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

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### Abstract

14 species of the *Siobla formosana* species-group are revised. Three new species: *Siobla jiangi* Niu & Wei, **sp. nov.**, *S. parallela* Niu & Wei, **sp. nov.**, *S. weiweii* Niu & Wei, **sp. nov.** are described. *Siobla rufipes* Malaise, 1945 is a new synonym of *S. atra* Malaise, 1945. The males formerly assigned to *S. atra* belong to *S. semipicta* Malaise, 1945. The previously unknown female of *Siobla rufopropodea* Wei, 1998 is described. Lectotypes are designated for *Siobla rufipes* Malaise, 1945, *Siobla atra* Malaise, 1945 and *Siobla semipicta* Malaise, 1945. The previously described species are illustrated and partly redescribed. A key to species of the group is given. Distribution records of each species of the group except *S. takeuchii* 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 (2010a). The *metallica* group was revised by Niu *et al.* (2012). Here we revise the *formosana* group, which contains three new species and ten previously known species.

### 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 (NHRM); National Museum of Nature and Science, Tokyo, Japan (NSMT), The Natural History Museum London, United Kingdom (BMNH), Museo Nacional de Ciencias Naturales, Entomología, Madrid, Spain (MNCN), The Smithsonian National Museum of Natural History, Washington DC, USA (USNM). If not mentioned otherwise, the examined specimens are deposited in the CSCS.

Nomenclatural acts of new species, 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

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