Review of eastern Asian species of the mysid genus *Rhopalophthalmus* Illig, 1906 (Crustacea, Mysida) with descriptions of three new species

YUKIO HANAMURA¹,4, MASAAKI MURANO² & ALIAS MAN³

¹ Japan International Research Center for Agricultural Sciences (JIRCAS), Owashi 1-1, Tsukuba 305-8686, Japan
(Present address: National Research Institute of Fisheries Science (NRIFS), Fuka-ura 2-12-4, Kanazawa-ku, Yokohama 236-8648, Japan)
² Shimotakaido 3-32-36, Suginami-ku, Tokyo 168-0073, Japan
³ Fisheries Research Institute (FRI), Kampung Acheh, 32000 Sitiawan, Perak, Malaysia
⁴ Corresponding author. E-mail: hanamura@affrc.go.jp

Table of contents

Abstract .......................................................... 1
Introduction ..................................................... 1
Material and methods ......................................... 2
Taxonomic account ............................................. 2
Genus *Rhopalophthalmus* Illig, 1906 ....................... 2
  *Rhopalophthalmus egregius* Hansen, 1910 ............... 2
  *Rhopalophthalmus hastatus* Hanamura, Murano & Alias sp. nov. .................................................. 8
  *Rhopalophthalmus longipes* Ii, 1964 ...................... 14
  *Rhopalophthalmus armiger* Hanamura & Murano sp. nov. .................................................. 18
  *Rhopalophthalmus orientalis* O. Tattersall, 1957 ....... 23
  *Rhopalophthalmus philippinensis* Hanamura & Murano sp. nov. ............................................. 29
Key to species of *Rhopalophthalmus* ........................................ 35
Acknowledgements ............................................. 36
References ...................................................... 36

Abstract

Mysid crustaceans of the genus *Rhopalophthalmus* Illig, 1906 (Crustacea: Mysida) are distributed in the eastern Atlantic through the Indo-West Pacific. In this paper, species of *Rhopalophthalmus* recorded from eastern Asian waters are reviewed on the basis of materials collected from south-eastern Asia to Japanese water. The taxonomic analysis led to the recognition of six species from the region, including three new species. *Rhopalophthalmus phyllodus* Murano, 1988 was regarded as a junior synonym of *R. egregius* Hansen, 1910. The identity of *R. macropsis* Pillai, 1964 has been controversial, and in this study, we recognised it as valid. However, specimens with remarkably stout and few spinose setae on the telson, often reported as either *R. macropsis* or *R. longipes* Ii, 1964 were determined to be a new species, *R. armiger*. In addition, two new species, *R. hastatus* and *R. philippinensis*, were reported from south-eastern Asian waters. A key to the 25 currently recognised world species is provided.

Key words: mysid shrimp, *Rhopalophthalmus*, taxonomy, new species, eastern Asia

Introduction

The genus *Rhopalophthalmus*, a well-defined group of the mysid crustacean (Crustacea, Mysida), was established by Illig (1906) on the basis of *R. flagellipes* caught in the Congo Estuary, Africa. This species is remarkable among the known species of *Rhopalophthalmus* by having elongated eyes that extend beyond the anterior end of the antennular peduncle. Later, Hansen (1910) reported another species with moderately developed sub-pyriform eyes under