand, is more common. In the past, M. neglectum was considered as a synonym (Nobili 1900; Roux 1932; Holthuis 1950; Chace & Bruce 1993) or a subspecies (e.g. Johnson 1960) of M. javanicum. However, M. neglectum was later recognized as distinct and treated as a distinct species from M. javanicum (see Ng 1990, 1997a; Ng & Choy 1990a, b; Wowor & Choy 2001; Cai & Ng 2002; Cai et al. 2004; Wowor et al. 2004). The detailed differences between these two species have been discussed at length by Wowor & Choy (2001) (see also Wowor et al. 2004) and in this study additional taxonomic information is provided.

The type material of *Palaemon javanicus* Heller, 1862, was examined. The study of this type material revealed that what almost every worker has been calling "*M. javanicum*" since De Man (1879) is actually an undescribed species. The real *M. javanicum* (Heller, 1862) is actually synonymous with *M. trompii* (De Man, 1898). At the same time, when studying the types of *Palaemon sundaicus* Heller, 1862, we discovered that