



## Revision of the *Siobla metallica* group (Hymenoptera: Tenthredinidae)

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## Abstract

Twenty-two species of *Siobla metallica* species-group are revised. Fourteen new species: *Siobla bomeica* Niu & Wei, **sp. nov.**, *S. brevipilosa* Niu & Wei, **sp. nov.**, *S. caerulea* Niu & Wei, **sp. nov.**, *S. dian* Niu & Wei, **sp. nov.**, *S. glabroorbita* Niu & Wei, **sp. nov.**, *S. glabrottemporalis* Niu & Wei, **sp. nov.**, *S. leucotarsis* Niu & Wei, **sp. nov.**, *S. longipennis* Niu & Wei, **sp. nov.**, *S. maculipennis* Niu & Wei, **sp. nov.**, *S. obtusiscutellata* Niu & Wei, **sp. nov.**, *S. rugosipropodea* Niu & Wei, **sp. nov.**, *S. shemongjiana* Niu & Wei, **sp. nov.**, *S. sinica* Niu & Wei, **sp. nov.** and *S. vardalae* Niu & Wei, **sp. nov.** are described and illustrated. Six previously described species are redescribed. A key for species of the group is given. Distribution records of each species of the group are given.

**Key words:** Sawflies, Symphyta, key, new species, China, East Asia

## Introduction

*Siobla* was divided into nine groups and three of the smaller groups were revised by Niu & Wei (2010). Here we revise the *metallica* group, which contains 16 new species and 6 previously known species. The thorax and abdomen of all species of the *metallica* group are colored metallic bluish, which distinguishes them from all other species of the genus.

## Material and methods

Specimen images were taken using a digital camera with a series of images montaged using Helicon Focus (©HeliconSoft). The distribution maps were prepared using the software DIVA-GIS (<http://www.diva-gis.org>), and the data in shapefiles were transformed from geographic coordinates into Asia Lambert Conformal Conic projection (ESRI: 102012).

Specimens examined during this study are deposited in: the Insect Collection of Central South University of Forestry and Technology, Changsha, China (CSCS); Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany (SDEI); Hungarian Natural History Museum, Budapest, Hungary (HNHM); Natural History Museum, Stockholm, Sweden (NHRS); National Science Museum, Tokyo, Japan (NSMT); Tianjin Museum of Natural History, Tianjin, China (TMNH); Department of Biology of Yeungnam University, Korea (YUK). National Museum of Natural Science, Taichung, Taiwan (NMHS), Taiwan Agricultural Research Institute, Taichung, Taiwan (TARI).

The repository of each holotype is given. Other specimens including the paratypes of the new species are deposited in the CSCS, if not mentioned otherwise.

All nomenclatural acts, authors and literature are registered in Zoobank as per the recent proposed amendment to the International Code of Zoological nomenclature for a universal register for animal names (Polaszek *et al.* 2005a, b; Pyle *et al.* 2008; ICZN 2008). Rules for spelling Chinese personal and place names follow GB/T 16159-1996 and ISO 7098: 1991: “Chinese people’s names are to be written separately with the surname first, followed by the personal name written as one word, with the initial letters of both capitalized.”. “Chinese place names should be alphabetized according to the “Spelling Rules for Chinese Geographical Place Names,” document no. 17 (1984) of the State Committee on Chinese Geographical Place Names. Separate the geographical proper name from the geographical feature name and capitalize the first letter of both”. Place names of the Xizang Autonomous Region follow Wu (1995).

## Results

### *Siobla* Cameron, 1877

*Siobla* Cameron, 1877: 88–89. Type species: *Siobla mooreana* Cameron, 1877, by subsequent designation of Ashmead, 1898. *Encarsioneura* Konow, 1890: 240. Type species: *Tenthredo sturmii* Klug, 1817, by monotypy.

*Megasiobla* Dovnar-Zapolskij, 1930: 86. Type species: *Megasiobla zenaida* Dovnar-Zapolskij, 1930, by original designation.