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## ***Ranatra libera* sp. n. (Heteroptera: Nepidae) from Burma**

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**A b s t r a c t :** *Ranatra libera* sp. n. from Burma is described as new. It belongs to the *R. biroi* species group and is closely related with *R. longipes* STAL 1861.

**Key words :** Heteroptera, Nepidae, *Ranatra*, new species, *Ranatra biroi* species group, *Ranatra longipes*, Burma.

### **Introduction**

Most of the aquatic and semiaquatic Heteroptera collected by my dear colleague Harald Schillhammer (Natural History Museum Vienna) in Burma are deposited in the Smithsonian Institution, Washington. However, a small sample from the Bago Division, which was unfortunately infected by fungi, is at the author's disposal and will be kept in the Natural History Museum Vienna (NHMW). This sampling contains a small series of a new species of *Ranatra* FABRICIUS 1790, which will be described below.

The Oriental *Ranatra* species were revised by LANSBURY (1972). Since then, only four species and one subspecies were described by NIESER (1996, 1997) and NIESER & CHEN (1991, 1996). A check-list of the Southeast Asian species was presented by NIESER & POLHEMUS (1998).

### ***Ranatra libera* sp. n. (Figs. 1-8)**

**Type material :** holotype (♂): Burma, Bago Division, 33 km W Oktwin, Bago Yoma, Sein Yai Forest Camp, Selnyay River, 170 m, in shallow, sandy and muddy stream (ca. 10-15 m wide) between roots at steep banks, 29.10.1998, leg. H. Schillhammer (36) (NHMW); paratypes: 3 ♀, same locality data as holotype (NHMW).

**Description :** body length of ♂ 26 mm, of ♀ ♀ 27-28 mm; length of respiratory siphon of ♂ 27 mm, of ♀ ♀ 26-27 mm; head width of ♂ 2.6 mm, of ♀ ♀ 2.7-2.8 mm; humeral width of ♂ 2.5 mm, of ♀ ♀ 2.6-2.8 mm; median pronotum length of ♂ 6.5 mm, of ♀ ♀ 7.0-7.1 mm; metafemur length of ♂ 14.6 mm, of ♀ ♀ 14.9-16.3 mm.

Colour greyish ochraceous, anterior part of pronotum darker than remaining body; legs and distal two thirds of siphon yellowish brown, legs with weak annulation.

Head with vertex obtusely elevated, without tubercle (Fig. 1); clypeolateral sulcus shallow, but distinct; eyes large, maximal eye width greater than interocular space (1.2 times) (Fig. 3); antenna as in Figure 7.

Pronotum weakly punctate, with anterior lobe medially 1.9 times as long as posterior

lobe; humeral width 1.5 times greater than anterior width; posterior lobe distinctly elevated (Fig. 1); prosternum anteriorly with indistinct median carina, posteriorly with a pair of longitudinal grooves; mesoscutellum 2.2 times longer than wide; mesosternum between mesocoxae narrow, smaller than distance of metacoxae, 0.3 times width of postero-medial metasternal lobe, medially slightly furrowed; metasternum posteriorly not emarginate, but produced caudad (Fig. 6); hemelytra reaching extreme base of tergite 7 (Fig. 5); profemur slender, bidentate, with teeth situated distinctly distally of middle of length, width at longer tooth smaller than at base (Fig. 2); protibia and protarsus also very slender; meso- and metafemur subequal in length; mesotibia and metatibia about 10 % longer than the femora, both ventrally with long hairs; metafemur reaching ( $\varnothing \varnothing$ ) or slightly surpassing ( $\delta$ ) the tip of the abdomen.

$\delta$ : subgenital plate narrowly lanceolate, distinctly carinate; genital capsule as in Figure 4; paramere broadest in distal third, subapically without tooth, but with weak dilatation, with distal process at the base strongly curved, then straight, and apex minutely dilated, recurved, and situated very close to the main piece (Fig. 8).

$\varnothing$ : subgenital plate very narrow, highly keeled, in lateral view curved and acute, reaching posterior margin of tergite 7 (Fig. 5).

**Discussion and comparative notes:** *Ranatra libera* sp. n. belongs to the *R. biroi* species group of LANSBURY (1972). Within this group, the relatively large eyes, the distance of mesocoxae, and the considerable body length set *R. libera* sp. n. close to *R. longipes* STÅL 1861. *Ranatra longipes* was originally described from Java, and later-on reported from Borneo (LANSBURY 1972). LANSBURY (1972) described two new subspecies of *R. longipes*, *R. l. thai* from Thailand and *R. l. celebensis* from Sulawesi. These three subspecies differ mainly in the distal, curved, finger-like part of the paramere which is apically broadly expanded (*longipes*), slightly dilated (*celebensis*), or slender (*thai*). As these characters are relatively constant in large series and all the three populations are isolated, a specific status of these taxa, especially of *R. l. thai*, should be considered. Based on the shape of the parameres, *R. longipes longipes* and *R. longipes celebensis* seem to be more similar to other species (*R. natunaensis* LANSBURY 1972 from Natuna Island and *R. biroi* LUNDBLAD 1933 from New Guinea) than to *R. l. thai*. The species and subspecies concept of LANSBURY (1972) is based on the presence or absence of external characters, which enable the species identification of females, too.

*Ranatra libera* sp. n. resembles large specimens of *R. longipes*. Externally there are no big differences. However, the respiratory siphon of *R. longipes* is distinctly (10-20 %) shorter than the body length, but subequal in length in *R. libera* sp. n. (slightly longer in  $\delta$ , slightly shorter in  $\varnothing \varnothing$ ); and the clypeolateral sulcus is more distinct in *R. libera* sp. n. The paramere of *R. libera* sp. n. is very diagnostic, differing from all described *Ranatra* species in the recurved distal process, which is closely appressed to the main piece (Fig. 8). *Ranatra longipes thai* was recently recorded from Vietnam and West Malaysia, and even from India by NIESER & POLHEMUS (1998). The occurrence of *R. libera* sp. n. within the distribution area of this subspecies justifies the specific status of the new taxon.

**Etymology:** *libera* (Latin, adj.) meaning "free". This species is dedicated to the idea that science, particularly entomology, should be independent of economic or national interests, of personal or institutional competitions, and of international lobbyisms.

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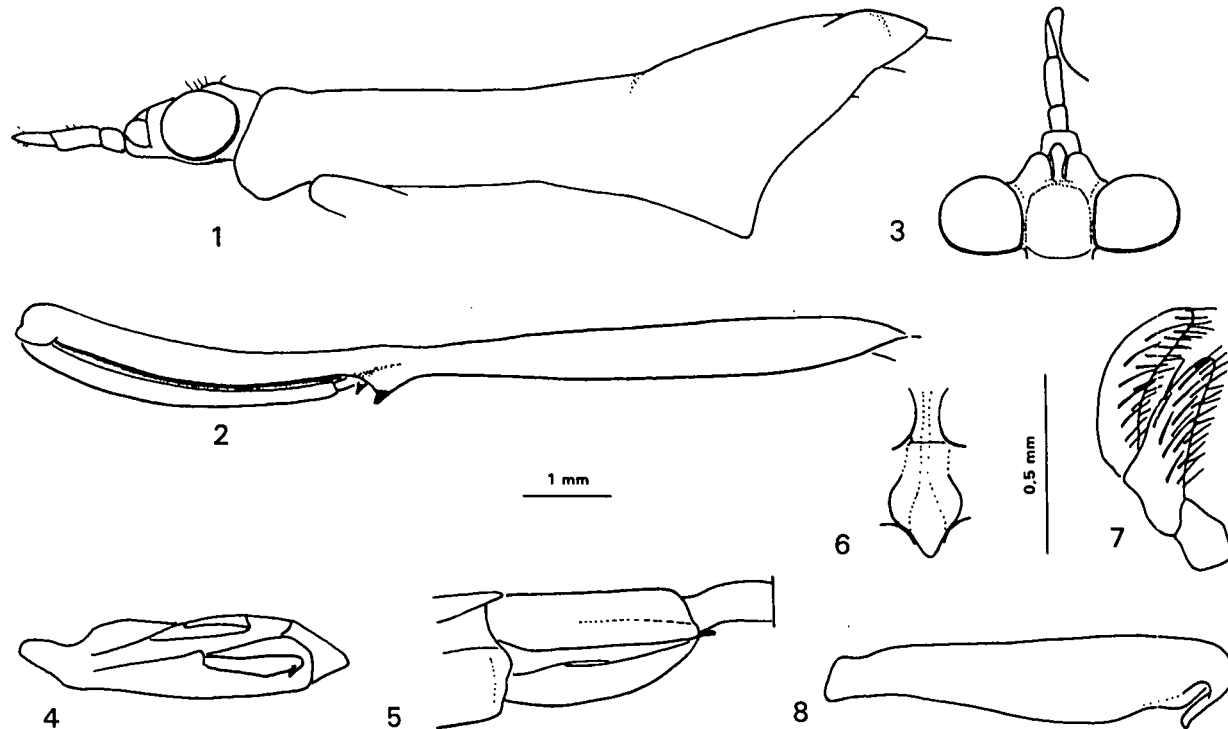
### Zusammenfassung

*Ranatra libera* sp. n. aus Burma wird neu beschrieben. Die Art gehört in die *R. biroi* Artengruppe und ist mit *R. longipes* STÅL 1861 nahe verwandt.

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**Figs. 1-8:** *Ranatra libera* sp. n. (1-4, 6, 8: holotype, ♂; 5, 7: paratype, ♀): 1 – head and prothorax, lateral view; 2 – profemur and protibia; 3 – head, dorsal view; 4 – male genital capsule; 5 – female terminalia (ovipositor shortened); 6 – meso- and metasternum; 7 – antenna; 8 – left paramere, lateral view.

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