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Review of genus *Nicephora* Bolívar (Orthoptera, Tettigoniidae, Meconematinae)

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Abstract

This article presents a revision on all species of genus *Nicephora* Bolívar, 1900, describes 1 new species distribute in China ally to this genus. A key to species of the genus is given.

Key words: Orthoptera, Tettigoniidae, Meconematinae, *Nicephora*, new species

Introduction

The genus *Nicephora* was proposed by Bolívar (1900) for 4 species distributed in India on the basis of the denticular process of the male cerci. Subsequently, 2 Sri Lanka species were described by Carl (1921) and Henry (1932). Gorochov (1993) proposed subgenus *Dianicephora* based on the number of sclerites in male genitalia for *Nicephora mirabilis* and described the female for the first time, In addition he proposed another subgenus *Eunicephora* with 1 species distributed in Vietnam in 1998. Presently, there are 7 species in *Nicephora*, but no mention Gorochov was made in 1993 and 1998 of the 2 Sri Lanka species even though they show considerable differences to the Indian species with respect to the male cerci and subgenital plate. It seems that those species belong to another genus. In this paper, we describe 1 new species *Nicephora dianxiensis* sp. nov. from China, review the genus and provide a new key to all species. Materials of the new species are deposited in the SEM (Shanghai Entomological Museum, CAS.)

In figures of genitalia, sclerotized parts are bold.

Nicephora Bolívar, 1900

Nicephora Bolívar, 1900. *Ann. Soc. ent. Fr.*, 68: 770; Kirby, 1906. *A Synonymic Catalogue of Orthoptera*, 2: 374; Caudell, 1912. *Genera Insectorum*, 138: 2, 3–4; Karny, 1924. *Treubia*, 5 (1–3): 108; Gorochov, 1993. *Zoosystematica Rossica*, 2 (1): 83; Gorochov, 1998. *Zoosystematica Rossica*, 7 (1): 115.

Body small. Brachypterous (tegmina longer than pronotum). Fastigium of vertex short, obtuse and tuberculate, frons transverse. Final segment of maxillary palpi longer than the preceding one. Pronotum without humeral sinus; auditory foramina of thorax entirely exposed. Tegmina with stridulating organ in male, hind wing reduced. Auditory foramina of fore tibiae open on both sides, hind tibiae with 2 pairs of apical spurs. Male 10th abdominal tergite with middle more or less notched at the hind margin, various; epiproct well developed; cerci elongate, with numerous processes; subgenital plate with small styli; genitalia with sclerites hidden by membranous folds. Female with various subgenital plate, ovipositor is shorter than hind femora, ventral valve with small apical hook.

Description. Male. Pronotum long and rather low, hind lobe elongate. Tegmina reaches base of cerci, strongly narrowing to round apex, stridulatory apparatus entirely conceal beneath the hind margin of pronotum. Spines of the fore and middle tibiae long, fore tibiae with spines armed 4, 4 (1, 1). Male 10th abdominal simple, without lobes; cerci upper medial process not bifurcated, lower denticulate process short, distal part long with curved apex. Genitalia with an apical and a pair of lateral sclerites. Subgenital plate long and narrow, hind margin little notched, styli short.

Female unknown.

Coloration. Brownish, antennae with numerous brownish spots. Apical part of hind femora and tibiae darkened, fore and middle tibiae spines dark. Abdominal tergites darkish, cerci very dark, abdominal sternites and subgenital plate greenish.

Measurement. (length in mm) Body: ♂8.5–9.5; pronotum: ♂5.2–5.6; tegmina: ♂5.5–6.0; hind femora: ♂10.5–11.0.

Distribution. Vietnam (Tam Dao).

Nicephora dianxiensis Wang & Liu sp. nov.

(Figs. 33–39)

Materials. Holotype ♂, paratypes: 3♂♂, 1♀, China: Yunnan, Lushui country, Yaojiaping, 2700m, 2010.VI.21–23, leg. BI-Wenxuan.

Description. Male. Fastigium of vertex conical, with weak dorsal groove. Pronotum long and low, metazona very long, hind margin little point. Tegmina almost as long as pronotum, reaches base of 7th abdominal tergite, apex pointed, venation clear. Fore tibiae with spines armed 3, 3 (1, 1), mid tibiae with 3 inner and 3 outer spines, hind tibiae each margin above with 20–22 dorsal teeth and 2 pairs of apical spurs. 10th abdominal without lobes, hind margin little sinuate; cerci with small pointed upper medial process, lower process foliaceous, down curved, apex with 2 teeth (Figs. 34, 36–38); middle part incurved, apical part straight and apex rounded. Genitalia with a pair of upper protruding and lower rounded sclerites (Fig. 37). Subgenital plate is longer than wide, apical part of each side in front of styli with a weak carina, hind margin notched, styli short (Fig. 36).

Female. Metazona shorter, more pointed. Tegmina short, interlaced. Subgenital plate almost triangular, with axis grooved deeply, hind margin pointed (Fig. 39). Ovipositor with very weak apical hook.

Coloration. Pale brownish, antennae with darkish rings. Base of each tibiae with a darkened spot. Dorsal of abdominal with a longitudinal darkish band.

Measurement. (length in mm) Body: ♂8.5–9.5, ♀7.0; pronotum: ♂4.4–4.6, ♀4.0; tegmina: ♂4.0–4.2, ♀3.5; hind femora: ♂6.9–7.8, ♀8.5; Ovipositor 8.2.

Discussion. This new species without densely denticulate apex in male cerci, integrated features are very close to *Eunicephora* in type of male cerci and number of genital sclerites; it distinguishes with the preceding species by processes of male cerci and the shape of sclerites in genitalia.

Distribution. China (Yunnan)

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