



## A new species of the genus *Nemoura* (Plecoptera: Nemouridae) from Xinjiang, China

WANG ZHI-JIE & DU YU-ZHOU<sup>1</sup>

Institute of Applied Entomology, Yangzhou University, Yangzhou, Jiangsu 225009, China

<sup>1</sup>Correspondence author. E-mail: yzdu@yzu.edu.cn

The genus *Nemoura* Latreille is distributed widely in the Holarctic and Oriental regions (Baumann 1975, Aubert 1967, Zwick & Sivec 1980). A total of 31 species from China have been described by Klapálek (1907, 1912), Okamoto (1922), Chu (1928), Uéno (1941), Wu (1938, 1949, 1962, 1973), Shimizu (1997), Sicec (1981), Zhu & Yang (2003), Wang & Du (2006), Li & Yang (2006, 2007), and Du et al. (2008). Currently, only one species of nemourid, *Amphinemura tricinctusidens*, Wang & Zhu, 2007 is known from Xinjiang province, China (Wang et al. 2007). A second species from Xinjiang, *Nemoura bidentata*, is described as new to science in this paper. Types of the new species are placed in the Insect Collection of Yangzhou University and are stored in 75% ethanol. Morphological terminology is that of Baumann (1975).

### *Nemoura bidentata* Wang & Du, sp. nov.

(Figs. 1–6)

**Diagnosis.** This species is characterized by the presence of paired, anterior facing projections of tergum 10, by a conical epiproct with sweeping semicircular ventral sclerites that meet to form a blunt tip apically, and by the outer lobe of the paraproct forming a dorsolaterally curved tip between the cerci and the epiproct.

**Adult habitus.** Head brown, wider than pronotum; antennae brown, pronotum transverse oblong, slightly brown, with dark rugosities on the surface; wings hyaline, veins brown; legs brown.

**Male.** Forewing length 5.5–6.1 mm (n=2), hind wing length 4.7–5.2 mm. Tergum 9 mostly membranous with several spinules near posterior margin. Tergum 10 with a pair of projections near posterior margin, each armed with 2 or 3 small apical spines, large membranous areas present, one beneath the epiproct and others sublaterally. Hypoproct short, wide, terminating in a bifurcate tip, a short (length 2X width), blunt, swollen vesicle present. Paraproct inner lobes sclerotized, its two projections fusing to a sclerous bar medially; outer lobe slightly sclerotized, broad basally with an acute apicomedial projection curved dorsolaterally between cercus and epiproct, its outer margin darkly sclerotized. Epiproct coniform in dorsal view, dorsal sclerite broad basally, extending dorsolaterally, completely covering lateral aspects of epiproct and part of ventral aspect, most darkly sclerotized areas located basally and near mid-dorsolateral margin immediately ahead of basal cushion. Ventral sclerite dark, broad basally, and bearing a pair of parallel ventral ridges, each armed with 3 spines medially, the ridges converging medially and then diverging dorsally to form a slender, bluntly rounded tip, the base of which is delimited by a semicircular groove. Cerci sclerotized at outer margin, with a large, a darkly sclerotized spine curving outward at apex.

**Female.** Unknown.

**Type material.** Holotype ♂ from China, Dongshan area (43.5217 N; 87.3844 E) of Urumchi, Xinjiang province, 18 June 2006, Leg. ZHANG Jian-Hua, et al. Paratypes, ♂, same data as the holotype.

**Etymology.** The name refers to the pair of spine bearing projections of tergum 10. The Latin “*dentata*” meaning toothed.

**Remarks.** The new species appears similar to *N. nankinensis* Wu, 1926 in the shape of the epiproct and cerci, but is distinguished by the shape of the paraprocts and projections of tergum 10. The new species lacks spines on the outer lobe of the paraproct, while in *N. nankinensis*, a large hamulus protrudes from the outer margin. Also, the new species has a pair of projections from the posterior margin of tergum 10; these projections are absent in *N. nankinensis*.