



Taxonomy of the tribe Paromalini Reitter (Coleoptera: Histeridae, Dendrophilinae) from China

YE-JUN ZHANG^{1,2} & HONG-ZHANG ZHOU^{1,3}

¹Institute of Zoology, Chinese Academy of Sciences, 25 Beisihuanxi Rd., Haidian, 100080 Beijing, P. R. China

²Graduate School of the Chinese Academy of Science, 19 Yuquan Rd., Shijingshan, 100039 Beijing, P. R. China

³Corresponding author. E-mail: zhouhz@ioz.ac.cn

Table of contents

Abstract	2
Introduction	2
Material and methods	3
Taxonomy	4
Tribe Paromalini Reitter, 1909	4
Key to the genera of the tribe Paromalini of China	4
Genus <i>Carcinops</i> Marseul, 1855	4
Key to the Chinese species of <i>Carcinops</i>	5
<i>Carcinops penatii</i> Zhang & Zhou, n. sp.	5
<i>Carcinops pumilio</i> (Erichson, 1834)	7
<i>Carcinops sinensis</i> Lewis, 1909	8
Genus <i>Diplostix</i> Bickhardt, 1921, new for China	8
<i>Diplostix vicaria</i> (Cooman, 1935), new for China	8
Genus <i>Pachylomalus</i> Schmidt, 1897	10
Key to the Chinese species of <i>Pachylomalus</i>	11
<i>Pachylomalus deficiens</i> Cooman, 1933, new for China	12
<i>Pachylomalus musculus</i> (Marseul, 1873)	12
Genus <i>Platylomalus</i> Cooman, 1948	12
Key to the Chinese species of <i>Platylomalus</i>	13
<i>Platylomalus inflexus</i> Zhang & Zhou, n. sp.	14
<i>Platylomalus ceylanicus</i> (Motschulsky, 1863)	17
<i>Platylomalus mendicus</i> (Lewis, 1892)	17
<i>Platylomalus niponensis</i> (Lewis, 1899)	18
<i>Platylomalus oceanitis</i> (Marseul, 1855)	18
<i>Platylomalus sauteri</i> (Bickhardt, 1912)	18
<i>Platylomalus submetallicus</i> (Lewis, 1892), new for China	20
<i>Platylomalus tonkinensis</i> (Cooman, 1937), new for China	20
<i>Platylomalus viaticus</i> (Lewis, 1892)	20
Genus <i>Eulomalus</i> Cooman, 1937	20
Key to the Chinese species of <i>Eulomalus</i>	22
<i>Eulomalus rugosus</i> Zhang & Zhou, n. sp.	22
<i>Eulomalus amplipes</i> Cooman, 1937, new for China	25
<i>Eulomalus lombokanus</i> Cooman, 1937	26
<i>Eulomalus pupulus</i> Cooman, 1937, new for China	27
<i>Eulomalus seitzii</i> Cooman, 1941, new for China	28
<i>Eulomalus tardipes</i> (Lewis, 1892)	28

<i>Eulomalus vermicipygus</i> Cooman, 1937, new for China	28
Genus <i>Paromalus</i> Erichson, 1834	31
Key to the Chinese species of <i>Paromalus</i>	31
<i>Paromalus acutangulus</i> Zhang & Zhou, n. sp.	31
<i>Paromalus tibetanus</i> Zhang & Zhou, n. sp.	34
<i>Paromalus parallelepipedus</i> (Herbst, 1792), new for China	36
<i>Paromalus picturatus</i> Kapler, 1999	36
<i>Paromalus vernalis</i> Lewis, 1892	36
Acknowledgments	36
References	37

Abstract

This paper reviews the tribe Paromalini Reitter (Coleoptera, Histeridae) of China. Five new species are described: *Carcinops penatii* Zhang & Zhou, **n. sp.** from Sichuan, *Platylomalus inflexus* Zhang & Zhou, **n. sp.** and *Eulomalus rugosus* Zhang & Zhou, **n. sp.** from Hainan, *Paromalus acutangulus* Zhang & Zhou, **n. sp.** from Yunnan, and *Paromalus tibetanus* Zhang & Zhou, **n. sp.** from Xizang. The genus *Diplostix* Bickhardt and nine species of this and other genera are recorded for the first time in China. They are *Diplostix vicaria* (Cooman, 1935), *Pachylomalus deficiens* Cooman, 1933, *Platylomalus submetallicus* (Lewis, 1892), *Platylomalus tonkinensis* (Cooman, 1937), *Eulomalus amplipes* Cooman, 1937, *Eulomalus pupulus* Cooman, 1937, *Eulomalus seitzii* Cooman, 1941, *Eulomalus vermicipygus* Cooman, 1937, *Paromalus parallelepipedus* (Herbst, 1792). According to our study, the Chinese fauna of the tribe Paromalini is now comprised of six genera and twenty-seven species. Keys to these genera and species are presented. The taxonomic position of *Pachylomalus deficiens* Cooman is discussed. All the type specimens are deposited in the Institute of Zoology, the Chinese Academy of Sciences.

Key words: Coleoptera, Histeridae, Paromalini, new species, new records, China

Introduction

The tribe Paromalini Reitter, 1909, belongs to the subfamily Dendrophilinae (Coleoptera: Histeridae) and is nearly cosmopolitan with respect to its zoogeographical distribution (Mazur 1997). The species of this tribe live in habitats of decomposing organic materials and in bark burrows where they prey upon xylophagous beetles and other wood-boring insects. Thus, they can play important role in forest biological control. Some species have been also found in nests of birds, mammals and rodents (Bickhardt 1917; Yélamos 2002).

The formal erection of the tribe Paromalini should be attributed to Reitter (1909), but its taxonomic definition has experienced different modifications thereafter. Kryzhanovskij and Reichardt (1976) divided the subfamily Dendrophilinae into three tribes, Dendrophilini, Paromalini and Bacaniini, by classifying all the species with dorsal striae into the tribe Dendrophilini while those without dorsal striae into the tribes Paromalini and Bacaniini. Vienna (1980) defined the tribe Paromalini by the presence of a short epistoma, usually margined by the frontoclypeal stria. This definition has been followed by the majority of the coleopterologists working on this group (Mazur 1984, 1993; Ôhara 1994). Mazur (1993) suggested that a long basal piece and relatively short parameres of the aedeagus should be additionally considered diagnosis of the tribe Paromalini. We follow mainly Mazur (1993) in our treatment. We nevertheless point out that there are difficulties in the tribe's taxonomy, particularly with regard to several included genera and species. For example, *Pachylomalus deficiens* Cooman, 1933 is very different from other species in the same genus (such as *Pachylomalus musculus* (Marseul, 1873), *P. opulentus* Cooman, 1932 and *P. sulcatipygus* Cooman, 1932 in hand) in body and genitalia morphology (cf. the text below).

The local or regional faunas of the tribe Paromalini have been studied in many regions, for example, in the former Soviet Union (Kryzhanovskij & Reichardt 1976), Italy (Vienna 1980), Japan (Ôhara 1994), Korea