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SIAMTHELPHUSA HOLTHUISI SPEC. NOV., A NEW SPECIES OF GECARCINUROID FRESHWATER CRAB (CRUSTACEA: DECAPODA: BRACHYURA) FROM THAILAND

by

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Naiyanetr, P. & P. K.L. Ng: *Siamthelphusa holthuisi* spec. nov., a new species of gecarcinuroid freshwater crab (Crustacea: Decapoda: Brachyura) from Thailand.

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Key Words: Crustacea; Decapoda; Brachyura; Gecarcinucoidea; *Siamthelphusa*; Thailand

A new species of freshwater crab, *Siamthelphusa holthuisi* spec. nov., is described from eastern Thailand. This species is closely allied to *Siamthelphusa improvisa* (Lanchester, 1901) from southern Thailand and northern Malaysia, but can be easily separated by its different male first pleopod structure.

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INTRODUCTION

The Indo-Chinese freshwater crab genus *Siamthelphusa* Bott, 1968, is represented by five species (Ng, 1988: 102), viz. *S. improvisa* (Lanchester, 1901) (type species), *S. paviei* (De Man, 1898), *S. beauvoisi* (Rathbun, 1902), *S. faxoni* (Rathbun, 1902), and *S. phimaiensis* Naiyanetr, 1978. Two other taxa, *Potamon* (*Parathelphusa*) *harmandi* Rathbun, 1902, and *Siamthelphusa improvisa tweediei* Bott, 1968, were synonymised with *S. beauvoisi* and *S. improvisa* respectively (Ng & Lim, 1986: 102; Ng & Ng, 1987: 10; Ng, 1988: 102). Present studies of the type material of *S. beauvoisi* and *S. phimaiensis* also show them to be synonyms, with the former having priority.

A new species from eastern Thailand, *S. holthuisi* spec. nov. is described here. The abbreviations G1 and G2 are used for the male first and second



Fig. 1. *Siamthelphusa holthuisi* spec. nov., ♂, holotype, 36.5 by 30.0 mm.

pleopods, respectively. Type specimens are deposited in the Rijksmuseum van Natuurlijke Historie, Leiden (RMNH); Chulalongkorn University Museum of Zoology, Bangkok, Thailand (CUMZ); and the Zoological Reference Collection, Department of Zoology, National University of Singapore (ZRC).

DESCRIPTIVE PART

***Siamthelphusa holthuisi* spec. nov.**

(figs. 1, 2)

Material. — Holotype, 1♂ (RMNH), carapace 36.5 by 30.0 mm, Lum Haui Khao Rakum, Amphoe Laem Ngob, Trat Province, eastern Thailand, 23.x.1988, leg. T. Boonyarat; Paratypes: 1♀ (RMNH), 1♂ (CUMZ), 1♂, 1♀ (ZRC), same data as holotype.

Diagnosis. — Carapace quadrilateral, surface smooth, glabrous, regions well defined, posterolateral region slightly convex; postorbital and epigastric cristae disjunct, very sharp, well developed; external orbital angle very sharp, distinct, epibranchial teeth acutely triangular, well developed, sharp. Ambulatory meri with distinct, sharp, subterminal spine. Outer surfaces of palm of larger chela with reticulate pattern on proximal half. G1 relatively stout, directed outwards, outer margin distinctly concave; tip blunt, with distinct opening, distinctly bent outwards. G2 with short flagellum, about one third length of basal segment.

Distribution. — Eastern Thailand.

Remarks. — *Siamthelphusa holthuisi* spec. nov. is closely allied to *S. improvisa* from northern Peninsular Malaysia, southern Thailand and nearby islands (Ng, 1988: 102). Both species have very sharp and well developed anterolateral teeth, and the outer surface of the larger chela in adult males has a reticulated pattern on the proximal half. Comparisons with males of *S. improvisa* of various sizes from southern Thailand, however, reveal important and consistent differences in their G1 structures. The G1 of *S. holthuisi* differs from that of *S. improvisa* in being comparatively more slender, the outer margin being distinctly concave (not almost straight), and the tip being more slender, and bent distinctly outwards (not straight and directed upwards). The specific characters of *S. holthuisi* are valid for all three males examined, including one small specimen. The female specimens agree with the male paratypes in all non-sexual characters.

The present specimens were collected from under small rocks and water plants in a moderately fast-flowing stream. Members of the genus *Siamthelphusa* are not known to excavate burrows, unlike crabs of the closely related

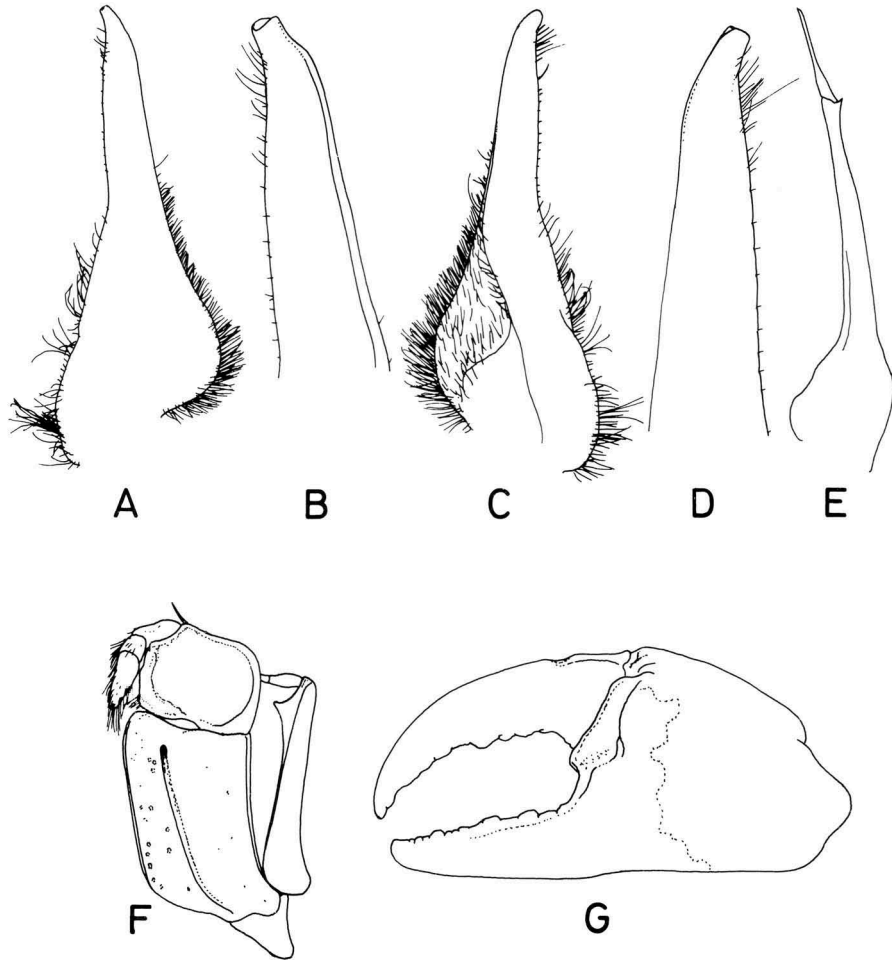


Fig. 2. *Siamthelphusa holthuisi* spec. nov., ♂, holotype, 36.5 by 30.0 mm. A, B: left G1, dorsal view; C, D: left G1 ventral view; E: G2; F: left third maxilliped; G: left chela.

genera *Parathelphusa* H. Milne-Edwards, 1853, and *Somanniathelphusa* Bott, 1968 (see Ng, 1988: 96, 105).

The colour of live specimens was a dark blackish-brown on most parts of the carapace and appendages. The reticulate pattern on the larger chela is apparent, but the orange colour, so distinct on *S. improvisa*, cannot be discerned. Since all the specimens were collected in the same locality, the darkness in colour may be due to the habitat (see Ng, 1988: 98). The normal colour of *S. holthuisi* is probably closer to that of *S. improvisa*, being light brown (Ng, 1988: 104).

Etymology. — *Siamthelphusa holthuisi* is named in honour of Professor Dr. L. B. Holthuis of the Rijksmuseum van Natuurlijke Museum, Leiden, in deep appreciation for his encouragement and help to the authors over the years.

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