



## Review of the *Epeolus tarsalis* species group (Hymenoptera: Apidae, *Epeolus* Latreille, 1802), with description of a new species

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### Abstract

The five species of *Epeolus tarsalis* species group are reviewed. One new species, *Epeolus mikhailovi* sp. nov. (Kyrgyzstan, Tajikistan), is described and illustrated. *Epeolus melectiformis* Yasumatsu, 1938 is newly recorded from China, and *E. tarsalis* Morawitz, 1874 is newly recorded from Kazakhstan. The distribution data for other species are supplemented. An identification key for both sexes of this species group is presented.

**Key words:** Anthophila, Apiformes, cleptoparasites, fauna, taxonomy, Palaearctic region

### Introduction

The genus *Epeolus* Latreille, 1802 includes about 115 species spread across much of the globe: they occur throughout the Holarctic Realm, from the west coast of the United States and eastwards to Europe and as far as Japan. About 65 species are known from North and Central America, about 40 from the Palaearctic region of which 17 species are found in Europe (Michener 2007; Onuferko 2018; Bogusch and Hadrava 2018; Bogusch 2021; Astafurova & Proshchalykin 2021). Unlike other Epeolini, all *Epeolus* species are so far known as cleptoparasites of species of *Colletes* Latreille, 1802 (Colletidae).

The composition of the *Epeolus tarsalis* species group was first suggested by Bischoff (1930), then including *E. praeustus* Pérez, 1884, *E. sibiricus* Radoszkowski, 1887 and *E. tarsalis* Morawitz, 1874. Later, Pittioni (1947) reviewed this group again and retained the same species composition. Van Lith (1956) returned to this group and special attention was given by him to the forms of species. He described a new subspecies *Epeolus tarsalis tirolensis* van Lith, 1956 and considered *E. praeustus* Pérez and *Epeolus rozenburgensis* van Lith, 1949 as subspecies of *Epeolus tarsalis* Morawitz. In this paper van Lith re-described *Epeolus melectiformis* Yasumatsu, 1938 from Japan and included this species to the *E. tarsalis* group. Hirashima described *E. himukanus* Hirashima, 1955 from Japan, but van Lith (1949) suggested that this species is very likely a subspecies of *E. tarsalis* and later this species was treated as subspecies by Hirashima and Tadauchi (1979) and Mitai and Tadauchi (2009).

During the long period after Hirashima (1955), no species have been described from the group and only recently *Epeolus ladakhensis* Bogusch, 2019 a species closely related to *E. tarsalis*, was described from Indian Kashmir (Bogusch 2019). In this paper, we describe another new species, *E. mikhailovi* sp. nov. belonging to this group from the mountains of Central Asia.

We have ascertained that *Epeolus coreanus* Yasumatsu, 1933 also belonging to the *E. tarsalis* species group, possessing the elevation between antennae enlarged laterally (Fig. 3).

In this paper we enumerate five species of the *Epeolus tarsalis* species group, including one new species. A key is presented for both sexes of this species group. Taxonomical status of *Epeolus sibiricus* Radoszkowski remains unresolved (refers to the note below).