Chen, Zhi-Teng and Yu-Zhou Du. 2017. Supplementary illustrations for two *Nemoura* (Plecoptera: Nemouridae) species. *Illiesia*, 13(10):98-103. https://doi.org/10.25031/2017/13.10

http://zoobank.org/ urn:lsid:zoobank.org:pub:00287636-CF1A-4E80-947C-DC749079DE81

SUPPLEMENTARY ILLUSTRATIONS FOR TWO *NEMOURA* (PLECOPTERA: NEMOURIDAE) SPECIES

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ABSTRACT

Supplementary images for two Chinese *Nemoura* (Plecoptera: Nemouridae) species, *N. fusiformis* Chen & Du, 2017 and *N. nankinensis* Wu, 1926 are provided to allow for ease of future identifications. Corrected coordinates for the holotype and paratype locality are provided for *N. fusiformis*.

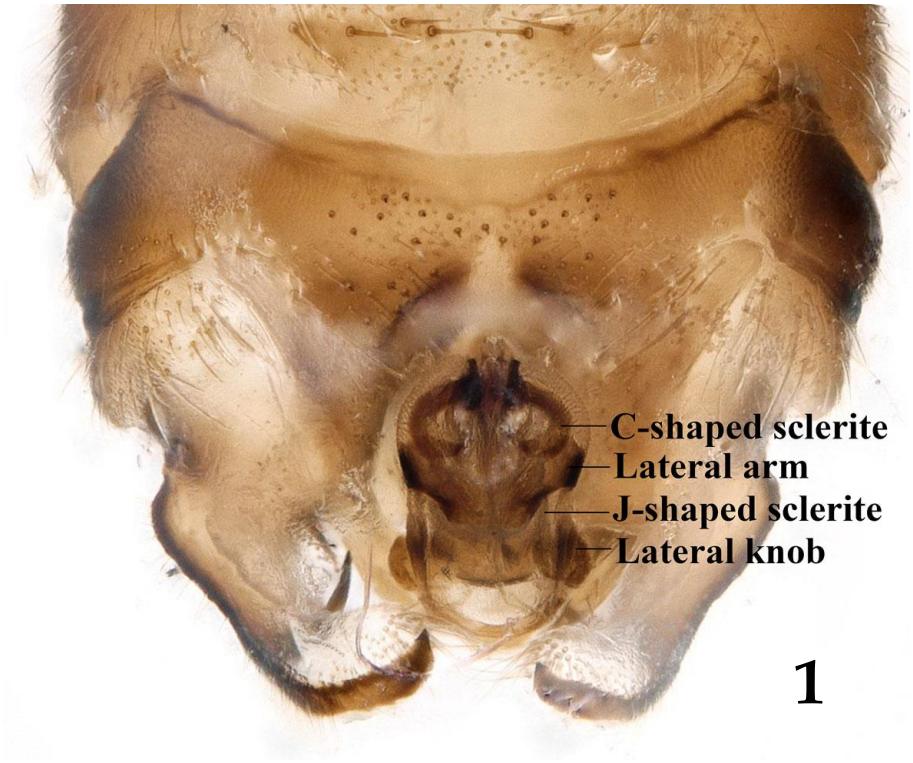
Keywords: Plecoptera, Nemouridae, *Nemoura*, supplementary illustrations, China

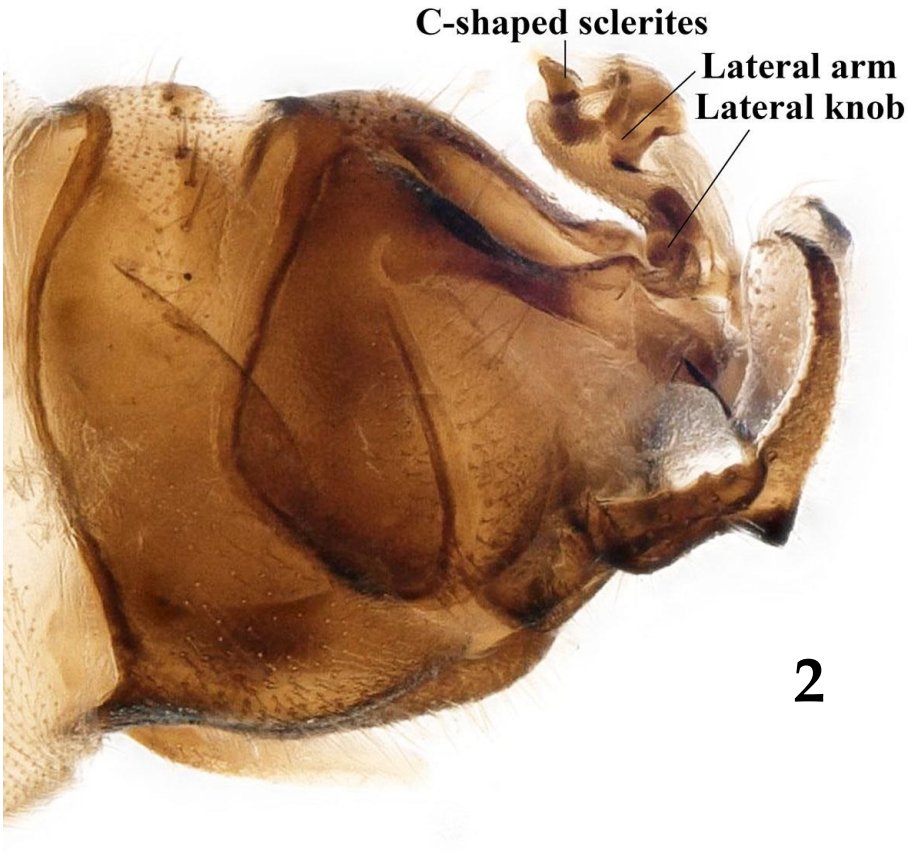
INTRODUCTION

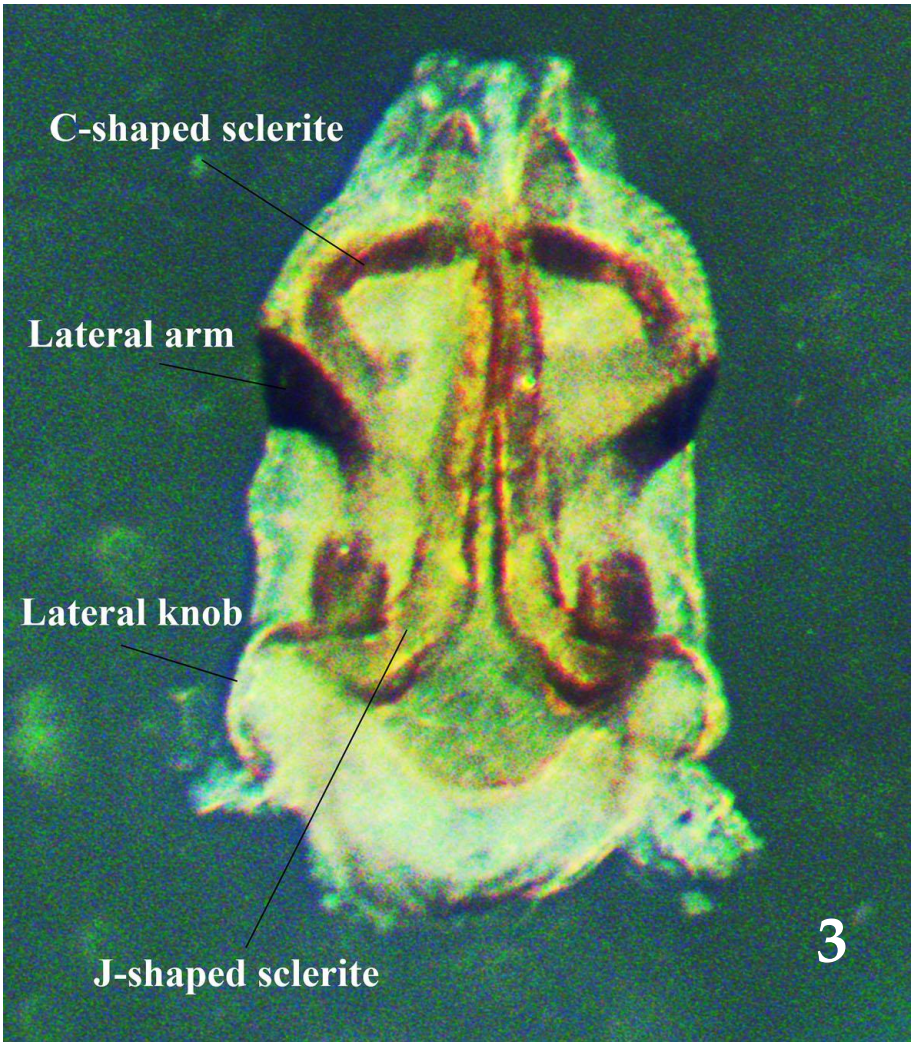
Chen & Du (2017) described a new species of *Nemoura*, *N. fusiformis* Chen & Du, 2017 from Jiangsu Province of east-central coastal China. These authors additionally illustrated *N. nankinensis* Wu, 1926, also a species described from Jiangsu Province of China. However, detailed structures of the male epiproct were not as clearly imaged because of older camera equipment. In this paper, supplementary images of the epiproct of both these two *Nemoura* species are presented to allow for more accurate identifications. Subsequent plotting of coordinates of the holotype male and paratype specimen data for *N. fusiformis* uncovered a significant error. New coordinates have been provided.

MATERIAL AND METHODS

Specimens used in this study were collected by hand and preserved in 75% ethanol. Morphology was studied with a Leica MZAPO microscope. Color images were taken with a KEYENCE VHX-5000 camera. Coordinates were determined using GoogleEarth. All specimens used in this study are deposited in the Insect Collection of Yangzhou University (ICYZU), Jiangsu Province, China.


C-shaped sclerite
Lateral arm
J-shaped sclerite
Lateral knob
1


C-shaped sclerites
Lateral arm
Lateral knob
2



Figs. 1-3. *Nemoura fusiformis* Chen & Du. 1. Male terminalia, dorsal view; 2. Male terminalia, lateral view; 3. Male epiproct, ventral view.

RESULTS

***Nemoura fusiformis* Chen & Du, 2017**

http://lsid.speciesfile.org/urn:lsid:Plecoptera.speciesfile.org:TaxonName:500685

(Figs. 1-3)

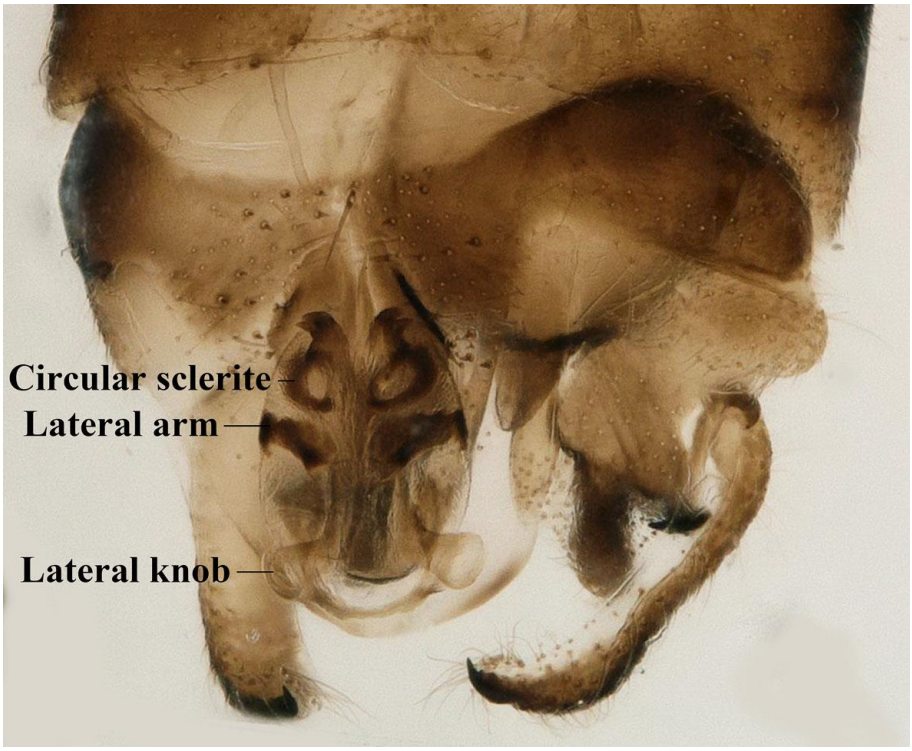
Nemoura fusiformis Chen & Du, 2017. Zootaxa. 4254 (2): 294.

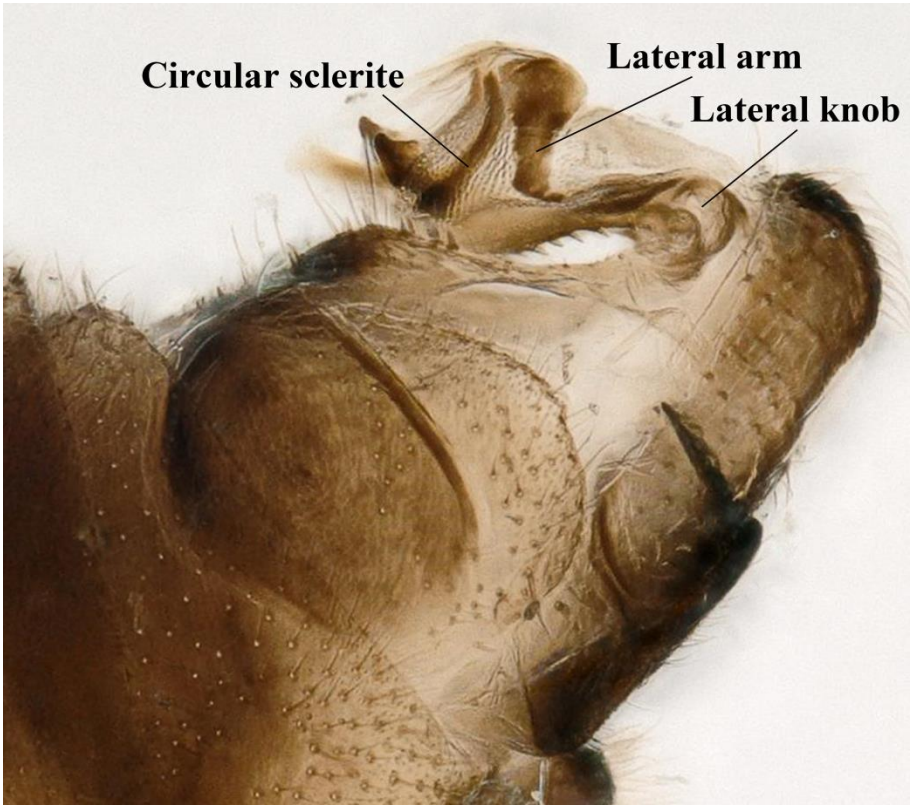
Type locality: Jiangsu Province, Suzhou.

Type material. Holotype: male, China: Jiangsu Province, Suzhou, Mt. Qionglongshan, 36m, 31.2629 N, 120.4318 E, 29 March, 2016, leg. Zhi-Teng Chen, Qing-Bo Huo (ICYZU: CNJSSZN1).

Material examined. 4 males, same data as holotype, 6 males; China: Jiangsu Province, Mt. Qionglongshan, 36 m, 31.2629 N, 120.4318 E, 23 February, 2016, leg. Zhi-Teng Chen, Qing-Bo Huo.

Remarks. The epiproct of *N. fusiformis* is elliptical in dorsal view. Its dorsal sclerite is broad with a pair of oblique, medially connected, darkly sclerotized lateral arms. The arms cover the epiproct laterally and a pair of C-shaped sclerites is present at the apex of epiproct (Figs. 1-2). The ventral sclerite is spinulose with a pair of symmetrical, J-shaped ventral ridges that converge





Figs. 4, 5. *Nemoura nankinensis* Wu. 4. Male terminalia, dorsal view; 5. Male terminalia, lateral view.

medially from base to the blunt apex (Fig. 3). The lateral knob is weakly sclerotized and covered with spinules (Figs. 1-2). This species is presently known only from the east-central coastal Jiangsu Province of China, north of Shanghai to Suzhou.

***Nemoura nankinensis* Wu, 1926**

http://lsid.speciesfile.org/urn:lsid:Plecoptera.speciesfile.org:TaxonName:6358

(Figs. 4-5)

Nemoura nankinensis Wu, 1926. J. Sci. Arts. 5:332. Type locality: Jiangsu Province, Nanking; Wu, 1938. Plecopt. Sin., 182; Illies, 1966. Das Tierreich, 82:208.

Type material (lost). Holotype: male, **China**: Jiangsu Province, Nanking, Ning-Kuo Temple, 4 April, 1923, leg. Chenfu Wu.

Material examined. 18 males and 10 females, China: Jiangsu Province, Nanjing, Mt. Zijinshan, 18-19 February, 2006, leg. Zhi-Jie Wang; 1 male and 1 female, same locality, 2 February, 2016, leg. Zhi-Teng Chen, Zhi-Jie Wang; 41 males and 21 females, same locality, 17 February, 2016, leg. Zhi-Teng Chen, Qin-Bo Huo, Qiu-Yue Huo; 19 males and 18 females, same locality, 3 March, 2016, leg. Zhi-Teng Chen, Qin-Bo Huo.

Remarks. The epiproct of *N. nankinensis* is oval with the dorsal sclerite medially having a pair of separated, transverse lateral arms reaching the ventral sclerite, and the anterior of the arms with a pair of circular, apically bifurcated sclerites. The ventral sclerite is broad with a row of long spines. The lateral knob is well developed but weakly sclerotized (Figs. 4-5).

The holotype and all paratypes of *N. nankinensis* are lost (Wu 1962). The original description and illustrations by Wu (1926, 1938) were typically incomplete. Yang *et al.* (2015) repeated the original description and used the illustrations of Wu (1926). These authors indicated that the male genitalia of *N. nankinensis* was similar with *N. yunnanensis* Wu, 1940 (see fig. 275 in Yang *et al.* 2015), but this morphological similarity is difficult to ascertain with their available illustrations. Based on the male epiproct and cercal characters, *N. nankinensis* appears more similar with *N. oculata* Wang & Du, 2006 (see Figs. 15-21 in Wang *et al.* 2006) described from Guizhou Province of southwestern China. However, comprehensive morphological studies of both males and females of the many species of the genus *Nemoura* described or reported from China (DeWalt *et al.* 2017) are necessary before specific relationships can be determined more accurately.

ACKNOWLEDGMENTS

Dr. Boris C. Kondratieff, Dr. R. Edward DeWalt and Dr. Bill P. Stark assisted in improving the manuscript. We thank the Testing Center of Yangzhou University for help with the images. This research was supported by the National Natural Science Foundation of China (No. 31572295; 31071958), and by the fund of Excellent Doctoral Dissertations of Yangzhou University.

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Submitted 2 November 2017, Accepted 13 November 2017, Published 21 November 2017

Hosted and published at the University of Illinois, Illinois Natural History Survey, Champaign, Illinois, U.S.A.