



<http://dx.doi.org/10.11646/zootaxa.3949.3.2>

<http://zoobank.org/urn:lsid:zoobank.org:pub:72E8A879-2102-4CF0-9406-EE437D182A6B>

## Additional records of the genus *Colletes* Latreille (Hymenoptera: Apoidea: Colletidae) from Siberia, with a checklist of Russian species

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### Abstract

In addition to a previously published study about Siberian *Colletes* species, we here further report on poorly known species. Twenty six species are currently known from Siberia with *C. cinerascens* Morawitz 1893, *C. kaszabi* Kuhlmann 2002, and *C. ebmeri* Kuhlmann 2002 found in Russia for the first time and *C. wacki* Kuhlmann 2002 is newly recorded from the Asian part of Russia. The male of *C. wacki* is here described for the first time and a lectotype designated for the closely related *C. conradti* Noskiewicz 1936 to clarify the taxonomy of this group. *Colletes uralensis* Noskiewicz 1936 was erroneously recorded from Russia and is removed from the list of Russian species. Images and updated distribution maps are provided for the closely related *C. kaszabi* and *C. uralensis* as well as for *C. conradti* and *C. wacki* to facilitate their identification. An updated checklist of the 42 species of *Colletes* so far known from Russia is provided.

**Key words:** taxonomy, lectotype, new records, fauna, Palaearctic region

### Introduction

Here we continue our study of the *Colletes* bees of the Asian part of Russia that started in 2010 (Kuhlmann & Proshchalykin 2011). After the publication of the first paper one of us (MYP) organized three expeditions (2012–2014) to South Siberia (Krasnoyarsk Territory, Altai Republic, Khakassia Republic, Tyva Republic) and was able to collect a rich sample of *Colletes* material. In addition to these new specimens, previously unstudied specimens were discovered in a number of museum collections that are also included in this study.

In the present study we report additional records of 21 species with four species recorded from Siberia for the first time bringing the total number of species of *Colletes* known from this region to 26 (Table 1), in order to complete the study on the Siberian taxa. In total 42 *Colletes* species are now recorded from Russia (Table 2). *Colletes uralensis* Noskiewicz is removed from the list of Russian species and the male of *C. wacki* Kuhlmann is here described for the first time. A lectotype is designated here for the closely related *C. conradti* Noskiewicz 1936 to clarify the taxonomy of this group. An updated checklist (Kuhlmann & Proshchalykin 2014) of the *Colletes* species recorded from Russia is provided in alphabetical order of species-groups (Table 2).

Since the end of the 19th century Siberia was recognized as the territory from the Ural Mountains in the west to the Pacific Ocean in the east. Very often in the early days entomologists referred to «Siberia occidentalis» (West Siberia) or «Siberia orientalis» (East Siberia, Far East) and even today these terms are still in use, so this division is also presented in Table 1 and Figure 1.

### Material and methods

Terminology for the description of species is based on Michener (2007) for general morphology. Puncture density is expressed as the relationship between puncture diameter (d) and the space between them (i), such as  $i = 1.5d$  or  $i < d$ . The following abbreviations were used for morphological structures: T—metasomal tergum, S—metasomal

Krasnoyarsk, Russia), A.D. Saaya (Tuvan Institute for Exploration of Natural Resources, Kyzyl, Russia), V.V.Shurkina and I.L. Maimanakova ("Khakassky" Natural Reserve, Abakan, Russia) for their help during field work in Siberia in 2012–2014. Yu.N. Danilov (Institute of Systematics and Ecology of Animals, Russian Academy of Sciences, Novosibirsk, Russia) kindly forwarded *Colletes* specimens from Russia to London. Comments by Claus Rasmussen and two anonymous reviewers substantially improved the manuscript.

The work of MYP was supported by President grant for government support of the Leading Scientific Schools of the Russian Federation (grant number НШ-150.2014.4), the Russian Funds for Basic Research (grant numbers 14-04-00649, 14-34-50002, 15-29-02466 офи\_м), and the Far Eastern Branch of the Russian Academy of Sciences (grant number 15-II-6-014).

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