

Perittopus ceylanicus sp.n., first record of the subfamily Perittopinae (Insecta: Heteroptera: Veliidae) from Sri Lanka

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Abstract

Perittopus ceylanicus sp.n. from Sri Lanka is described. It is the first record of the subfamily Perittopinae from this island. *Perittopus ceylanicus* sp.n. differs from all other species of the genus in a distinct size dimorphism of the sexes. The male is smaller than the female and has strongly incrassate profemora. *Perittopus ceylanicus* sp.n. is more closely related with the Southeast Asian species of *Perittopus* than with those from South India.

Key words: Heteroptera, Veliidae, Perittopinae, *Perittopus*, new species, Sri Lanka.

Zusammenfassung

Perittopus ceylanicus sp.n. aus Sri Lanka wird beschrieben. Es handelt sich um den ersten Nachweis der Unterfamilie Perittopinae von dieser Insel. *Perittopus ceylanicus* sp.n. unterscheidet sich von allen anderen Arten der Gattung durch einen deutlichen Größendimorphismus der Geschlechter. Das Männchen ist kleiner als das Weibchen und hat stark verdickte Vorderschenkel. *Perittopus ceylanicus* sp.n. ist näher mit den südostasiatischen *Perittopus*-Arten verwandt als mit jenen des benachbarten südindischen Festlandes.

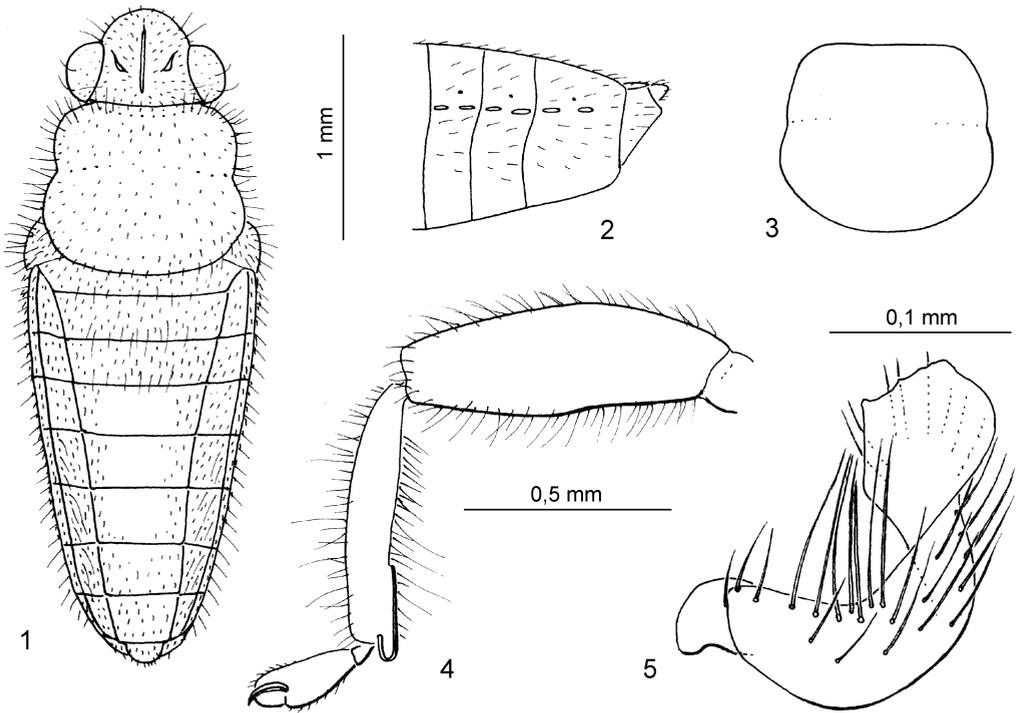
Introduction

Recently, the seven species of *Perittopus* FIEBER, 1861, which are known from Malesia (from the Malay Peninsula to Bali and Borneo) have been revised by the author (ZETTEL 2001). In addition, three species are described from India (PAIVA 1919, LUNDBLAD 1933), and numerous undescribed species, mostly from Indochina and South India, are known from collections. All these species can be arranged in two distinct phylogenetic entities, one in South India and one in a large area reaching from Northeast India to the western Malay Archipelago (Sundaland). However, this clear zoogeographic separation is now invalidated by the occurrence of one species in Sri Lanka, which clearly belongs to the eastern species group. Terminology and methods follow ZETTEL (2001).

Perittopus ceylanicus sp.n. (Figs. 1 - 5)

Holotype (apterous female), **allotype** (apterous male) and **paratypes** (7 apterous females, 13 apterous males): "SRI LANKA: Uva Province\ Tangamalai Nat. Res.\ 3 km W Haputale 1500m\ 28.12.2000" (all in Natural History Museum Vienna). **paratypes**: 3 apterous males, 1 apterous female "Ceylon, Centr.Prov.\ Hakgala\ 5 mls SE Nuwara-Ellya\ 3.III.62.Loc.114:1", "Stream", "Lund University\ Ceylon Expedition 1962\ Brinck-Andersson-\ Cederholm" (Museum Lund); 1 apterous female "Ceylon, N.Prov.\ Glant's Tank\ 10 mls SE Mannar\ 15.II.62. Loc.83", "At shore", "Lund University\ Ceylon Expedition 1962\ Brinck-Andersson-\ Cederholm" (Museum Lund).

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Figs. 1 - 5: *Perittopus ceylanicus* sp.n. (1 - 2: apterous female, 3 - 5: apterous male): (1) habitus, dorsal; antenna and legs omitted; (2) end of abdomen, lateral; (3) pronotum, dorsal; (4) foreleg; (5) left paramere; pilosity partly or completely omitted.

Description: Apterous female: Size of holotype: body length 3.3 mm (in paratypes 3.3 - 3.7 mm); pronotal width 1.03 mm; length of second antennal segment 0.33 mm; length of metatibia 1.44 mm. Body relatively slender (Fig. 1).

Colour of head and pronotum orange, of abdomen more dull, brownish; venter yellowish to orange; antenna black, base of first antennomere brownish; legs yellow, apices of femora, meso- and metatibia, and all tarsi blackish.

Structural characteristics: Hind margin of head without blackish spiculae; relative lengths of antennal segments as 1.1 : 1 : 1.0 : 1.3; pronotum relatively small and short, posteromedially reaching base of tergite 1, 1.16 times as wide as long, in anterior two fifths of length with weak lateral constriction, anteriorly and laterally with long blackish bristles, with posterior part (pronotal lobe) hardly wider than anterior one (Fig. 1); prosternum without blackish spiculae; relative lengths of leg segments (in percentage of metatibia length): profemur 61, protibia 55, protarsus 3+22; mesofemur 75, mesotibia 85, mesotarsus 21+27+26; metafemur 75, metatibia 100, metatarsus 6+18+25; connexiva moderately convergent, their smallest distance at apex of segment 7 approximately 8 times width of one connexivum (Fig. 1); in lateral view connexiva without long, posterodorsad directed hairs, posterior corner of segment 7 angulate (Fig. 2); tergites with short, yellowish brown pilosity, discs of tergites 4 - 6 bare; tergites 1 and 2 additionally

with some longer hairs; laterotergites 5 - 7, laterosternites and sternites with some posteriad directed, long blackish hairs; gonocoxa widely exposed, with short pilosity; proctiger very small.

Apterous male: Size of allotype: body length 3.0 mm (2.7 - 2.9 mm in other paratypes); pronotal width 1.08 mm; length of second antennal segment 0.30 mm; length of metatibia 1.36 mm; colour as in female.

Structural characteristics: Pronotum slightly stouter than in female, with hardly visible constriction (Fig. 3); profemur strongly incrassate, 2.9 times as long as broad; length of grasping comb 0.36 times length of protibia (Fig. 4); all tergites with erect blackish hairs; segment 7 without black spiculae; paramere with slender basal part and helicoid, short distal part, apically truncate (apex broken?; see Discussion) (Fig. 5).

Macropterous morphs unknown.

Discussion: The helicoid paramere of the male (Fig. 5) and the small proctiger of the female (Fig. 2) place *P. ceylanicus* sp.n. in a group of species, which is otherwise distributed from Northeast India to Borneo and Bali, and clearly separate this species from the *Perittopus* fauna of South India. From all Southeast Asian species *P. ceylanicus* sp.n. can be distinguished by the short pronotal lobe of the apterous morph (Figs. 1, 3), the absence of black spiculae on head and prosternum, the size of the male, which is constantly smaller than the female (length of largest male 91 % of length of smallest female; size of sexes overlapping in other species), the strongly enlarged profemur of the male (Fig. 4), and the combination of characteristics of the abdomen of the female (Figs. 1, 2).

The truncate, irregularly dentate apex of the paramere appears to be broken (Fig. 5), but this structure has been found in fifteen males, so that an artificial breaking can be excluded.

Distribution: Sri Lanka: Uva Province, Central Province, Northern Province.

Acknowledgements

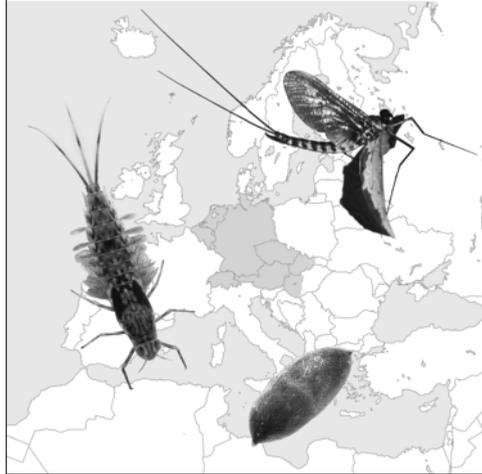
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**Die Eintagsfliegen Zentraleuropas
(Insecta: Ephemeroptera):
Bestimmung und kologie**

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**Die Eintagsfliegen Zentraleuropas (Insecta: Ephemeroptera):
Bestimmung und Ökologie**

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