The type specimens of bees (Hymenoptera, Apoidea) deposited in the Zoological Institute of the Russian Academy of Sciences, St. Petersburg. Contribution I. Family Halictidae, genus *Lasioglossum* Curtis, 1833

YULIA V. ASTAFUROVA¹ & MAXIM YU. PROSHCHALYKIN², ³

¹Zoological Institute, Russian Academy of Sciences, Universitetskaya Nab., 1, Saint Petersburg, 199034, Russia.  
E-mail: Yulia.Astafurova@zin.ru

²Federal Scientific Center of the East Asia Terrestrial Biodiversity, Far Eastern Branch of Russian Academy of Sciences, Vladivostok-22, 690022, Russia. E-mail: proshchalikin@biosoil.ru

³Corresponding author

Magnolia Press  
Auckland, New Zealand

Accepted by J. Gibbs: 7 Mar. 2018; published: 13 Apr. 2018
# Table of contents

Abstract ........................................................................................................................................... 3
Introduction ..................................................................................................................................... 3
Materials and methods .................................. .................................................................................. 4
List of types of *Lasioglossum* Curtis, 1833 deposited in ZISP ...................................................... 4
1. *Andrena campestris* Eversmann, 1852 .................................................................................. 4
2. *Eysylnca baleicus insulicola* Pesenko, 2007 ........................................................................ 6
4. *Halictus adabaschus* Blüthgen, 1931 ................................................................................. 8
5. *Halictus alpestris* Morawitz, 1877 ....................................................................................... 8
6. *Halictus anguliceps* Morawitz, 1893 ................................................................................... 10
7. *Halictus atomarius* Morawitz, 1876 .................................................................................... 11
8. *Halictus bicallosus* Morawitz, 1874 .................................................................................... 11
9. *Halictus caspicus* Morawitz, 1874 ..................................................................................... 12
10. *Halictus chloropus* Morawitz, 1893 ................................................................................... 13
11. *Halictus coloratus* Morawitz, 1874 ................................................................................... 13
12. *Halictus corvus* Morawitz, 1877 ....................................................................................... 15
13. *Halictus deblis* Morawitz, 1893 ....................................................................................... 16
14. *Halictus denticollos* Morawitz, 1891 .............................................................................. 16
15. *Halictus dmitrijewi* Morawitz, 1891 .............................................................................. 17
16. *Halictus fallax* Morawitz, 1874 ....................................................................................... 18
17. *Halictus glabriusculus* Morawitz, 1872 ............................................................................ 18
18. *Halictus grocillus* Morawitz, 1865 .................................................................................... 20
19. *Halictus gussakovskii* Blüthgen, 1929 ............................................................................ 21
20. *Halictus haesitans* Blüthgen, 1931 .................................................................................. 21
21. *Halictus hyalinipennis* Morawitz, 1876 ........................................................................... 22
22. *Halictus keriensis* Blüthgen, 1931 ................................................................................... 23
23. *Halictus laevinodis* Morawitz, 1876 .................................................................................. 23
24. *Halictus laticeps* Morawitz, 1890 ..................................................................................... 25
25. *Halictus lativentris sotschica* Blüthgen, 1931 ............................................................... 25
26. *Halictus maculipes tchulico* Blüthgen, 1931 ................................................................. 26
27. *Halictus mandibularis* Morawitz, 1866 ........................................................................... 27
28. *Halictus monstrificus* Morawitz, 1891 ............................................................................ 27
29. *Halictus morbillosus orientis* Cockerell, 1924 .............................................................. 29
30. *Halictus nigriceps* Morawitz, 1880 ................................................................................... 29
31. *Halictus nigricornis* Morawitz, 1887 ................................................................................ 30
32. *Halictus nodicorns* Morawitz, 1890 ................................................................................ 30
33. *Halictus ocularis* Morawitz, 1893 .................................................................................... 32
34. *Halictus olivaceus* Morawitz, 1890 .................................................................................. 33
35. *Halictus opacontiens* Blüthgen, 1931 ............................................................................. 33
36. *Halictus orphepopsis* Blüthgen, 1931 ............................................................................. 34
37. *Halictus pallipes* Morawitz, 1865 .................................................................................... 34
38. *Halictus convexiusculus pendschakenticus* Blüthgen, 1935 .......................................... 36
40. *Halictus popovi Blüthgen*, 1931 ..................................................................................... 37
41. *Halictus porcus* Morawitz, 1872 ..................................................................................... 38
42. *Halictus przewalskyi* Blüthgen, 1931 ............................................................................. 39
43. *Halictus puncticollis* Morawitz, 1872 ............................................................................. 39
44. *Halictus resplendens* Morawitz, 1890 ............................................................................. 41
45. *Halictus riparius* Morawitz, 1874 ................................................................................... 42
46. *Halictus salebrosus* Blüthgen, 1934 .............................................................................. 42
47. *Halictus salinus* Morawitz, 1876 ..................................................................................... 43
48. *Halictus satschauensis* Blüthgen, 1934 .......................................................................... 43
49. *Halictus subquadratis* Blüthgen, 1931 ............................................................................ 45
50. *Halictus subprasinus* Blüthgen, 1931 ............................................................................ 46
51. *Halictus testaceohirtulus* Blüthgen, 1929 ..................................................................... 46
52. *Halictus truncaticollis* Morawitz, 1877 .......................................................................... 47
53. *Halictus unipennis* Morawitz, 1890 ................................................................................ 48
54. *Hylaeus fulvirus* Eversmann, 1852 ................................................................................. 48
55. *Hylaeus rostratus* Eversmann, 1852 .............................................................................. 50
56. *Hylaeus rubellus* Eversmann, 1852 ................................................................................. 51
57. *Lasioglossum acuticrissa* Pesenko, 1986 ....................................................................... 51
58. *Lasioglossum alaicum* Pesenko, 1986 ............................................................................ 53

**Key words:** Anthophila Apiformes, lectotypes, Palaearctic region, taxonomy

**Introduction**

The Hymenoptera collection of the Russian Academy of Sciences, St. Petersburg [ZISP] is one of the largest in the world and has the most complete representation of the faunas of Russia and Central Asia. Hymenopteran specimens in the collection total at least 4.5 million. The Hymenoptera Department of the Laboratory of Insect Taxonomy of the ZISP houses a general worldwide collection of bees in 850 standard wooden drawers with glass lids in 32 wooden cabinets. The bee collection and comprises more than 300,000 pinned, labelled and identified specimens belonging to approximately 200 genera and 5,000 species from 6 families. The collection also includes more than 150,000 pinned, labelled, but unsorted and unidentified specimens, and an additional 150,000 specimens preserved between cotton layers in 500 hermetic plastic boxes (with bees generally mixed with specimens of other Hymenoptera). In addition to extensive representation of Palaearctic taxa, primarily from the former Russian Empire and Soviet Union and adjacent countries, the collection of bees also includes representatives of extralimital taxa from the Oriental (Vietnam, Thailand, China, Nepal), Afrotropical, Nearctic and, to a lesser extent, Neotropical and Australian regions. In total, the collection of bees of the ZISP is estimated at 600,000 specimens.

Collections of hymenopterous insects, including bees, in the middle and second half of 19th Century serve as the foundation the collection. Notable collectors included A.K. Becker, D.K. Glasunov, G.F. Christoph, E.A. Eversmann, N.A. Zarudny, V.E. Yakovlev, G.G. Jacobson, N.M. Przhevalskiy, P.K. Kozlov, G.N. Potanin, A.P. Fedchenko, A.P. Semenov-Tian-Shanskiy, etc. In the end of the 19th Century, on the basis of these materials, the outstanding entomologists F.F. Morawitz, E.A. Eversmann and O.W. Radozkowski published the first important taxonomic works with descriptions of a considerable number of species new to science (Pesenko & Astafurova 2003). Even now further descriptions and new taxonomic and distributional data can be obtained from further study of these unique collections, including the first to be obtained from important centers of bee diversity such as the Caucasus and Central Asia (including “Turkestan”).

In the beginning of 20th Century, further additions to the collection were made by the members of the Hymenoptera Department (V.V. Gussakovskij, V.V. Popov, and M.N. Nikol'skaya), and by researchers from other departments and institutions collaborating with the Zoological Institute (A.V. Shestakov, A.S. Skorikov, etc.). Additionally, the collections of many other entomologists, notably N.R. Kokujev, S.I. Malyshev, N.F. Meier, and L.M. Wollman were later passed in the Zoological Institute.
Intensive collections of insects made in numerous expeditions lead by the ZISP in the post-war period (1950s–1960s) in various regions of the USSR and Mongolia currently form the core of the collection of bees. These were primarily collected by department members V.V. Popov, V.P. Rudolf, A.A. Ponomareva, M.N. Nikol'skaya, V.I. Tobias, V.A. Trjapitzin, Yu.A. Pesenko, E.S. Sugonyaev, and M.A. Kozlov, as well as the general entomological collections of numerous entomologists of the ZISP. Recently, the bee collection has been intensively supplemented by numerous field works performed by D.R. Kasparyan, S.A. Belokobylskij, and other current members of Hymenoptera Department, not only from within the territory of the former USSR territory but also further afield. Essential material including type specimens have been received in exchange from other zoological collections.

The value of the bee collection is estimated not only by the huge taxonomic diversity of its specimens, but also by the numerous type specimens of the species described by the eminent melittologists of the past and present, F.F. Morawitz, O.W. Radozkowski, E.A. Eversmann, H. Friese, P. Blüthgen, V.V. Gussakovskij, A.S. Skorikov, V.V. Popov, A.Z. Oytshnjuk, K. Warncke, Yu.A. Pesenko, M. Kuhlmann, H.H. Dathe, M.Yu. Proshchalykin, and others, as well as by the current member of the department (Yu.V. Astafurova).

Up until now, the type specimens of bees deposited in the ZISP were cataloged in only a few genera: *Psithyrus* Lepeletier de Saint-Fargeau, 1833, and *Apis* Linnaeus, 1758 (Pesenko 2000), *Colletes* Latreille, 1802 (Proshchalykin & Kuhlmann 2015), and *Hylaeus* Fabricius, 1793 (Dathe & Proshchalykin 2017). The present paper is the first part of a series of works dealing with the primary type specimens of bees deposited in the ZISP, the main goal of which is to make the ZISP collection of bees more accessible for scientists.

The genus *Lasioglossum* Curtis, 1833 currently includes 1818 described species (Ascher & Pickering 2018), which are globally distributed with the highest known diversity in the Holarctic Region (Michener 2007). The ZISP collection of *Lasioglossum* is housed in 48 drawers and comprises more than 15,000 pinned, labelled and identified specimens belonging to 400 species. The most valuable part of the general collection, along with 69 primary types of *Lasioglossum*, comprise the numerous secondary types (paratypes, paralectotypes, ca. 446 specimens in total) of 75 species and subspecies described by E. Eversmann, F. Morawitz, T. Cockerell, P. Blüthgen, K. Warncke, Yu. Pesenko, and N. Davydova.

As a part of a detailed types inventory of the ZISP collection, *Lasioglossum* lectotypes are designated here for eleven nominal taxa to avoid any confusion about the status and diagnosis of type specimens.

**Materials and methods**

Taxa are arranged alphabetically by current genus and species. Each entry includes the name of the taxon in original combination, the complete reference to the original description of the species (including the original combination and spelling of the name and author, year and page of the description), and the list of type specimens present in the collection of the ZISP. The data of each label is separated by two slashes ( // ). Hard brackets are used for English translated and when information is added to specimen label information (e.g., geographical coordinates) or published data (e.g., current name of an old place name; affiliation to a present day country).

Photographs were made using a combination of stereomicroscope Olympus SZX10 and digital camera Canon EOS70D. Illustrations were obtained by montaging an image series, covering different focal planes, into a single in-focus image with the Helicon Focus 6. The final illustrations were post-processed for contrast and brightness using Adobe® Photoshop® software.


**List of types of *Lasioglossum* Curtis, 1833 deposited in ZISP**

1. *Andrena campestris* Eversmann, 1852
   (Figs 1a–e)

*Andrena campestris* Eversmann, 1852: 20, ♀, ♂.

**Type locality.** Promontoriis Uralensib. australib. (Russia).

**Lectotype:** ♀, designated by Pesenko 1986: 137, Spask [Russia, Orenburg Prov., Spasskoe, 52°00′N 56°32′E],