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A new species of *Ranatra* from Thailand (Insecta: Heteroptera: Nepidae)

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Abstract

Ranatra katsara sp.n. from Northeast Thailand is described and compared with related species.

Key words: Nepidae, *Ranatra*, new species, Thailand.

Zusammenfassung

Ranatra katsara sp.n. aus Nordost-Thailand, wird neu beschrieben und mit verwandten Arten verglichen.

Introduction

During a survey of water quality of the Mun River in NE Thailand (HANBOONSONG & al. 1996) an undescribed species of *Ranatra* was collected. In order to include this species in the keys to Thai water bugs, which are not supposed to contain descriptions of new species it is described here.

Measurements are in millimetres, the anterior and posterior lobes of the pronotum are measured along median longitudinal line and separated by the transverse groove which is interrupted medially. The distal and proximal parts of the fore femur are separated by a line through the apex of the larger central tooth perpendicular on the longitudinal axis of the femur. The prothoracic pit is located ventrally near posterior margin.

Thanks are due to Dr. H. Zettel (NHMW) for bringing this interesting species to my attention.

Depositories: KKU - Entomological Collections of Khon Kaen University, Khon Kaen, Thailand; NCTN - Nieser collections, Tiel, The Netherlands; NHMW - Naturhistorisches Museum, Wien, Austria.

Ranatra katsara sp.n. (Figs. 1 - 8)

Ranatra sp.: HANBOONSONG & al. 1906: 21.

Holotype (♂): Thailand: Ubon Ratchanthani Province, Mun River, Kansapung Piboon, 7 July 1996, leg. Y. Hanboonsoong (NHMW); **paratype** (1 ♂): same data as holotype (NCTN); **allotype** (♀): Mun River, Tan Soom, 16 March 1996, leg. Y. Hanboonsong (KKU).

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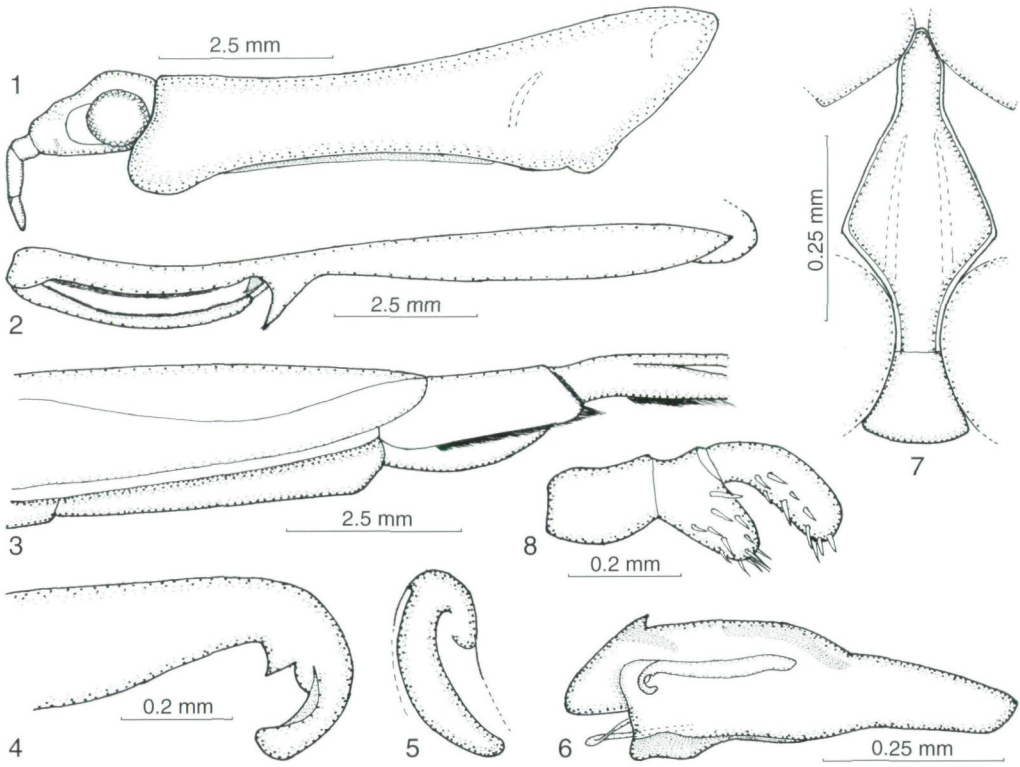

Figs. 1 - 8: *Ranatra katsara* sp.n.: 1, 2, 4 - 7: holotype, ♂, 3: allotype, ♀, 8: paratype, ♂: (1) head and pronotum, (2) fore femur, tibia and tarsus, (3) apex of abdomen, (4 - 5) apex of paramere in (4) lateral and (5) caudal view, (6) genital capsule, (7) metasternum, (8) antenna.

Description:

Dimensions (the holotype is the larger male). Length: 27.6 - 30.7 (♂♂), 32.6 (♀); respiratory siphon: 27.6 - 33.5 (♂♂), 33.3 (♀); width of head: 2.75 - 3.00 (♂♂), 3.20 (♀); width of an eye: 0.87 - 0.97 (♂♂), 1.02 (♀); interocular space: 1.00 - 1.03 (♂♂), 1.16 (♀); pronotum anterior width: 1.86 - 2.05 (♂♂), 2.25 (♀); humeral width: 2.3 - 2.9 (♂♂), 3.4 (♀); along median line length of anterior lobe: 4.3 - 4.5 (♂♂), 5.0 (♀); length of posterior lobe: 1.9 - 2.6 (♂♂), 2.8 (♀) total length 6.2 - 7.1 (♂♂), 7.8 (♀); fore leg, length of coxa: 7.7 - 8.5 (♂♂), 9.0 (♀); femur length of distal part: 4.1 - 4.5 (♂♂), 4.6 (♀); length of proximal part: 7.0 - 7.8 (♂♂), 8.7 (♀); middle leg, length of femur: 17.8 - 19.8 (♂♂), 20.0 (♀); length of tibia: 18.8 - 20.7 (♂♂), 22.3 (♀); hind leg, length of femur: 17.3 - 20.0 (♂♂), 19.4 (♀); length of tibia: 19.0 - 21.7 (♂♂), 22.7 (♀).

Clypeus higher than lorum, clypeoloral sulcus shallow, lorum not clearly separated from inner margin of eyes. Vertex smoothly to distinctly raised between eyes (Fig. 1), without tubercle. Eye narrower than interocular space. Antenna as in Fig. 8. Anterior margin of pronotum ("collar") raised, anterior lobe of pronotum nearly twice as long as posterior lobe, sublateral swellings caudally on pronotum indistinct (Fig. 1). In the para-

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type the anterior lobe is longer compared to the posterior lobe and its pronotal measurements related to the rest of the body smaller relative to the other specimens. Apparently the holo- and allotype are specimens with developed flight muscles the ♂ paratype with reduced flight muscles, but this has not been verified by opening the thorax. Scutellum twice as long as broad, dorsal surface smooth with a pair of faint depressions caudally. Prosternum with a distinct median keel broadening caudally, ending in the prothoracic pit. Mesosternum rather flat, caudally with a fovea, anterior nodules vestigial. Metasternum elevated into a broad ventral keel in posterior part (not in paratype), posteriorly rounded (Fig. 7). Space between hind coxae over twice the distance between middle coxae (0.25/0.1). Membrane reaching just beyond posterior margin of sixth tergite (Fig. 3).

Legs unicolorous in males, annulated light and dark brown in the female specimen. Fore femur bidentate, much (nearly 3/4) longer than pronotum, teeth approximately in apical third. Width of fore femur measured from dorsal margin to apex of larger tooth clearly greater than widest part of femur proximally (1.35/1.0; Fig. 2). Hind femur just reaching beyond apex of abdomen.

Male operculum in ventral view elongate with an indication of a median keel just reaching the base of respiratory siphon, in lateral view boat-shaped with a small slightly upturned knob at its tip. Genital capsule (Fig. 6): posterior diverticulum long and membranaceous; paramere with a distinct subapical tooth (Fig. 4), in caudal view curved inward (Fig. 5).

Female operculum just reaching apex of abdomen (Fig. 3).

Etymology: katsaros, Greek adjective meaning curled, referring to the inwardly curled apex of paramere.

Comparative notes: The bidentate profemur with one very large profemoral tooth associates this species with *R. malayana* LUNDBLAD, 1933, known from Sulawesi. *Ranatra katsara* sp.n. has the distance between hind coxae twice as large as between middle coxae, in *R. malayana* the distance between middle coxae is larger than between hind coxae. In addition, the apex of paramere of *R. malayana* is curved in one plane, not inward.

Discussion

So far (LANSBURY 1972) *R. malayana* formed a species group of its own. *Ranatra katsara* sp.n. and *R. malayana* may be combined in a species group which would have the following group characteristics: siphon long, at least about as long as body; width of eye less than interocular space; clypeus higher than lorum which is poorly separated from inner margin of eye; scutellum twice as long as its basal width, with a pair of faint impressions caudally; fore coxa slightly longer than median length of pronotum, fore femur bidentate with one very large tooth, its length 1.5 or more times as long as prothorax; middle and hind tibiae subequal, slightly longer than the respective femora; membrane surpassing the caudal margin of sixth abdominal tergite; posterior diverticulum long and membranaceous; female operculum not surpassing the apex of abdomen. Of these the long bidentate fore femur with one large tooth is diagnostic.

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References

HANBOONSONG, Y., MUNGKANDEE, P. & ZETTEL, H. 1996: A preliminary list of aquatic and semiaquatic Heteroptera (Nepomorpha, Gerromorpha) from the Maekhong-Chi-Mun rivers area, Thailand. – Amemboa 1: 19-24.

LANSBURY, I. 1972: A review of the Oriental species of *Ranatra* FABRICIUS (Hemiptera - Heteroptera: Nepidae). – Transactions of the Royal Entomological Society of London 124: 287-341.

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