SUPPLEMENTAL INFORMATION ON THE TAXONOMY, SYNONYMY, AND DISTRIBUTION OF CAMBAROIDES JAPONICUS (DECAPODA: CAMBARIDAE)

BY

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ABSTRACT

The Japanese endangered freshwater crayfish Cambaroides japonicus (De Haan, 1841) is the only indigenous species in Japan. To supplement somewhat insufficient previous works based on dry specimens, C. japonicus is taxonomically discussed and illustrated on the basis of newly obtained specimens.

INTRODUCTION

Taxonomic information on C. japonicus has remained insufficient since its original description based on the dry specimens of the type series (Fitzpatrick, 1995) and, subsequently, some fine specific structures of this species were not presented (Kawai & Fitzpatrick, 2004). The present paper provides a brief description and illustrations of this species based on new specimens preserved in alcohol. Further information regarding some problems left unsolved in the taxonomy of C. japonicus are discussed, including synonymies, distribution, author name of the taxon, publication dates, and morphological variations.

Fine specific structures were examined in detail and illustrations were prepared from 9 freshly-obtained specimens, collected from Sapporo, Hokkaido, Japan. Measurements of crayfish structures were made to the nearest 0.1 mm with a digital precision caliper and a stereomicroscope, following the methods

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of Hobbs (1981). Abbreviations used in the text are: CBM, Natural History Museum and Institute, Chiba; POCL, post orbital carapace length; TCL, total carapace length; TL, total length.

**Cambaroides japonicus** (De Haan, 1841)

Japanese name: Zarigani or Nihon-zarigani
(figs. 1, 2)


*Potamobius* (Cambaroides) japonicus: Ortman, 1902: 286.

*Cambaroides japonicus neglectus* Skorikov, 1907: 116; Entz, 1912: 80.


Description. — Cephalothorax (fig. 1A) subcylindrical; thoracic section of carapace dorsoventrally depressed (maximum width 1.6 times its depth). Rostrum lacking spines or tubercles, tip extending distal margin of antennal scale and ultimate podomere of antennal peduncle, floor (dorsal surface) of rostrum convex, median carina absent, rostrum comprising 18.9% of TCL. Areola 1.9 times as long as wide, comprising 30.6% of TCL (36.7% of POCL). Suborbital ridge and post orbital ridge poorly defined dorsally, caudal end very weak without spines or tubercles.

Antennal scale (fig. 1E) 1.8 times as long as broad, widest at midlength, tip reaching midlength of ultimate podomere of antennular peduncle. Epistome (fig. 1C) with subovate cephalic lobe bearing cephalomedian projection, margin of lobe markedly elevated; fovea of epistome scarcely visible; zygome slightly curved.

Pleura (fig. 1B) at second to fifth abdominal somites rounded. Mesial ramus of uropoda with submedian dorsal ridge, terminating in moderate median spine, barely reaching dorsocaudal edge. Telson with single fixed, corneous spine at each lateral corner; lateral margin slightly tapering to rounded caudal margin, lacking telson notch.

Palm of chela (fig. 1D) with scattered large punctuations on dorsal, lateral, mesial, and ventral surfaces; palm inflated, 1.4 times wider than deep, length of mesial margin 32.3% of lateral margin of chela length; fixed finger with single longitudinal ridge on dorsal surface; opposable surface of fixed finger with single row of 12 tubercles. Length of dactylus 1.8 times length of mesial