



A review of the *Pachyprotasis pallidistigma* species group (Hymenoptera: Tenthredinidae) from China, with descriptions of three new species

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Abstract

The Chinese species of the *Pachyprotasis pallidistigma* group are revised and a key to the world species of the group is provided. Three new species of the group from China are described: *P. bilineata* sp. nov. (Yunnan), *P. sichuanensis* sp. nov. (Sichuan), *P. shennongjiaii* sp. nov. (Hubei). The previously known species of the group are revised.

Key words: Sawflies, Symphyta, taxonomy, Palaearctic, Oriental

Introduction

Pachyprotasis Hartig, 1837, is chiefly distributed in the north of the Oriental and East Palaearctic regions. In the course of a revision of the *formosana* group, we have provided a key that enables recognition of the species groups (Zhong & Wei 2010a). The *pallidistigma* group as it is treated here can easily separated from other groups by the following characters: stigma in life green, in dry specimens mostly muddy yellow; in the male mostly darker, fulvous or light brown, but still transparent; most of body color muddy yellow, and in life green.

Until now fifteen species have been described, which are here associated with the *pallidistigma* group. Most species are distributed in Southeast Asia (Myanmar, China and India): (Forsius 1931; Malaise 1945; Saini & Kalia 1989; Nie & Wei 1999; Wei & Nie 1998; Wei & Zhong 2002, 2007), two species extend to Japan (Hokkaido, Honshu) and Russia (Kuriles) (*P. elegans* Takeuchi, 1956, *P. longicornis* Jakowlew, 1891), and only *P. nigronotata* Kriechbaumer, 1874 is widely distributed in the north of the Oriental and Palaearctic regions (Taeger & Blank 2010). Here we describe three new species from China and provide a key to all known species of the *pallidistigma* group.

Material and Methods

The specimens were examined with a Motic-DM-143 dissection microscope. Adult images were taken with a Nikon D2X digital camera, and genitalia images were taken with a Motic BA600 Mot.

Terminology of sawfly genitalia follows Ross (1945), Viitasaari (2002) and Fig. 97. Terminology of wing venation is shown in Fig. 110.

Under each species of the *pallidistigma* group treated here we include only selected references of significance. Usually these works include illustrations and keys for the species concerned. For each species the distribution is presented according to material studied by ourselves or according to the literature cited. The distribution maps were prepared using Arcview-GIS 3.3.

Specimens examined during this study are deposited in the Insect Collection of Central South University of Forestry and Technology, Changsha/China (CSCS); some specimens are deposited in the Senckenberg Deutsches Entomologisches Institut, Müncheberg/Germany (DEI).