

## Freshwater prawns of the genus *Macrobrachium* Bate, 1868 (Crustacea, Decapoda, Palaemonidae) from Laos

YUKIO HANAMURA<sup>1,5</sup>, HIDEYUKI IMAI<sup>2</sup>, OULAYTHAM LASASIMMA<sup>3</sup>,  
PANY SOULIYAMATH<sup>4</sup> & SAYAKA ITO<sup>1</sup>

<sup>1</sup>Japan International Research Center for Agricultural Sciences (JIRCAS), Owashi 1–1, Tsukuba 305–8686, Japan

<sup>2</sup>Faculty of Science, University of the Ryukyus, Nishihara, Okinawa 903–0213, Japan

<sup>3</sup>Living Aquatic Resources Research Center (LARReC), National Agriculture and Forestry Research Institute, PO Box 9180, Vientiane, Lao PDR

<sup>4</sup>Na-Luang Fishery Station, Department of Livestock and Fisheries (DLF), Luang Prabang, Lao PDR

<sup>5</sup>Corresponding author. E-mail: hanamura@affrc.go.jp (Present address: National Research Institute of Fisheries Science, 2–12–4 Fuku-ura, Kanazawa-ku, Yokohama 236–8648, Japan)

### Table of contents

Abstract .....	1
Introduction .....	2
Material and methods .....	2
Taxonomic accounts .....	3
Genus <i>Macrobrachium</i> Bate, 1868 .....	3
<i>Macrobrachium amplimanus</i> Cai & Dai, 1999 .....	3
<i>Macrobrachium dienbienphuense</i> Dang & Nguyen, 1972 .....	6
<i>Macrobrachium eriocheirum</i> Dai, 1984 .....	10
<i>Macrobrachium lanchesteri</i> (De Man, 1911) .....	13
<i>Macrobrachium mieni</i> Dang, 1975 .....	14
<i>Macrobrachium niphanae</i> Shokita & Takeda, 1989 .....	16
<i>Macrobrachium nipponeuse</i> (De Haan, 1849) .....	18
<i>Macrobrachium rosenbergii</i> (De Man, 1879) .....	20
<i>Macrobrachium sintangense</i> (De Man, 1898) .....	20
<i>Macrobrachium sirindhorni</i> Naiyanetr, 2001 .....	23
<i>Macrobrachium superbum</i> (Heller, 1862) .....	26
<i>Macrobrachium thai</i> Cai, Naiyanetr & Ng, 2004 .....	27
<i>Macrobrachium yui</i> Holthuis, 1950 .....	29
<i>Macrobrachium</i> sp .....	32
Brief note on fresh water prawn biodiversity in Laos .....	34
Acknowledgements .....	34
References .....	35

### Abstract

Caridean prawns of the genus *Macrobrachium* Bate, 1868 (Crustacea, Decapoda, Palaemonidae) collected from the Laotian river system were studied. Fourteen species are recognised in this study, including one unidentified species. Their taxonomy is discussed and illustrated, of which 11 species are new records to the Laotian fauna. The identity of species of the “*M. dienbienphuense*” group has been remained obscure, and this study, which incorporated the 16S rRNA mitochondrial gene analysis, demonstrated that *M. amplimanus* Cai & Dai, 1999, *M. dienbienphuense* Dang & Nguyen, 1972, and *M. eriocheirum* Dai, 1984 are valid species. The *Macrobrachium* fauna in Laos exhibited closer affinity to that of the tropical Indo-China and Sunda elements (southern Yunnan Province, south-western China, northern Vietnam as well as north and north-eastern Thailand), implying that the Mekong River system contributes substantially to the regional freshwater prawn biodiversity.

**Key words:** shrimp, Caridea, taxonomy, biodiversity, Indo-China