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4408

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

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Abstract

The type specimens of *Lasioglossum* Curtis, 1833 deposited in the Zoological Institute, Russian Academy of Sciences (St. Petersburg) are reviewed. Primary types of 69 taxa are illustrated and detailed information is provided (taxa include 33 described by F. Morawitz; 16 by P. Blüthgen; 15 by Yu. Pesenko (one of them with N. Davydova); four by E. Eversmann; and one by T.D.A. Cockerell). Lectotypes are designated here for the following eleven nominal taxa: *Halictus anguliceps* Morawitz, 1893, *H. corvinus* Morawitz, 1877, *H. debilis* Morawitz, 1893, *H. glabriusculus* Morawitz, 1872, *H. gussakovskii* Blüthgen, 1929, *H. hyalinipennis* Morawitz, 1876, *H. morbillosus orientis* Cockerell, 1924, *H. popovi* Blüthgen, 1931, *H. porcus* Morawitz, 1872, *H. puncticollis* Morawitz, 1872, and *H. truncaticollis* Morawitz, 1877.

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 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.

Iintensive 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 presence of 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. Osytshnjuk, 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 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.

The classification of *Lasioglossum* follows those of Gibbs *et al*. (2013) and Ascher & Pickering (2018).

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

1. *Andrena campestris* Eversmann, 1852

(Figs 1a–e)

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

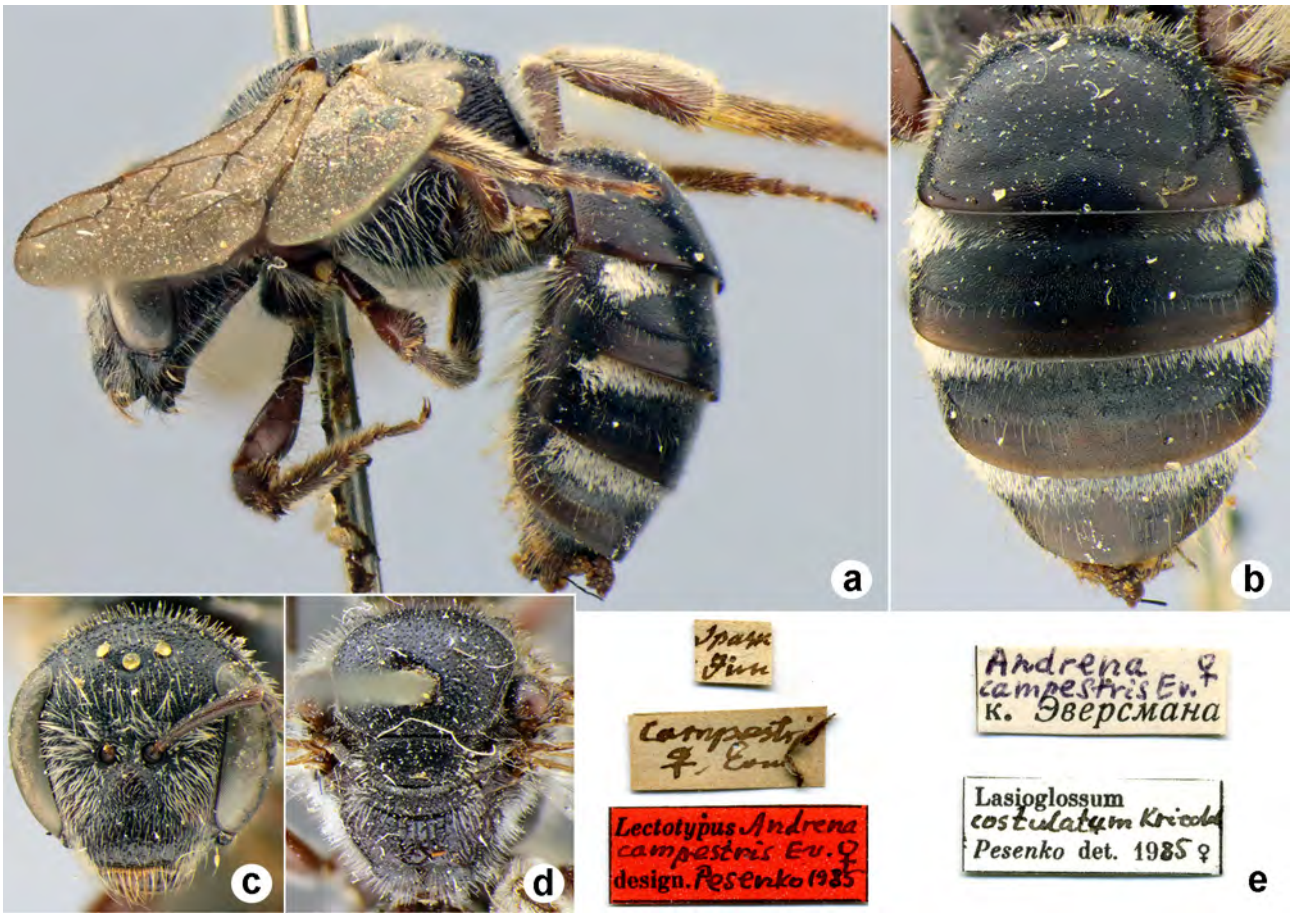
Type locality. Promontoriis Uralensib. australib. (Russia).

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

Jun. // *campestris*, ♀, Evm. // *Andrena campestris* Ev., ♀, к.[оллекция] Эверсманна [Collection of E. Eversmann] // Lectotypus, *Andrena campestris* Ev., ♀, design. Pesenko 1985 <red label> // *Lasioglossum costulatum* Kriechb., Pesenko det. 1985, ♀. Nomen oblitum (Opinion of ICZN, no. 1511; see also Pesenko, 1987: 17).

Paralectotypes: 2 ♀, the same labels as in lectotype.

Current status. *Lasioglossum* (*Lasioglossum*) *costulatum* (Kriechbaumer, 1873) (synonymized by Pesenko 1986: 137).



FIGURES 1a–e. *Andrena campestris* Eversmann, 1852. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

2. *Evylaeus baleicus insulicola* Pesenko, 2007

(Figs 2a–e)

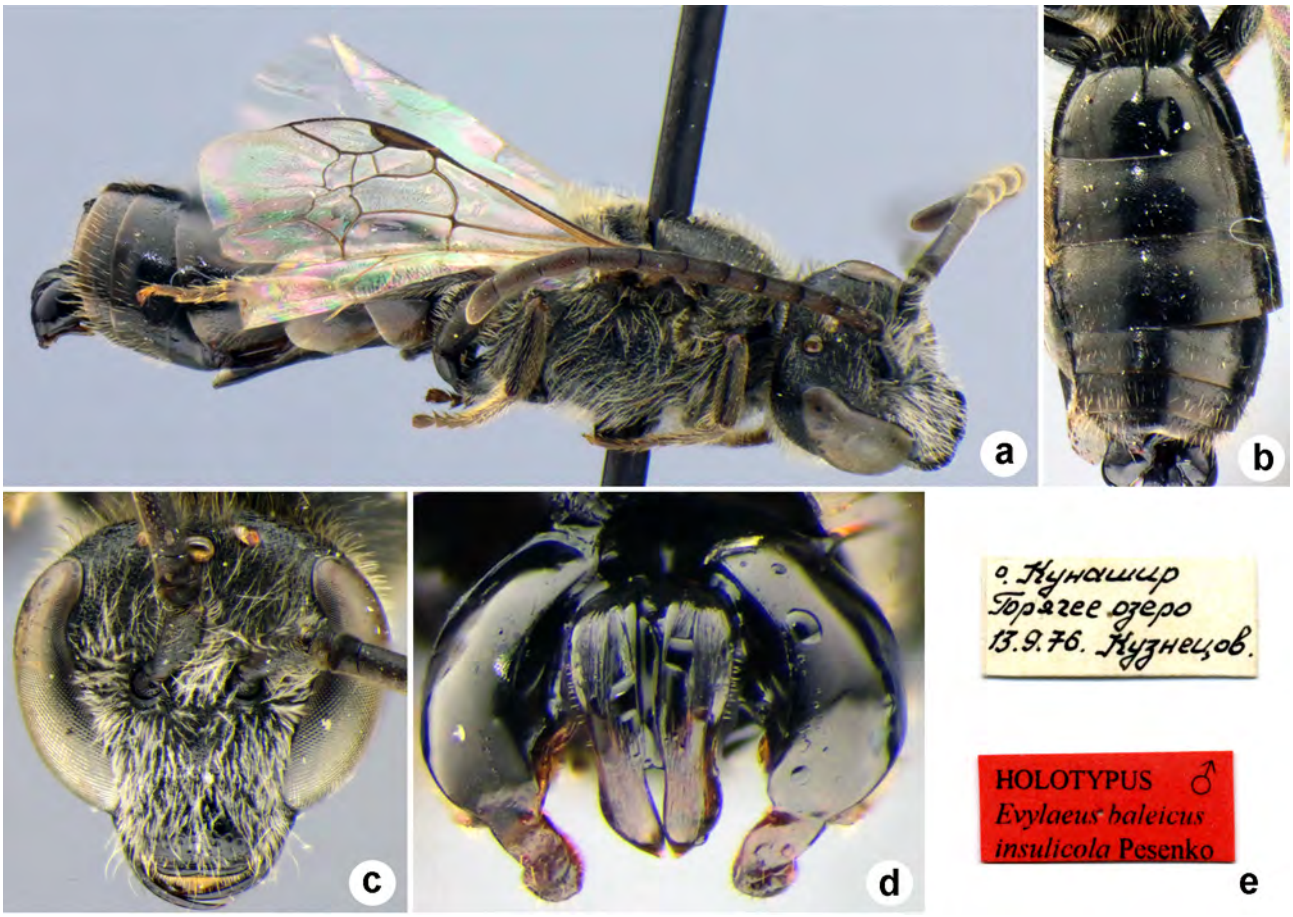
Evylaeus (*Fratevylaeus*) *baleicus insulicola* Pesenko, 2007: 91 (key), 104, ♂.

Type locality. Kunashir Island (Russia).

Holotype: ♂, о.[стров] Кунашир, Горячее озеро [Russia, Kuril Islands, Kunashir, Goryachee Lake, 43°52′N 145°30′E], 13.9.1976, Кузнецов [V. Kuznetsov] // Holotypus, ♂, *Evylaeus baleicus insulicola* Pesenko <red label>.

Paratypes: 1 ♂, о.[стров] Сахалин, Новоалександровск [Russia, Sakhalin, Novoaleksandrovsk], 27.VII.1978, Лелей [A. Lelej]; 1 ♂, о.[стров] Сахалин, Южносахалиснк [Russia, Sakhalin, Yuzhnosakhalinsk], А. Лелей [A. Lelej]; 2 ♂, о.[стров] Кунашир, Горячее Озеро [Russia, Kunashir Is., Lake Goryacheye], 13.IX.1976, В. Кузнецов [V. Kuznetsov]; 1 ♂, idem, 8.VIII.1981, Лелей [A. Lelej]; 1 ♂, Hokkaido [Japan, no locality], 26.IX.1972, coll. Kawano Moiwa; 1 ♂, Tenneru nr. Kushiro [Japan], 1968, E. Ohtsuka // Paratypus *Evylaeus baleicus insulicola* Pesenko, ♀ <red label> [this label for every paratype specimens].

Current status. *Lasioglossum* (*Sphecodogastra*) *baleicum insulicolum* (Pesenko, 2007).



FIGURES 2a–e. *Evylaeus baleicus insulicola* Pesenko, 2007. Holotype, male: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—genitalia, dorsal view; e—labels.

3. *Evylaeus yakuticus* Pesenko & Davydova, 2004

(Figs 3a–e)

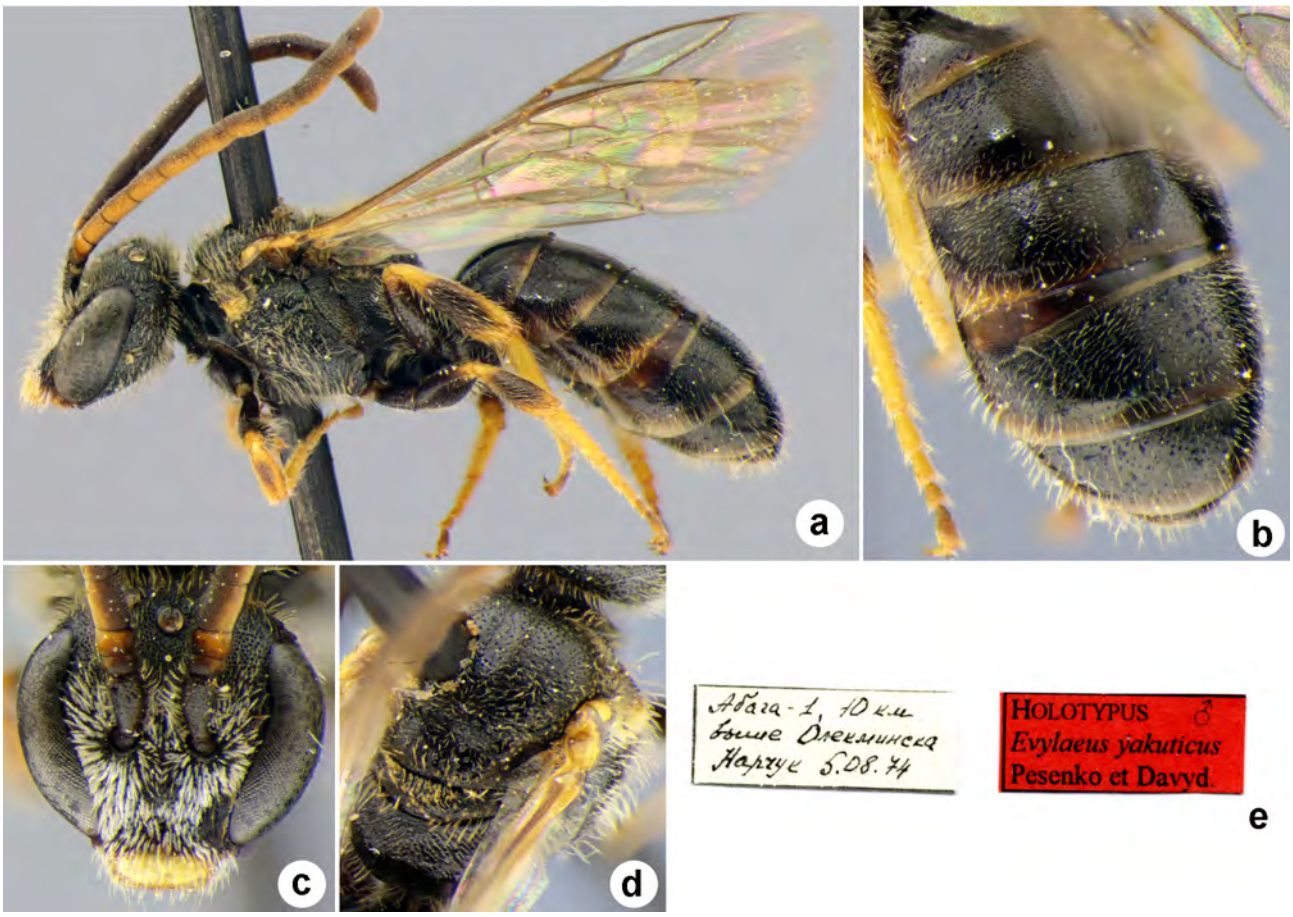
Evylaeus (*Minutulaeus*) *yakuticus* Pesenko & Davydova, 2004: 696, Figs 10–18, Tb. 5, ♀, ♂.

Type locality. Yakutia (Russia).

Holotype: ♂, Абага-1, 10 км выше Олекминска [Russia, Yakutia, Abaga-1, 10 km above Olekminsk, 60°21′N 120°34′E], 5.08.[19]74, Нарчук [E. Narchuk] // Holotypus, *Evylaeus yakuticus* Pesenko et Davyd. <red label>.

Paratypes: 2 ♂, the same label as in holotype; 2 ♂, дер.[евня] Новопокровск на Амге, Якут.[ск] окр.[есности], [Novopokrovsk on Yamga River, near Yakutsk], 7.VIII.[19]25, Бианки [Bianki]; 2 ♂, Якутск, Бот.[анический] сад, остепн.[енный] склон [Yakutsk, Botanical Garden, steppe slope], 27.VII.[19]74, Песенко [Yu. Pesenko]; 2 ♂, Якутия, Лено-Амгинское междуречье, с.[ело] Тюнгюлю, 50 км ВСВ Якутска [Yakutia, country between Lena and Amga Rivers, Tyungyulyu, 50 km ENE Yakutsk], 10.VIII.[19]90, Каймук [Kaymuk]; 1 ♂, с.[ело] Хаптагай, бер.[ег] Лены, 30 км выше Якутска [Khaptagay, right bank of Lena, 30 km upper Yakutsk], 21.VII.1998, Н. Давыдова [N. Davydova]; 2 ♀, Хаптагай, 30 км ЮЮВ Якутска [Khaptagay, 30 km SSE Yakutsk], 29.VI.974, Ю. Песенко [Yu. Pesenko]; 2 ♀, Якутск [Yakutsk], 8 and 15.VII.[1]927, Москвин [Moskvin]; 2 ♀, окр.[есности] Якутска, бот.[анический] сад [near Yakutsk, botanical garden], 14.VI.[19]99, А. Попов [A. Popov]; 2 ♀, Сергелях 3 км от Якутска [Sergelyakh, 3 km from Yakutsk], 7.VI.[1]928, Муз. [Muzichenko] // Paratypus, *Evylaeus yakuticus* Pesenko et Davyd. <red label> [this label for every paratype specimens].

Current status. *Lasioglossum* (*Sphecodogastra*) *yakuticum* (Pesenko & Davydova, 2004).



FIGURES 3a–e. *Evylaeus yakuticus* Pesenko & Davydova, 2004. Holotype, male: a—habitus, lateral view; b—metasoma, postero-lateral view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

4. *Halictus adabaschus* Blüthgen, 1931

(Figs 4a–e)

Halictus adabaschus Blüthgen, 1931: 368, Fig. 12a, ♀.

Type locality. Ashgabat (Turkmenistan).

Holotype: ♀, Асхабад [Turkmenistan, Ashgabat, 37°57′N 58°23′E], 5.V.[1]928, В. Гуссаковский [V. Gussakovskij] // Typus <red label> // *Halictus adabaschus* n. sp., ♀, P. Blüthgen det. // Holotypus <red label>.

Current status. *Lasioglossum* (*Hemihalictus*) *adabaschum* (Blüthgen, 1931).

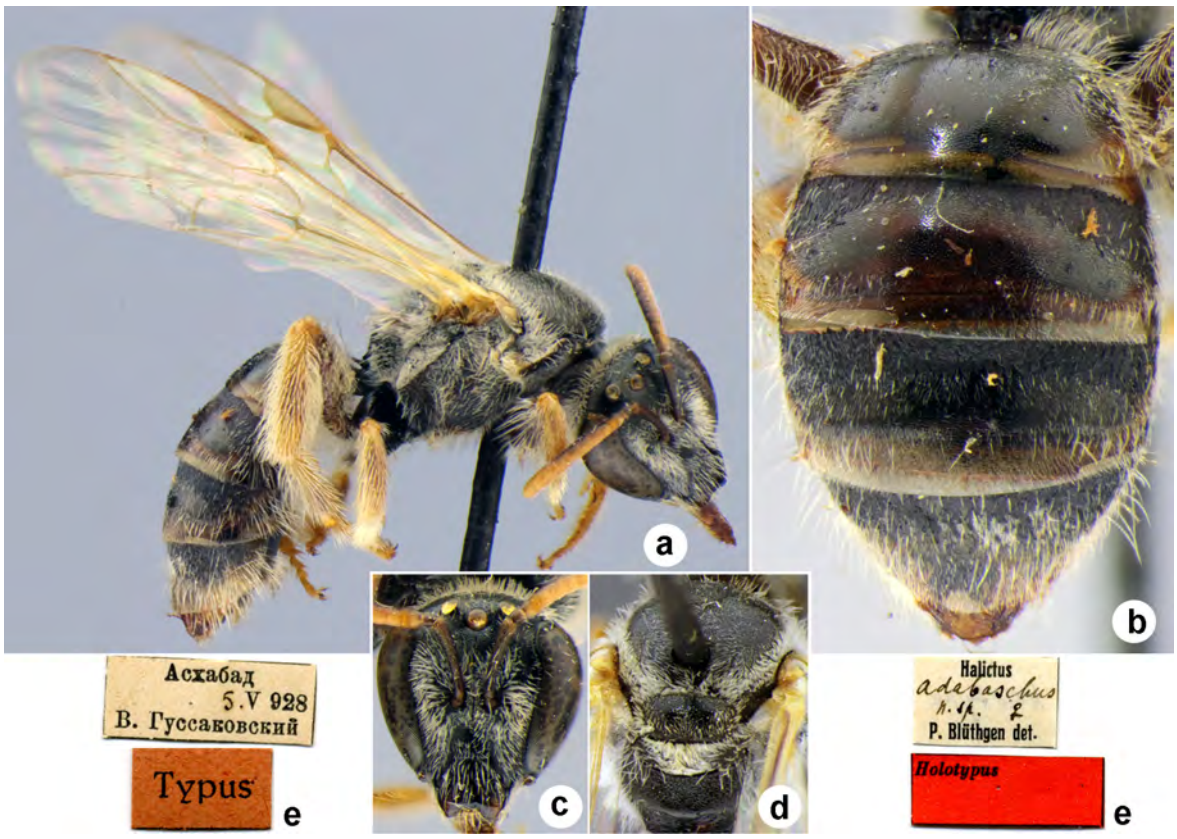
5. *Halictus alpestris* Morawitz, 1877

(Figs 5a–e)

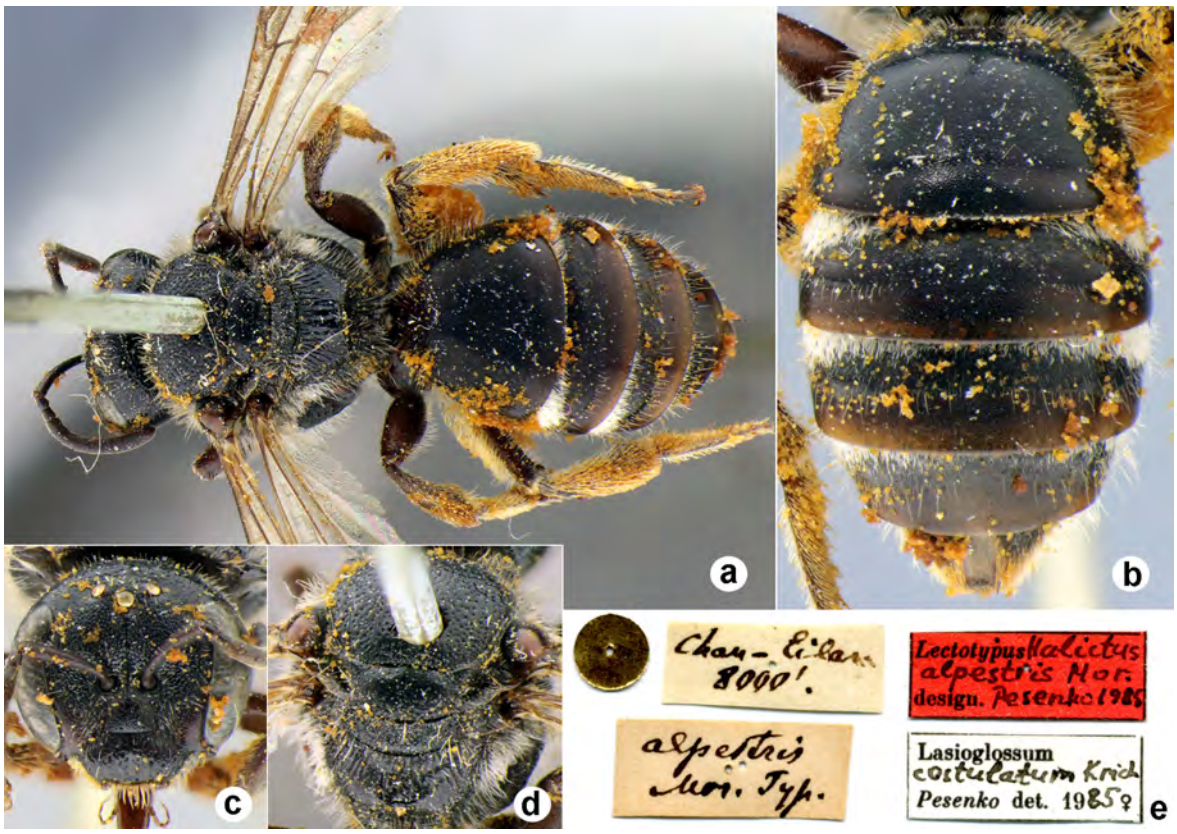
Halictus alpestris Morawitz, 1877: 88–89, ♀.

Type locality. Chan-Eilar (Azerbaijan).

Lectotype: ♀, designated by Pesenko 1986: 137, <golden circle> // Chan-Eilar [Azerbaijan, N Shaki, Khanaylar Ridge, 41°15′N 47°15′E], 8000′ [ft] // *alpestris* Mor. Typ. // Lectotypus *Halictus alpestris* Mor., design. Pesenko 1985 <red label> // *Lasioglossum costulatum* Krich., Pesenko det. 1985.



FIGURES 4a–e. *Halictus adabaschus* Blüthgen, 1931. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.



FIGURES 5a–e. *Halictus alpestris* Morawitz, 1877. Lectotype, female: a—habitus, dorsal view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

Current status. *Lasioglossum* (*Lasioglossum*) *costulatum* (Kriechbaumer, 1873) (synonymized by Alfken 1904: 1; Blüthgen 1922a: 46).

6. *Halictus anguliceps* Morawitz, 1893

(Figs 6a–e)

Halictus anguliceps Morawitz, 1893: 76–77, ♀.

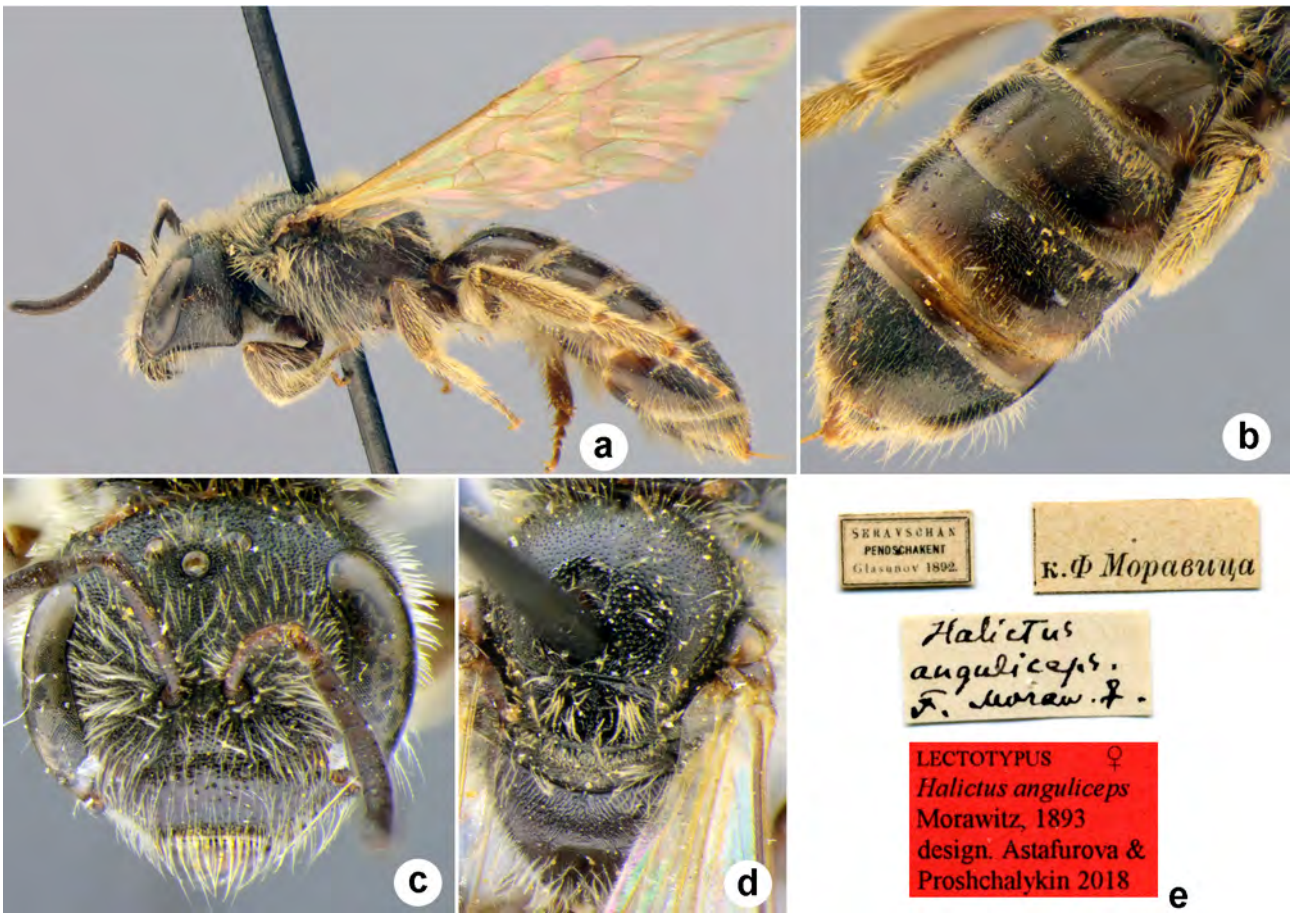
Type locality. Pendschakent (Tajikistan).

Lectotype (designated here): ♀, Seravchan, Pendschakent, [Tajikistan, Sogd Prov., Panjakent, 39°30′N 67°37′E], [leg. D.] Glasunov 1892 // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // *Halictus anguliceps* F. Moraw., ♀ // Lectotypus, ♀, *Halictus anguliceps* Morawitz, 1893, design. Astafurova & Proshchalykin 2018 <red label>.

Paralectotypes: 2 ♀, the same labels as in lectotype.

Remark. *Halictus anguliceps* Morawitz, 1893 was described from females collected in "Pendschakent" [Panjakent, Tajikistan]. There are three females in ZISP from this locality, which corresponds to the original description of F. Morawitz. One of this females is designated here as a lectotype of *H. anguliceps* to avoid any confusion about the status of its type specimens and to properly diagnose this species.

Current status. *Lasioglossum* (*Sphecodogastra*) *anguliceps* (Morawitz, 1893).



FIGURES 6a–e. *Halictus anguliceps* Morawitz, 1893. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

7. *Halictus atomarius* Morawitz, 1876
(Figs 7a–e)

Halictus atomarius Morawitz, 1876b: 218 (key), 254, ♀.

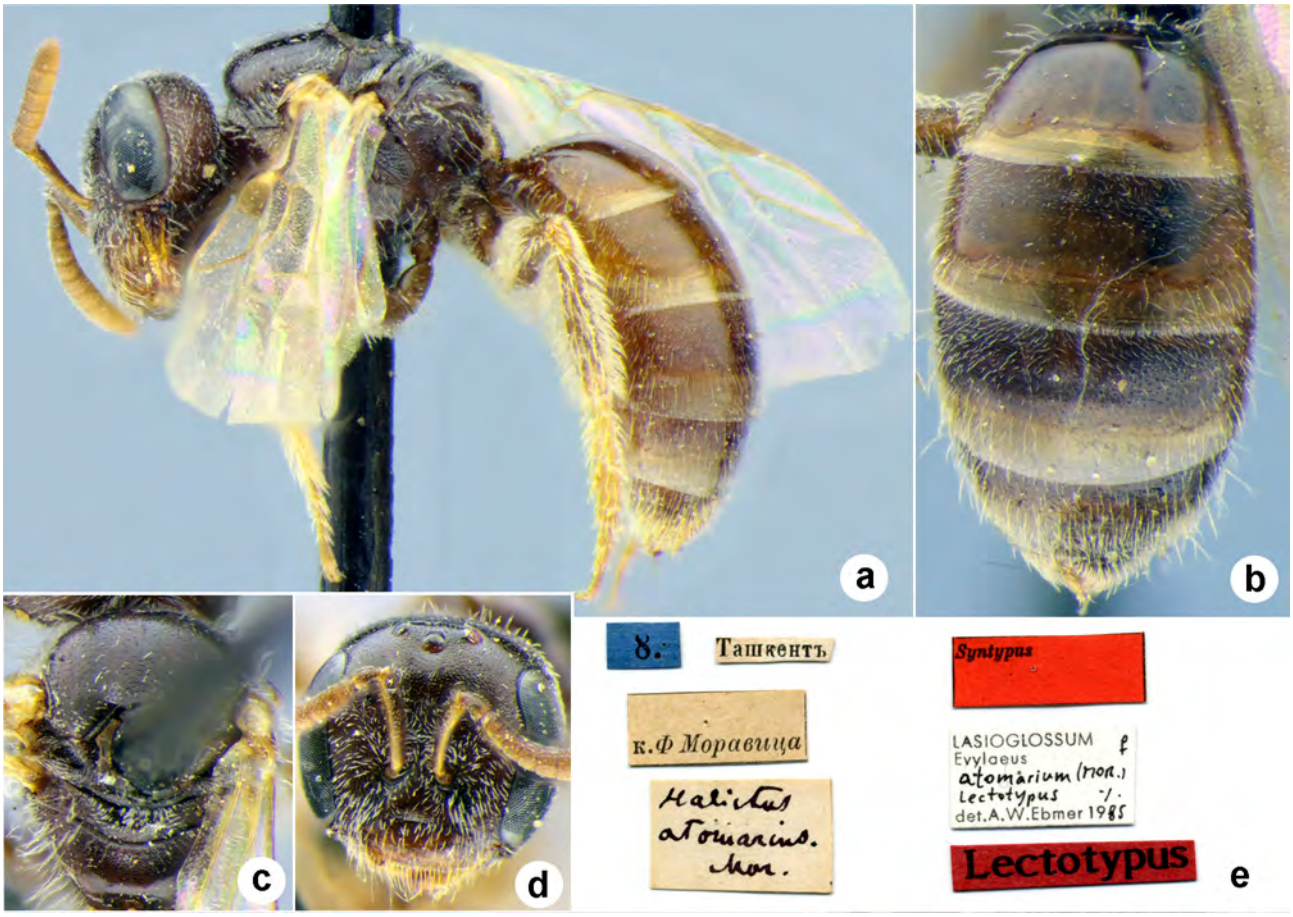
Type locality. Tashkent (Uzbekistan).

Lectotype: ♀, designated by Ebmer 1985b: 290, 8. [8.VIII.1870] <blue label> // Ташкентъ [Uzbekistan, Tashkent 41°18′N 69°16′E] // *Halictus atomarius* Mor. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] / / Syntypus <red label> // *Lasioglossum Evylaeus atomarium* (Mor.), ♀, Lectotypus, det. A.W. Ebmer 1985 // Lectotypus <red label>.

Paralectotype: 1 ♀, 8. [8.VIII.1870] <blue label> // Ташкентъ // *Halictus atomarius* Mor. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz].

Current status. *Lasioglossum* (*Evylaeus s.l.*) *politum atomarium* (Morawitz, 1876) (according to Ebmer 1988: 667).

Remarks. The subgenetic status of this species is controversial. Pesenko (2007) applied the name *Pyghalictus* Warncke, 1975, Michener (2007) synonymized *Pyghalictus* with *Dialictus* Robertson, 1901. However, the position of this species in the molecular phylogeny (Gibbs *et al*. 2013) is inconsistent. Here we use *Evylaeus s.l.* as a compromise choice.



FIGURES 7a–e. *Halictus atomarius* Morawitz, 1876. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

8. *Halictus bicallosus* Morawitz, 1874
(Figs 8a–e)

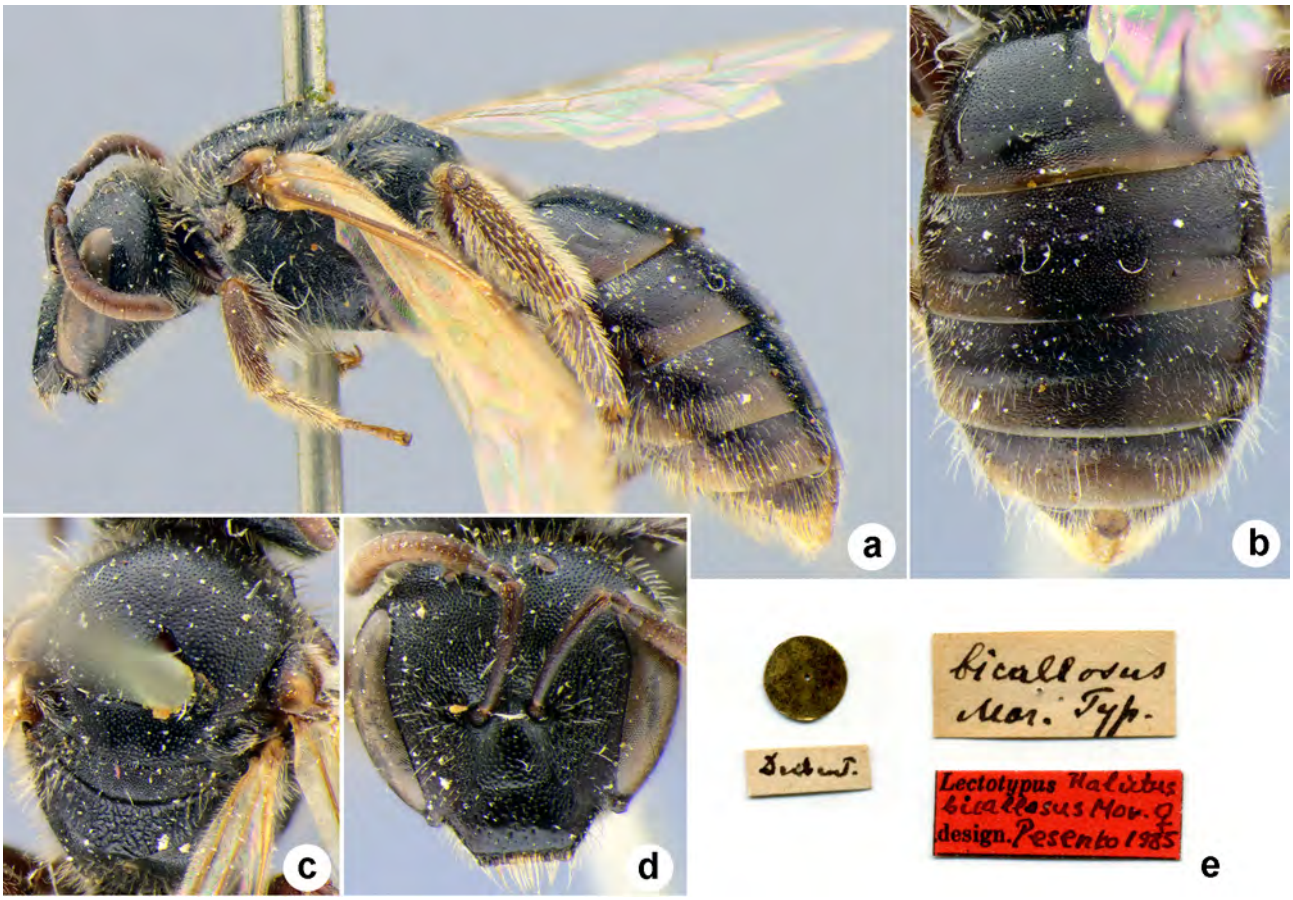
Halictus bicallosus Morawitz, 1874: 166, ♀.

Type locality. Derbent (Russia).

Lectotype: ♀, designated by Pesenko 1986: 124, <golden circle> // Derbent [Russia, Dagestan Republic, 42°03′N 48°17′E] // *bicallosus* Mor. Typ. // Lectotypus *Halictus bicallosus* Mor., ♀, design. Pesenko 1985 <red label>.

Paralectotypes: 2 ♀, Derbent // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // *Halictus bicallosus* Mor. // Paralectotypus, design. <red label>.

Current status. *Lasioglossum* (*Lasioglossum*) *bicallosum* (Morawitz, 1874).



FIGURES 8a–e. *Halictus bicallosus* Morawitz, 1874. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

9. *Halictus caspicus* Morawitz, 1874

(Figs 9a–e)

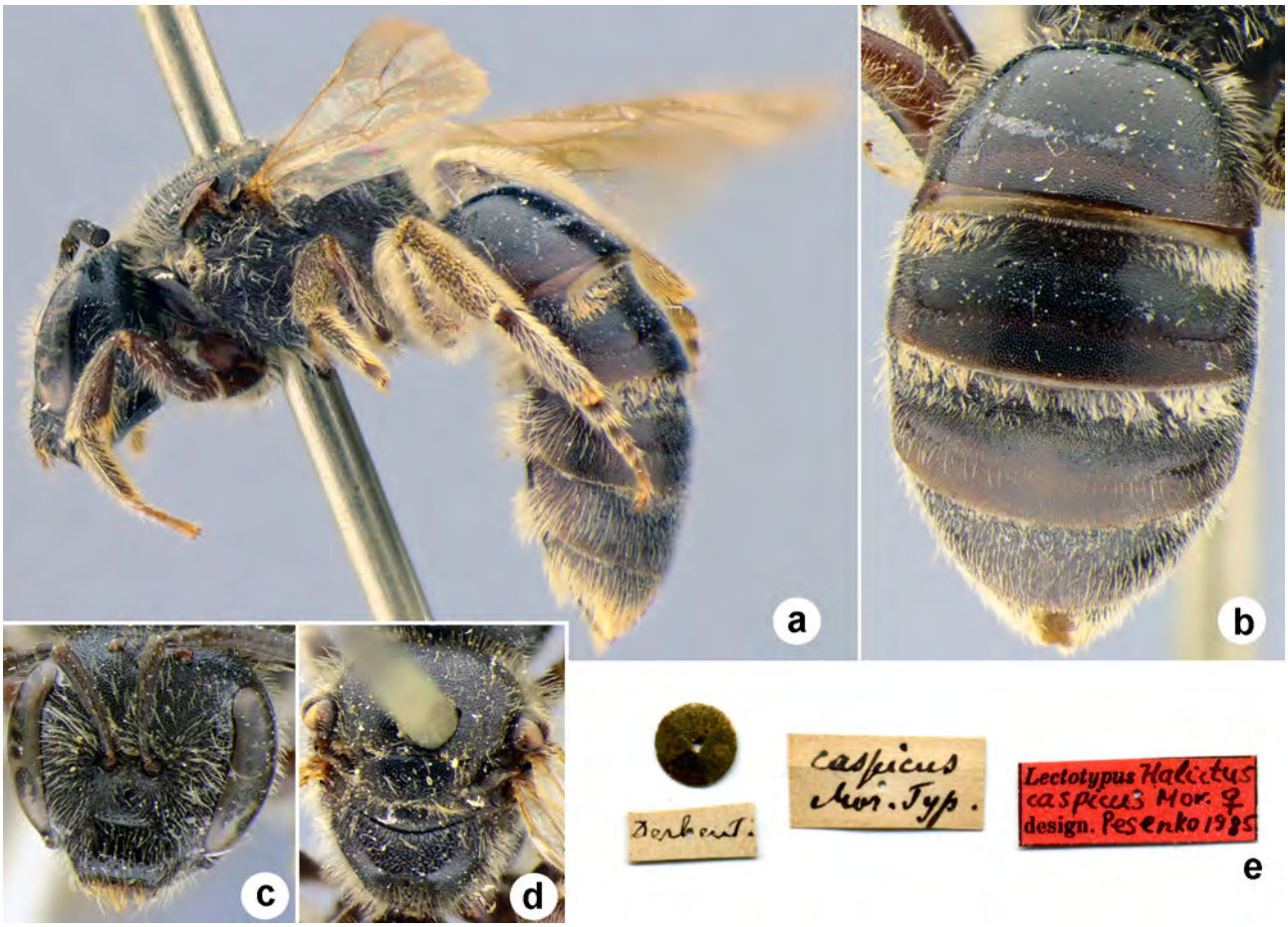
Halictus caspicus Morawitz, 1874: 164, ♀.

Type locality. Derbent (Russia).

Lectotype: ♀, designated by Pesenko 1986: 124, <golden circle> // Derbent [Russia, Dagestan Republic, 42°03′N 48°17′E] // *caspicus* Mor. Typ. // Lectotypus *Halictus caspicus* Mor., ♀, design. Pesenko 1985 <red label>.

Paralectotypes: 3 ♀, Derbent // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // *caspicus* Morawitz // Paralectotypus, design. <red label>.

Current status. *Lasioglossum* (*Lasioglossum*) *caspicum* (Morawitz, 1874).



FIGURES 9a–e. *Halictus caspicus* Morawitz, 1874. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

10. *Halictus chloropus* Morawitz, 1893

(Figs 10a–e)

Halictus chloropus Morawitz, 1893: 75, ♂.

Type locality. Sching (Tajikistan).

Lectotype: ♂, designated by Pesenko 1986: 130, Sching [Tajikistan, Sogd Prov., 30 km SSE Pendzhikent, 39°16′N 67°50′E], VI.3 // *Halictus chloropus* F. Moraw., ♂ // Lectotypus *Halictus chloropus* Mor., ♂, design. Pesenko 1986 <red label>.

Current status. *Lasioglossum* (*Lasioglossum*) *chloropus* (Morawitz, 1893).

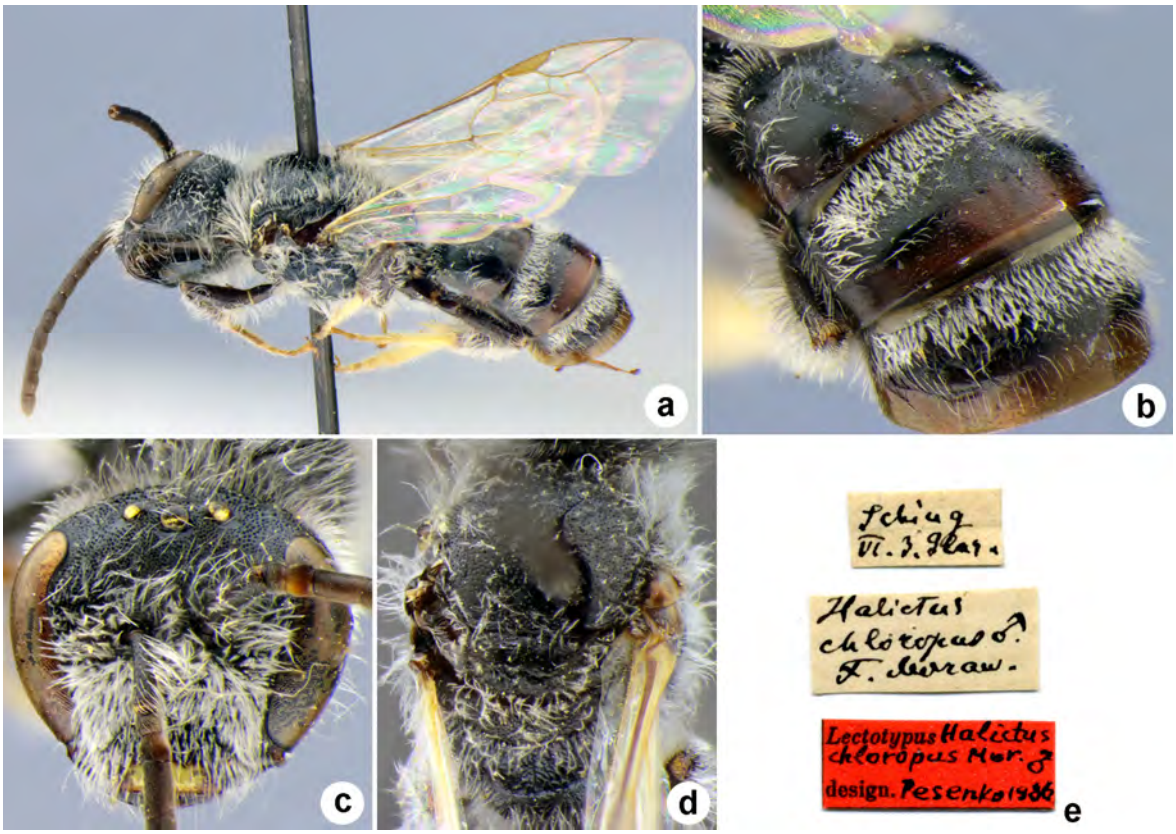
11. *Halictus coloratus* Morawitz, 1874

(Figs 11a–e)

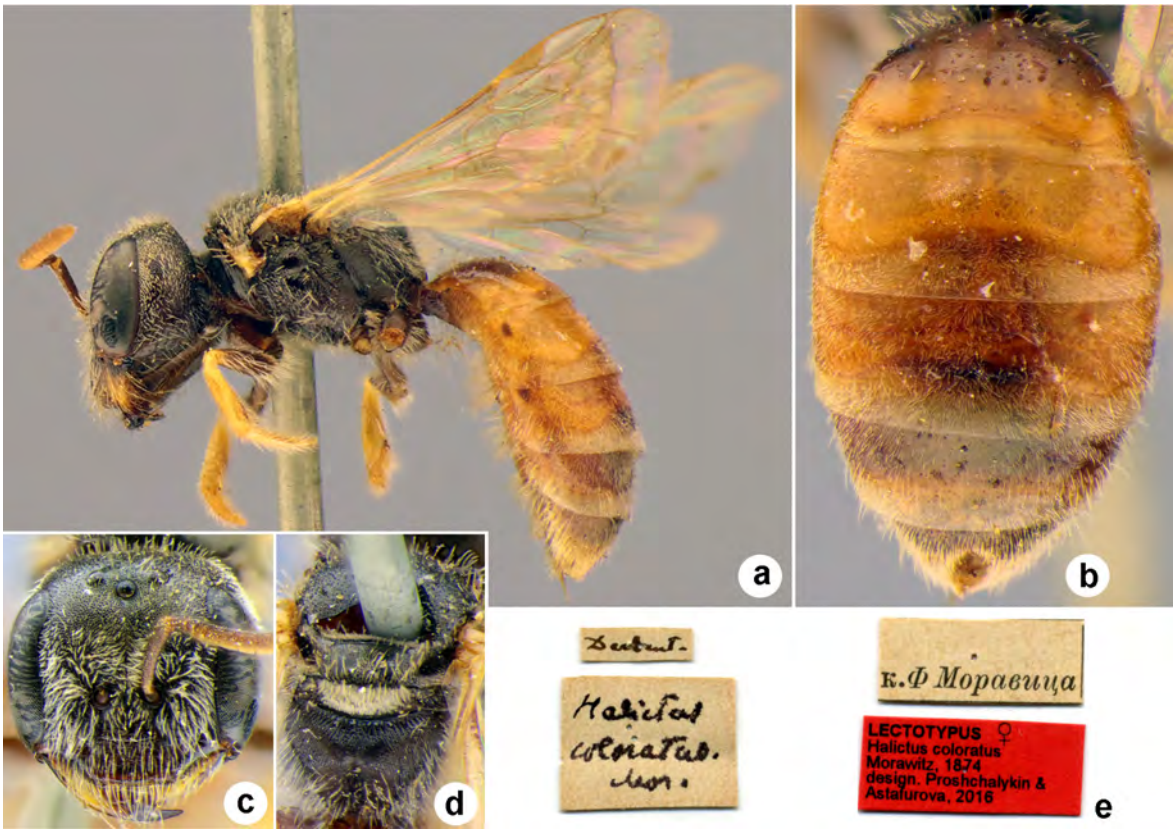
Halictus coloratus Morawitz, 1874: 167, ♀.

Type locality. Derbent (Russia).

Lectotype: ♀, designated by Proshchalykin & Astafurova 2016: 10, Derbent [Russia, Dagestan Republic, 42°03′N 48°17′E] // *Halictus coloratus* Mor. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Lectotypus *Halictus coloratus* Morawitz, 1874, ♀, design. Proshchalykin & Astafurova, 2016 <red label>.



FIGURES 10a–e. *Halictus chloropus* Morawitz, 1893. Lectotype, male: a—habitus, lateral view; b—metasoma, postero-lateral view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.



FIGURES 11a–e. *Halictus coloratus* Morawitz, 1874. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

Paralectotype: 1 ♀, Derbent, [leg. A.] Becker // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Paralectotypus, design. <red label>.

Current status. *Lasioglossum* (*Evylaeus s.l.*) *mandibulare* (Morawitz, 1866) (synonymized by Blüthgen 1931: 212). Specimens from type series of *Halictus coloratus* are red color morph of *Lasioglossum mandibulare*.

Remarks. This species belongs to *politum* group of species with problematic subgenetic status (see remarks to *Halictus atomarius* Morawitz, above).

12. *Halictus corvinus* Morawitz, 1877

(Figs 12a–e)

Halictus corvinus Morawitz, 1877: 89, ♀.

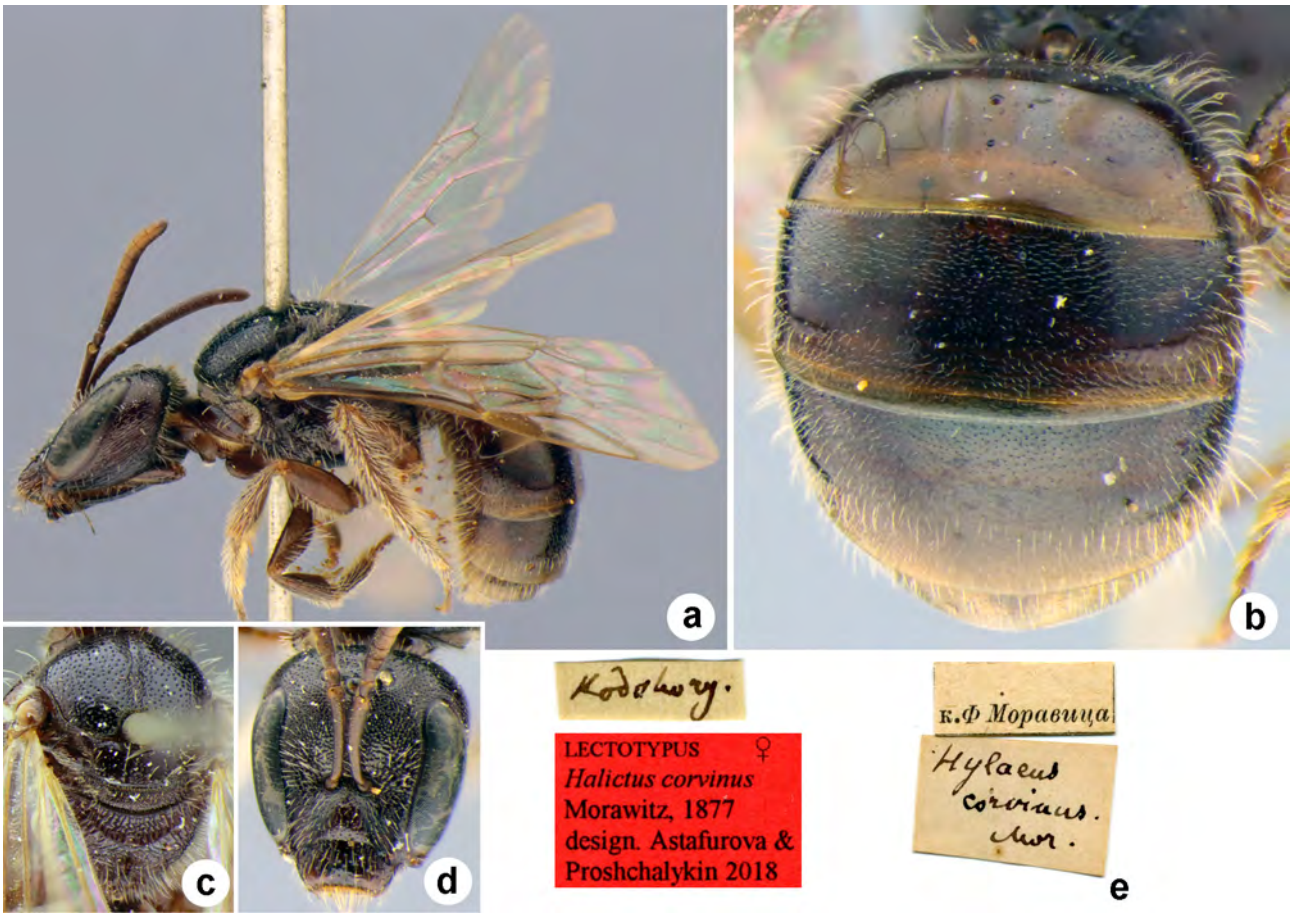
Type locality. Kodzhory (Georgia).

Lectotype (designated here): ♀, Kodzhory [Georgia, Kodzhori, 41°40′N 44°42′E] // *Halictus corvinus* Mor. / / к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Lectotypus *Halictus corvinus* Morawitz, 1877, ♀, design. Astafurova & Proshchalykin 2018 <red label>.

Paralectotypes: 2 ♀, the same labels as in lectotype.

Remark. *Halictus corvinus* Morawitz, 1877 was described from females collected in "Kodzhory" [Kodzhori, Georgia]. There are three females in ZISP from this locality, which corresponds to the original description of F. Morawitz. One of these females is designated here as the lectotype of *H. corvinus* to avoid any confusion about the status of its type specimens and to properly diagnose this species.

Current status. *Lasioglossum* (*Hemihalictus*) *corvinum* (Morawitz, 1877).



FIGURES 12a–e. *Halictus corvinus* Morawitz, 1877. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

13. *Halictus debilis* Morawitz, 1893
(Figs 13a–e)

Halictus debilis Morawitz, 1893: 77, ♀, ♂.

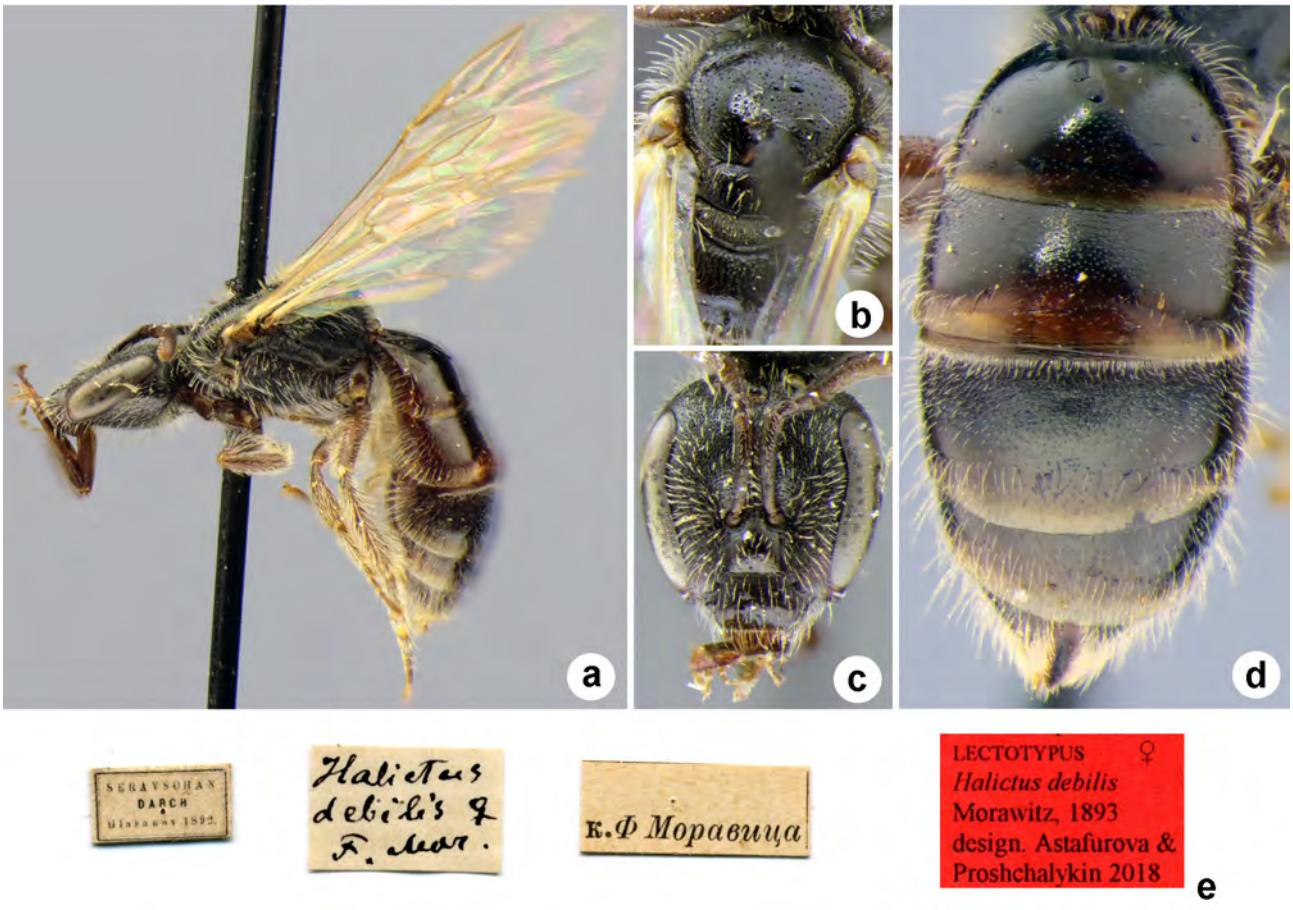
Type locality. Darch (Uzbekistan).

Lectotype (designated here): ♀, Seravshan, Darch [an irrigation ditch in Tashkent] [Uzbekistan, 41°18′N 69°16′E], [D.] Glasunov, 1892 // *Halictus debilis* F. Mor., ♀ // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Lectotypus *Halictus debilis* Morawitz, 1893, ♀, design. Astafurova & Proshchalykin 2018 <red label>.

Paralectotypes: 2 ♂, the same labels as in lectotype.

Remark. *Halictus debilis* Morawitz, 1893 was described from males collected in Darch [Uzbekistan]. There are three males in ZISP from this locality, which corresponds to the original description of F. Morawitz. One of these males is designated here as the lectotype of *H. debilis* to avoid any confusion about the status of its type specimens and to properly diagnose this species.

Current status. *Lasioglossum* (*Dialictus s.l.*) *debile* (Morawitz, 1877).



FIGURES 13a–e. *Halictus debilis* Morawitz, 1893. Lectotype, female: a—habitus, lateral view; b—mesosoma, dorsal view; c—head, frontal view; d—metasoma, dorsal view; e—labels.

14. *Halictus denticollis* Morawitz, 1891
(Figs 14a–e)

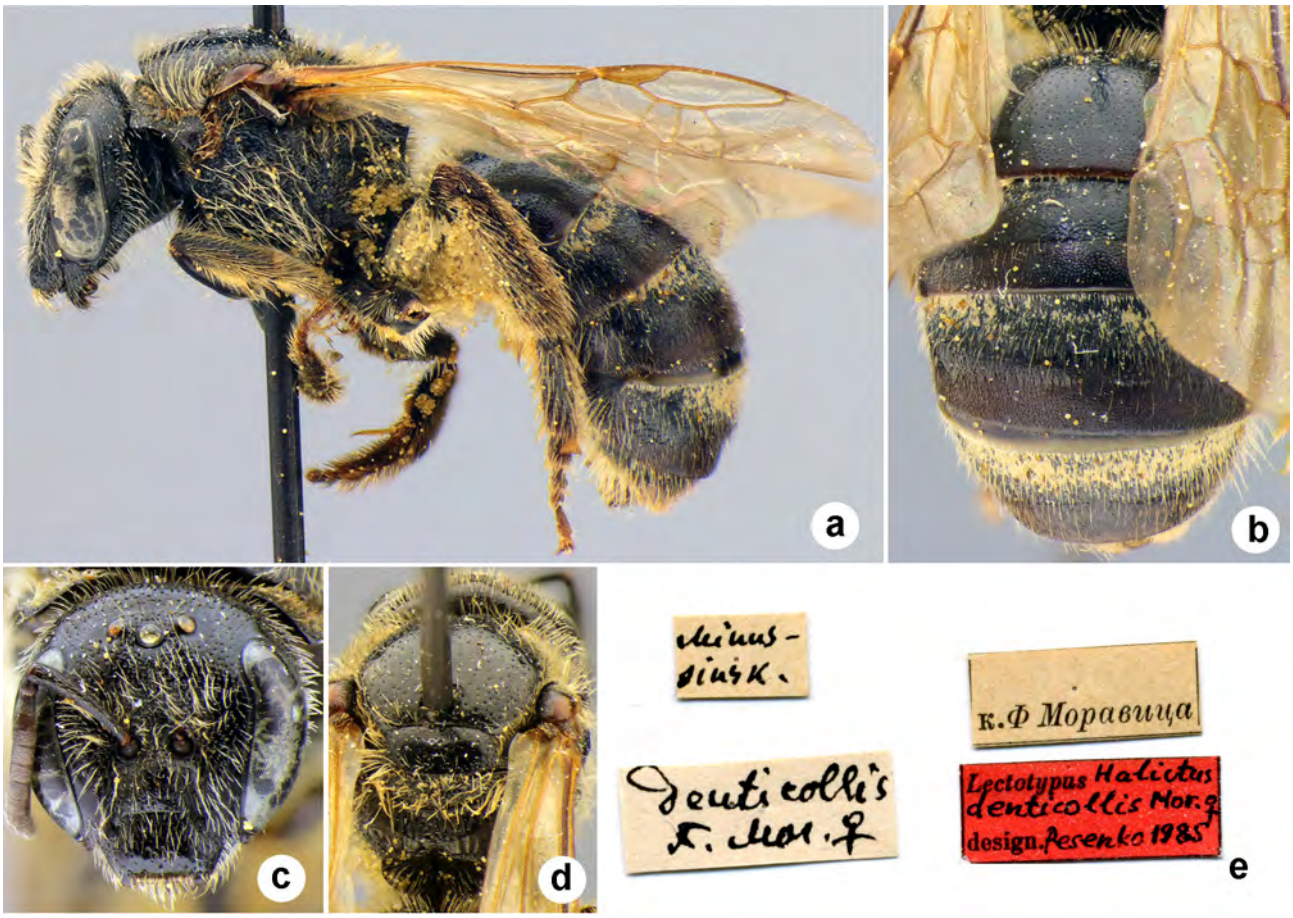
Halictus denticollis Morawitz, 1891: 145, ♀.

Type locality. Minussinsk (Russia).

Lectotype: ♀, designated by Pesenko 1986: 139, Minussinsk [Russia, Krasnoyarsk Territory, Minusinsk, 53°42′N 91°41′E] // *denticollis* F. Mor., ♀ // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Lectotypus *Halictus denticollis* Mor., ♀, design. Pesenko 1985 <red label>.

Paralectotypes: 2 ♀, the same labels as in lectotype.

Current status. *Lasioglossum* (*Leuchalictus*) *denticolle* (Morawitz, 1891).



FIGURES 14a–e. *Halictus denticollis* Morawitz, 1891. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

15. *Halictus dmitrijewi* Morawitz, 1891

(Figs 15a–e)

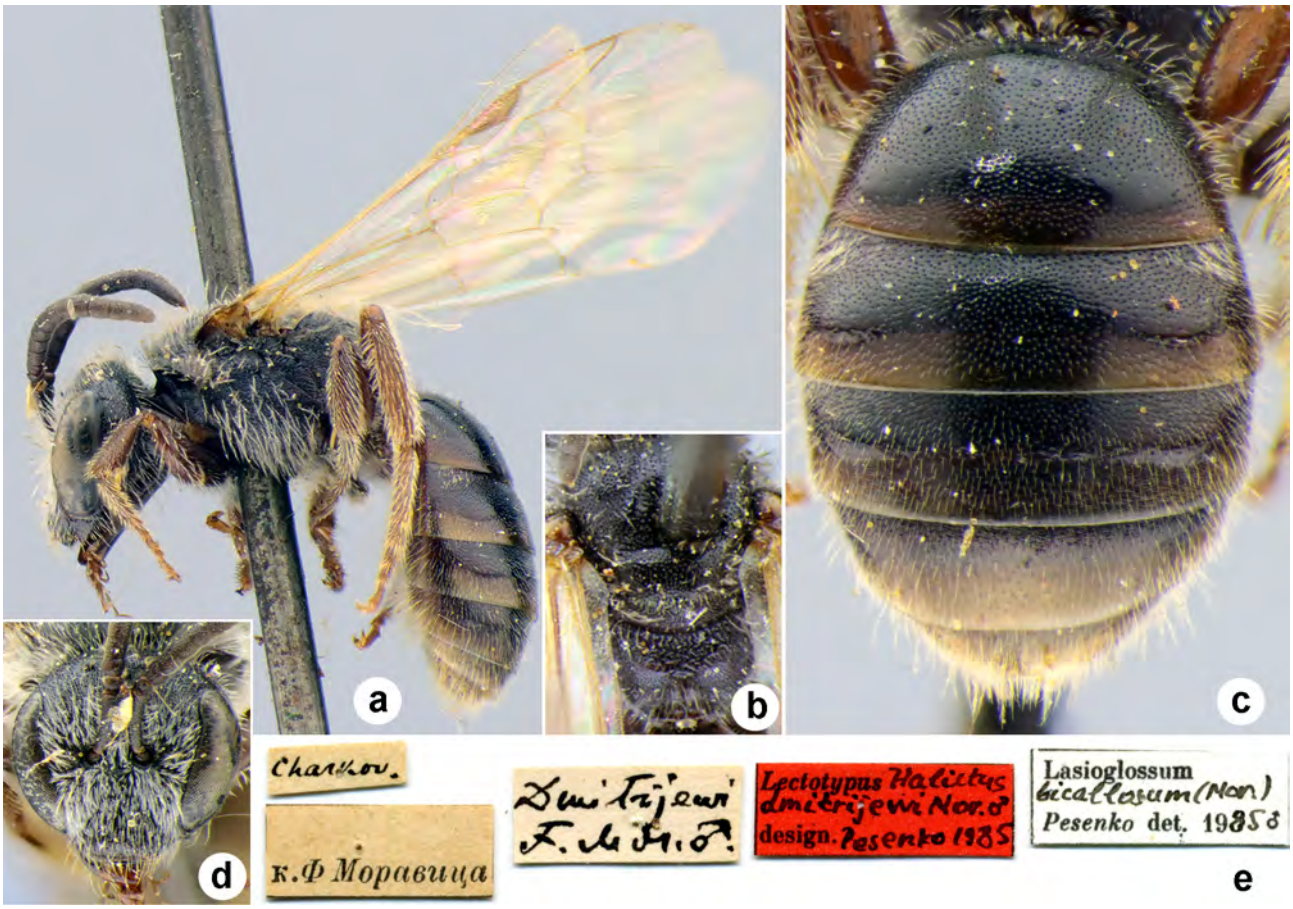
Halictus dmitrijewi Morawitz, 1891: 146, ♂.

Type locality. Charkov (Ukraine).

Lectotype: ♂, designated by Pesenko 1986: 124, Charkov [Ukraine, Kharkov, 49°58′N 36°11′E] // *dmitrijewi* F. Mor., ♂ // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Lectotypus *Halictus dmitrijewi* Mor., ♂, design. Pesenko 1985 <red label> // *Lasioglossum bicallosum* (Mor.), Pesenko det. 1985.

Paralectotypes: 2 ♂, the same labels as in lectotype.

Current status. *Lasioglossum* (*Lasioglossum*) *bicallosum* (Morawitz, 1874) (synonymy by Blüthgen 1922b: 316).



FIGURES 15a–e. *Halictus dmitrijewi* Morawitz, 1891. Lectotype, male: a—habitus, lateral view; b—mesosoma, dorsal view; c—metasoma, dorsal view; d—head, frontal view; e—labels.

16. *Halictus fallax* Morawitz, 1874

(Figs 16a–e)

Halictus fallax Morawitz, 1874: 163, ♀.

Type locality. Derbent (Russia).

Lectotype: ♀, designated by Pesenko 1986: 131, Derbent [Russia, Dagestan Republic, 42°03′N 48°17′E] // *Halictus fallax* Mor. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Lectotypus *Halictus fallax* Mor., ♀, design. Pesenko 1985 <red label>.

Paralectotypes: 4 ♀, the same labels as in lectotype.

Current status. *Lasioglossum* (*Lasioglossum*) *fallax* (Morawitz, 1874).

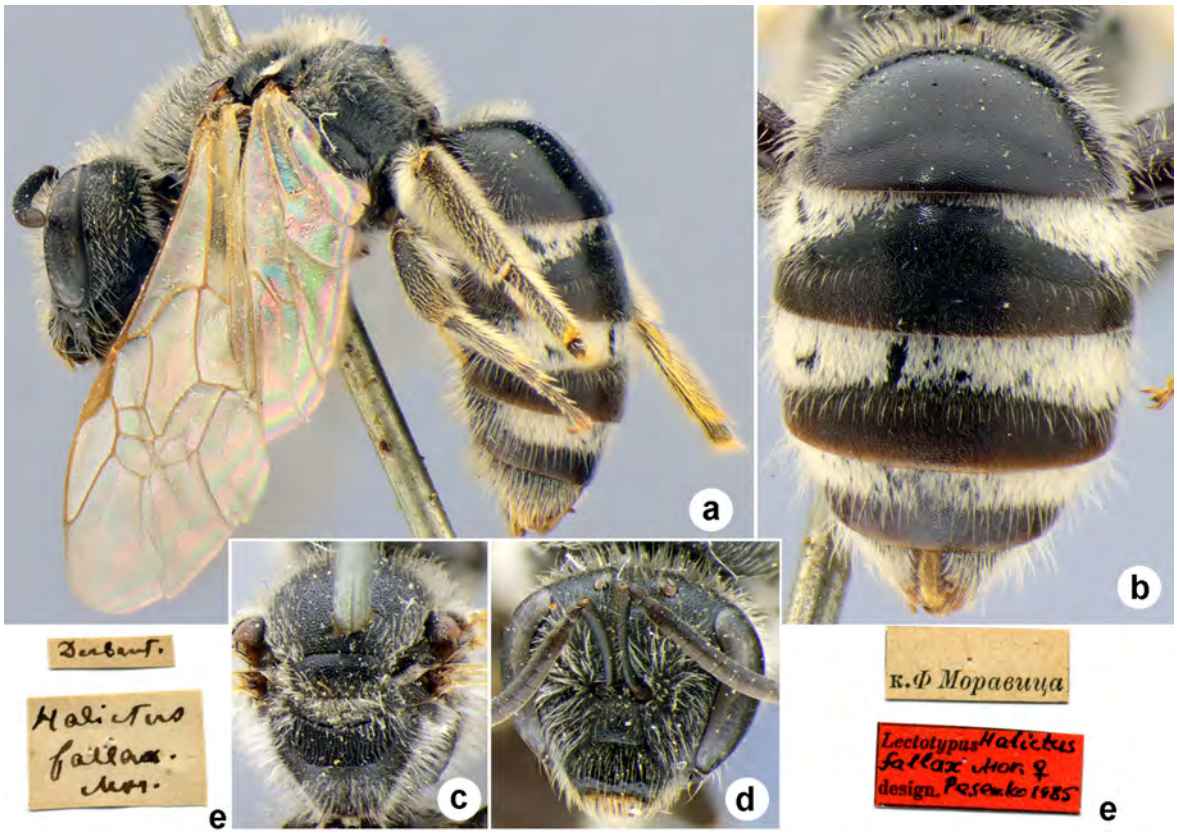
17. *Halictus glabriusculus* Morawitz, 1872

(Figs 17a–e)

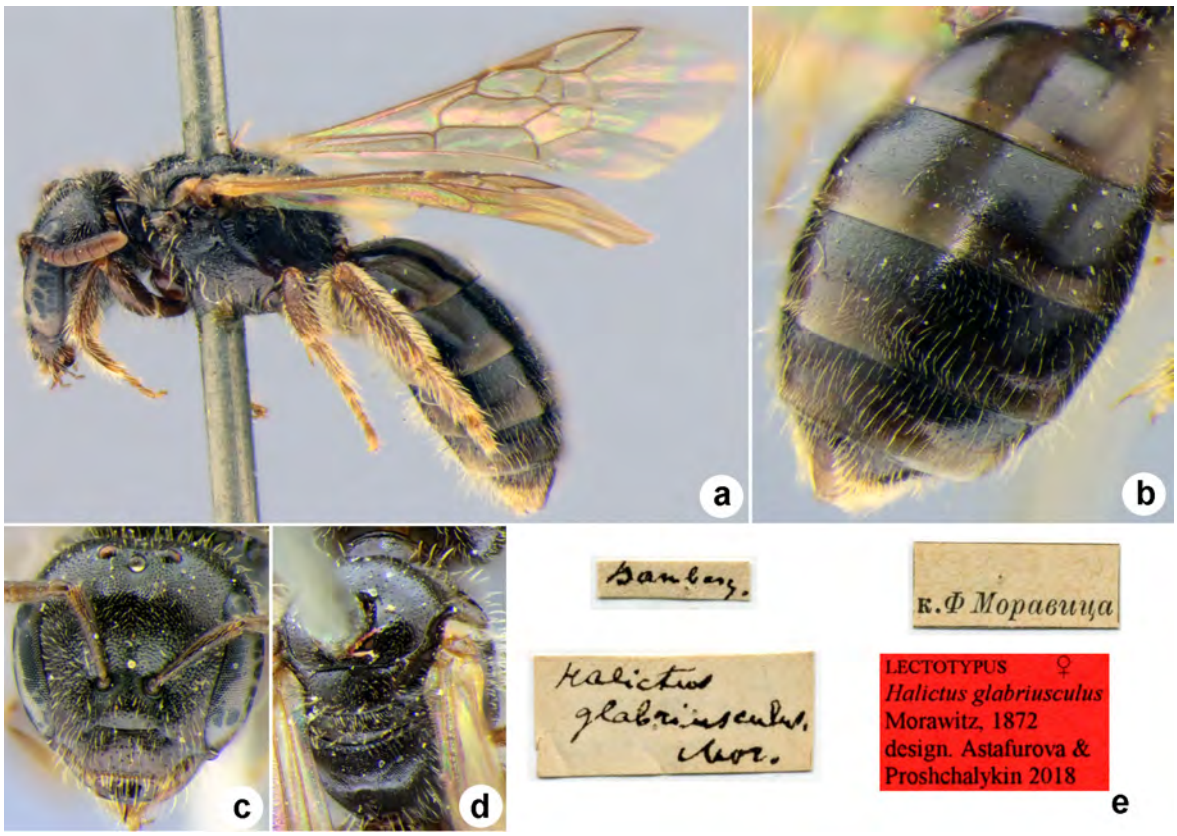
Halictus glabriusculus Morawitz, 1872: 372, ♀, ♂.

Type locality. Bamberg (Germany), Meran (Italy).

Lectotype (designated here): ♀, Bamberg [Germany, 49°53′N 10°53′E] // *Halictus glabriusculus* Mor. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Lectotypus *Halictus glabriusculus* Morawitz, 1872, ♀, design. Astafurova & Proshchalykin 2018 <red label>.



FIGURES 16a–e. *Halictus fallax* Morawitz, 1874. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.



FIGURES 17a–e. *Halictus glabriusculus* Morawitz, 1872. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

Paralectotypes: 1 ♀, 1 ♂, the same labels as in lectotype.

Remark. *Halictus glabriusculus* Morawitz, 1872 was described from specimens of both sexes collected in Bamberg [Germany] and "Meran" [Merano, Italy]. There are three specimens (two females and one male) in ZISP from Bamberg, which corresponds to the original description of F. Morawitz. One of these specimens (female) is designated here as the lectotype of *H. glabriusculus* to avoid any confusion about the status of its type specimens and to properly diagnose this species.

Current status. *Lasioglossum* (*Evylaeus s.l.*) *glabriusculum* (Morawitz, 1872).

18. *Halictus gracilis* Morawitz, 1865

(Figs 18a–e)

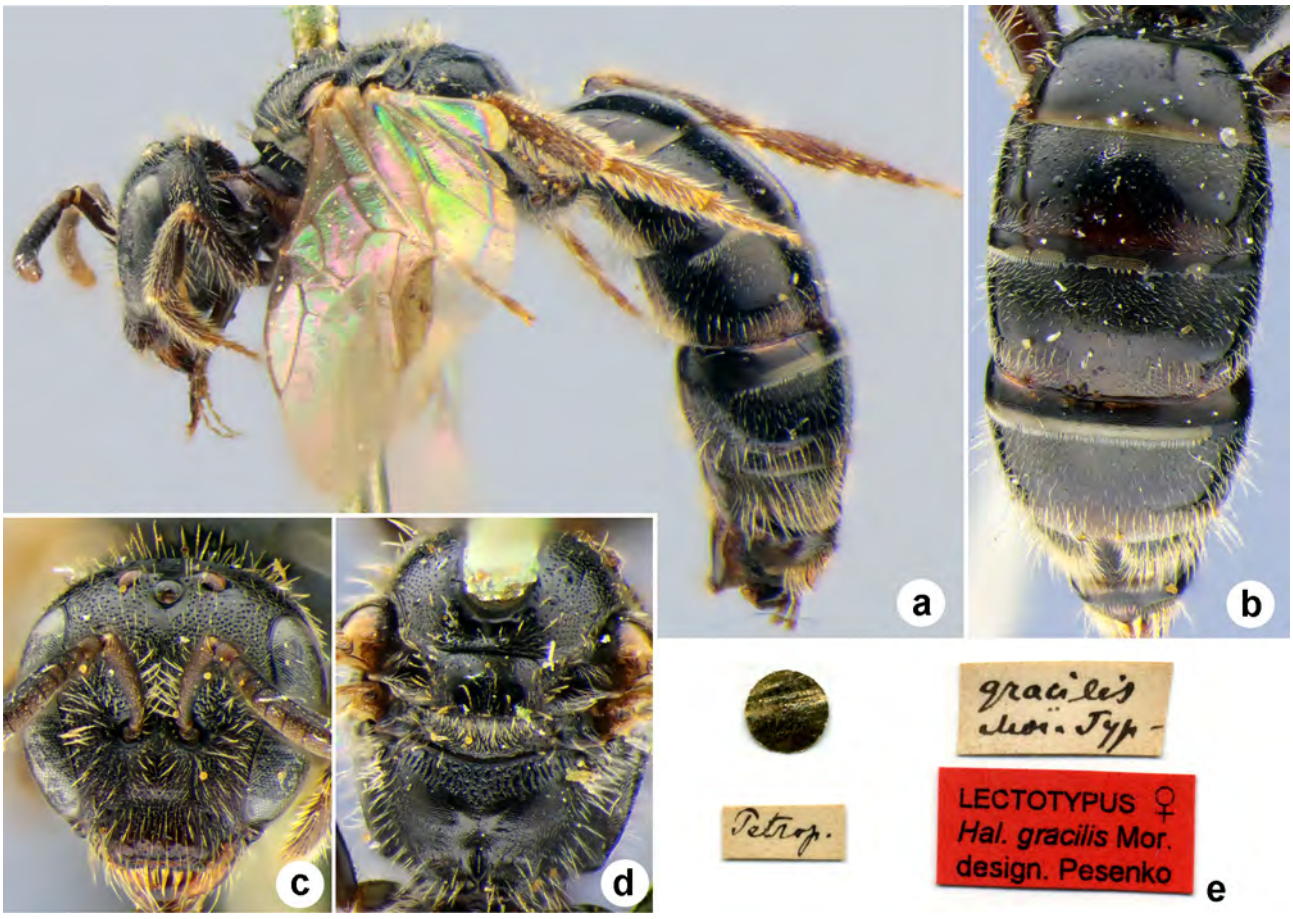
Halictus gracilis Morawitz, 1865: 77, ♀, ♂.

Type locality. Petrop. (Russia).

Lectotype: ♀, designated by Pesenko 2007: 108, <golden circle> // Petrop[olis] [Russia, St. Petersburg, 59°57′N 30°19′E] // *gracilis* Mor. Typ. // Lectotypus *Hal. gracilis* Mor., ♀, design. Pesenko <red label].

Paralectotypes: 3 ♀, 2 ♂, the same labels as in lectotype; 2 ♀, 13 ♂, Pargola [Leningrad Province Pargolovo], VIII.[1916–1923] // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Paralectotypus *Hal. gracilis* Mor., design. Pesenko <red label>.

Current status. *Lasioglossum* (*Hemihalictus*) *lucidulum* (Schenck, 1861) (synonymy by Schenck 1874: 163). Senior homonym of *Halictus gracilis* Robertson 1890: 316 [= *Lasioglossum foxii* (Robertson 1895)].



FIGURES 18a–b. *Halictus gracilis* Morawitz, 1865. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

19. *Halictus gussakovskii* Blüthgen, 1929
(Figs 19a–e)

Halictus gussakovskii Blüthgen, 1929: 74, Figs 6a-6c, ♀, ♂.

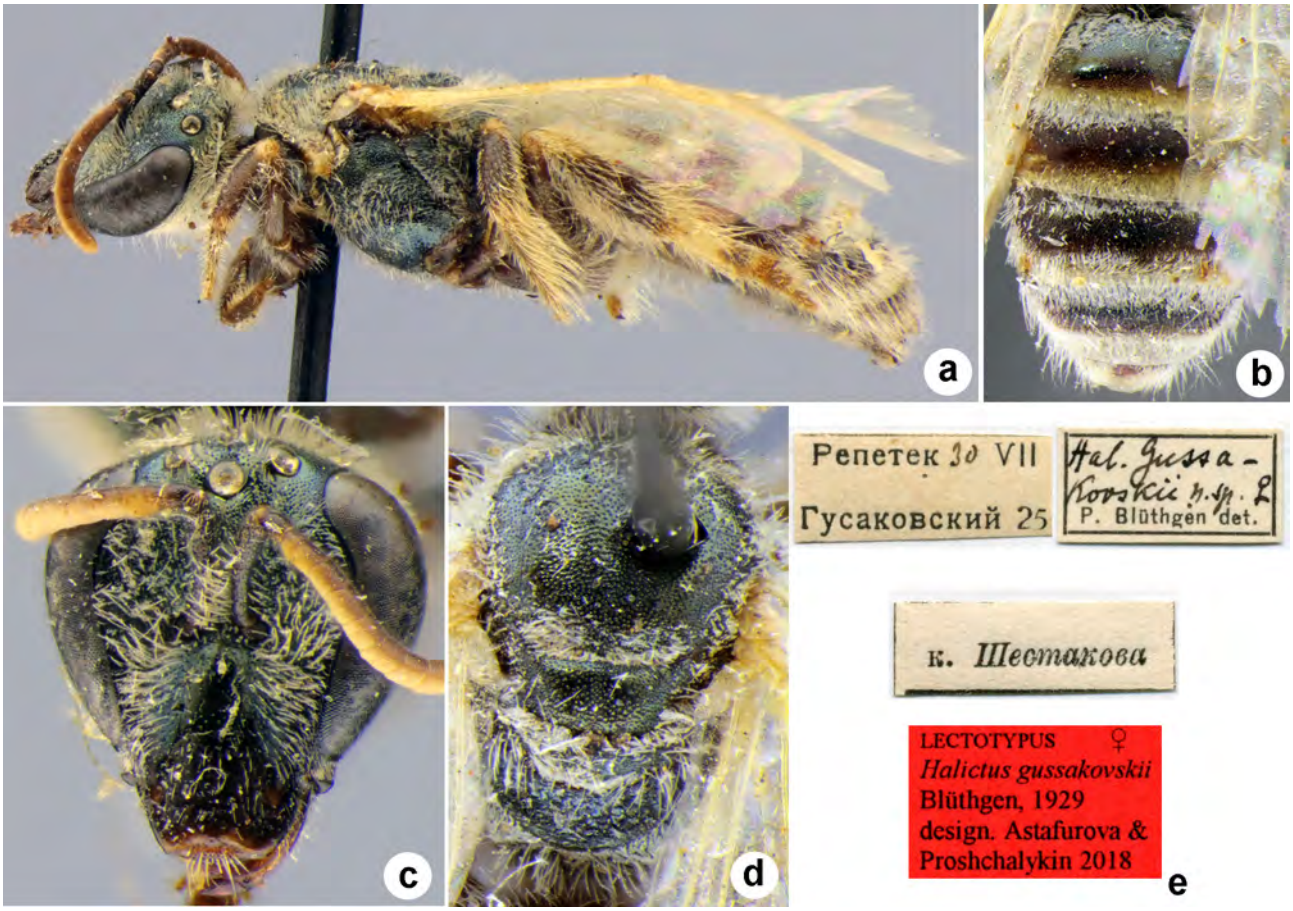
Type locality. Repetek (Turkmenistan).

Lectotype (designated here): ♀, Репетек [Turkmenistan, Repetek, 70 km SW Turkmenabad, 38°33′N 63°10′E], 30.VII.[19]25, Гуссаковский [V. Gussakovskij] // к.[оллекция] Шестакова [Collection of A. Shestakov] // *Hal. gussakovskii* sp. n., ♀, P. Blüthgen det. // Lectotypus *Halictus gussakovskii* Blüthgen, 1929, ♀, design. Astafurova & Proshchalykin 2018 <red label>.

Paralectotype: 1 ♂, the same label as in lectotype, but 11.VII.[19]25.

Remark. *Halictus gussakovskii* Blüthgen, 1929 was described from specimens of both sexes collected in Repetek [Turkmenistan]. There are two specimens (female and male) in ZISP from this locality, which corresponds to the original description of P. Blüthgen. One of these specimens (female) is designated here as the lectotype of *H. gussakovskii* to avoid any confusion about the status of its type specimens and to properly diagnose this species.

Current status. *Lasioglossum* (*Dialyctus*) *gussakovskii* (Blüthgen, 1929).



FIGURES 19a–e. *Halictus gussakovskii* Blüthgen, 1929. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

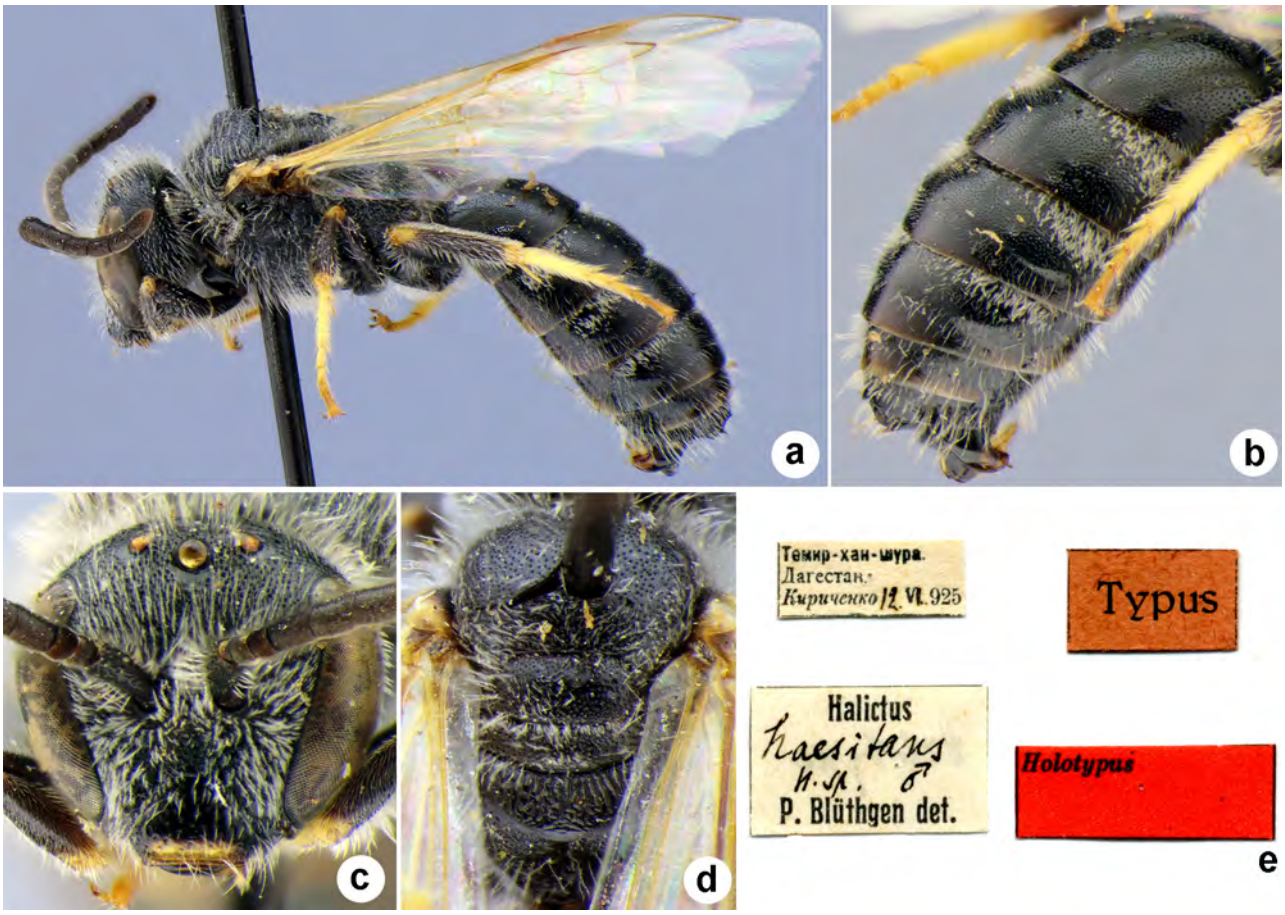
20. *Halictus haesitans* Blüthgen, 1931
(Figs 20a–e)

Halictus haesitans Blüthgen, 1931: 348, Figs 7a, b, ♂.

Type locality. Temir-khan-schura, Dagestan (Russia); Elisabethopol (Azerbaijan).

Holotype: ♂, Дагестан, Темир-хан-шура [Russia, Dagestan Republic, Temir-khan-schura(=Buinaksk), 42°49′N 47°07′E], 12.VI.[1]925, Кириченко [A. Kirichenko] // Typus <red label> // Halictus haesitans n. sp., ♂, P. Blüthgen det. // Holotypus <red label>.

Current status. *Lasioglossum* (*Lasioglossum*) *korbi* (Blüthgen, 1929) (synonymy by Blüthgen 1931: 350).



FIGURES 20a–e. *Halictus haesitans* Blüthgen, 1931. Holotype, male: a—habitus, lateral view; b—metasoma, postero-lateral view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

21. *Halictus hyalinipennis* Morawitz, 1876

(Figs 21a–e)

Halictus hyalinipennis Morawitz, 1876b: 218 (key to females), 220 (key to males), 253–254, ♀, ♂.

Type locality. Tashkent, Ferghana (Uzbekistan), Seravshan river valley (Tajikistan).

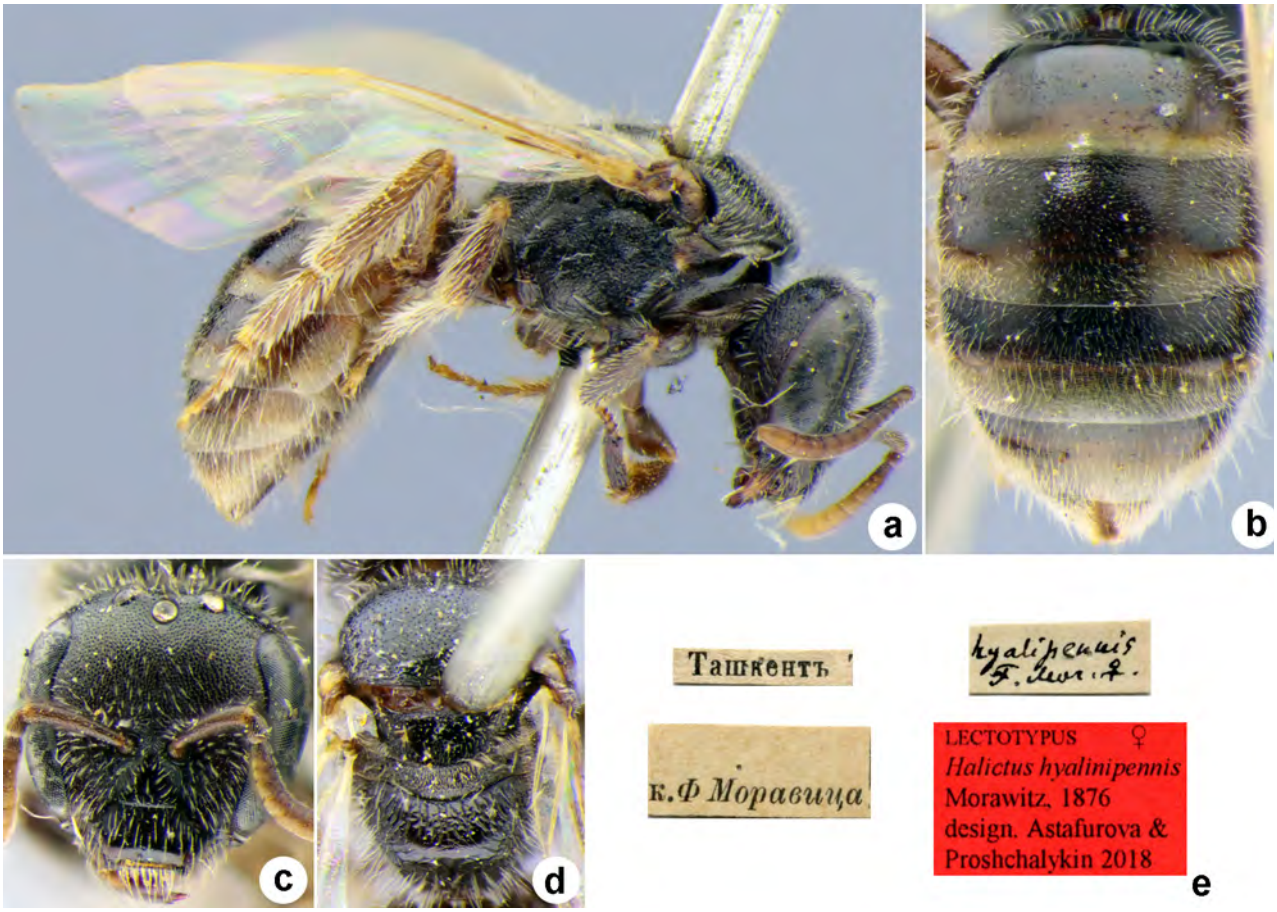
Lectotype (designated here): ♀, Ташкентъ [Tashkent, Uzbekistan, 41°18′N 69°16′E] // *hyalinipennis* F. Mor., ♀ // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Lectotypus *Halictus hyalinipennis* Morawitz, 1876, ♀, design. Astafurova & Proshchalykin 2018 <red label>.

Paralectotypes: 1 ♀, Шагимарданъ [Shagimardan], 3. [3.VII.1871] // к.[оллекция] Ф. Моравица [Collection of F. Morawitz]; 1 ♂, Така [Taka] // к.[оллекция] Ф. Моравица [Collection of F. Morawitz]; 1 ♀, 1 ♂, Сохъ [Sokh], 29. [29.VI.1871] // к.[оллекция] Ф. Моравица [Collection of F. Morawitz]; 1 ♂, Уч-Курганъ [Uch-Kurgan] // к.[оллекция] Ф. Моравица [Collection of F. Morawitz]; 2 ♀, Ташкентъ [Tashkent] // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Paralectotypus *Halictus hyalinipennis* Morawitz, 1876, ♀, design. Astafurova & Proshchalykin 2018 <red label>.

Remark. *Halictus hyalinipennis* Morawitz, 1876 was described from specimens of both sexes collected in Tashkent, Ferghana [Uzbekistan] and Seravshan river valley [Tajikistan]. There are eight specimens (five females and three males) in ZISP from these localities, which correspond to the original description of F. Morawitz. One of

these specimens (female) is designated here as the lectotype of *H. gussakovskii* to avoid any confusion about the status of its type specimens and to properly diagnose this species.

Current status. *Lasioglossum* (*Sphecodogastra*) *hyalinipenne* (Morawitz, 1876).



FIGURES 21a–e. *Halictus hyalinipennis* Morawitz, 1876. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

22. *Halictus keriensis* Blüthgen, 1931

(Figs 22a–e)

Halictus keriensis Blüthgen, 1931: 392, ♀.

Type locality. Oase Keria (China).

Holotype: ♀, Oasis Keria [China, Xinjiang, Yutian, 36°03′N 81°36′E] // [N.] Przhevalsky [leg.] // Typus <red label> // *Halictus keriensis* n. sp., ♂ [sic!], P. Blüthgen det. // Holotypus <red label>.

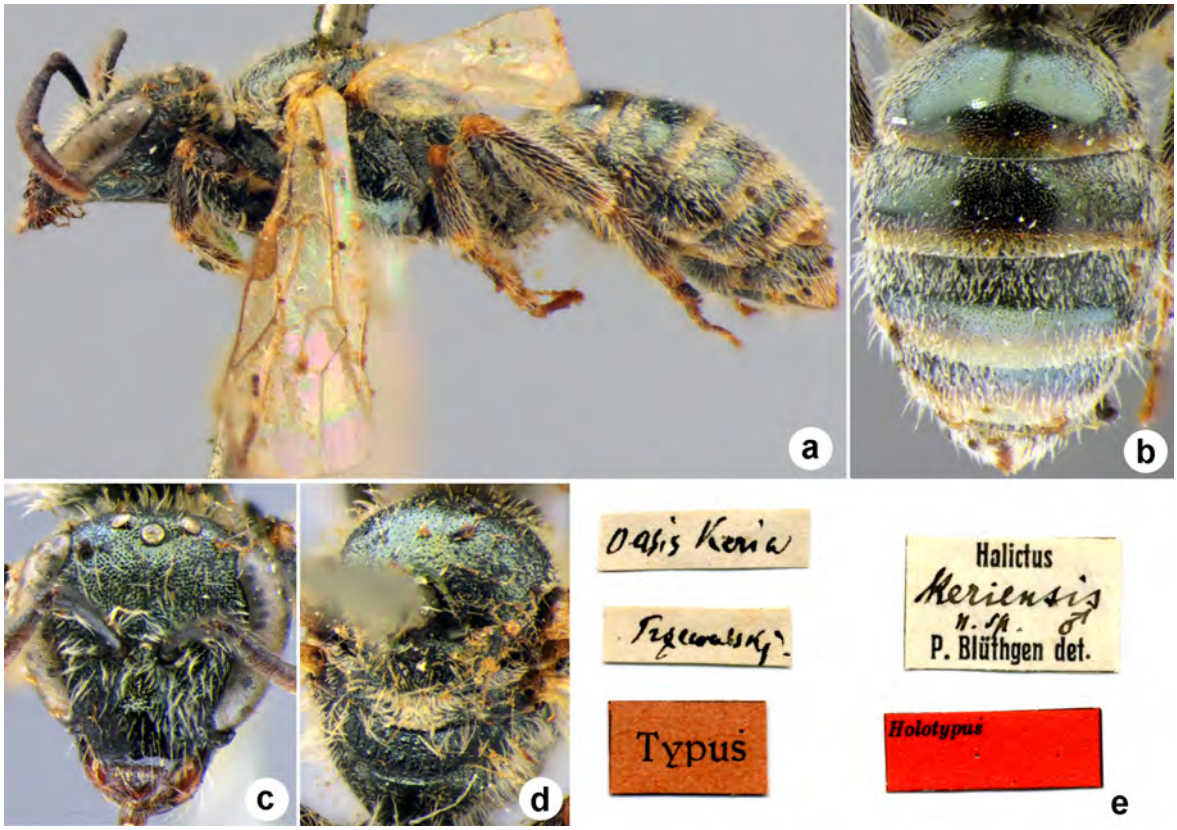
Current status. *Lasioglossum* (*Dialictus*) *centesimum keriensis* (Blüthgen, 1931) (according to Ebmer 1982: 218).

23. *Halictus laevinodis* Morawitz, 1876

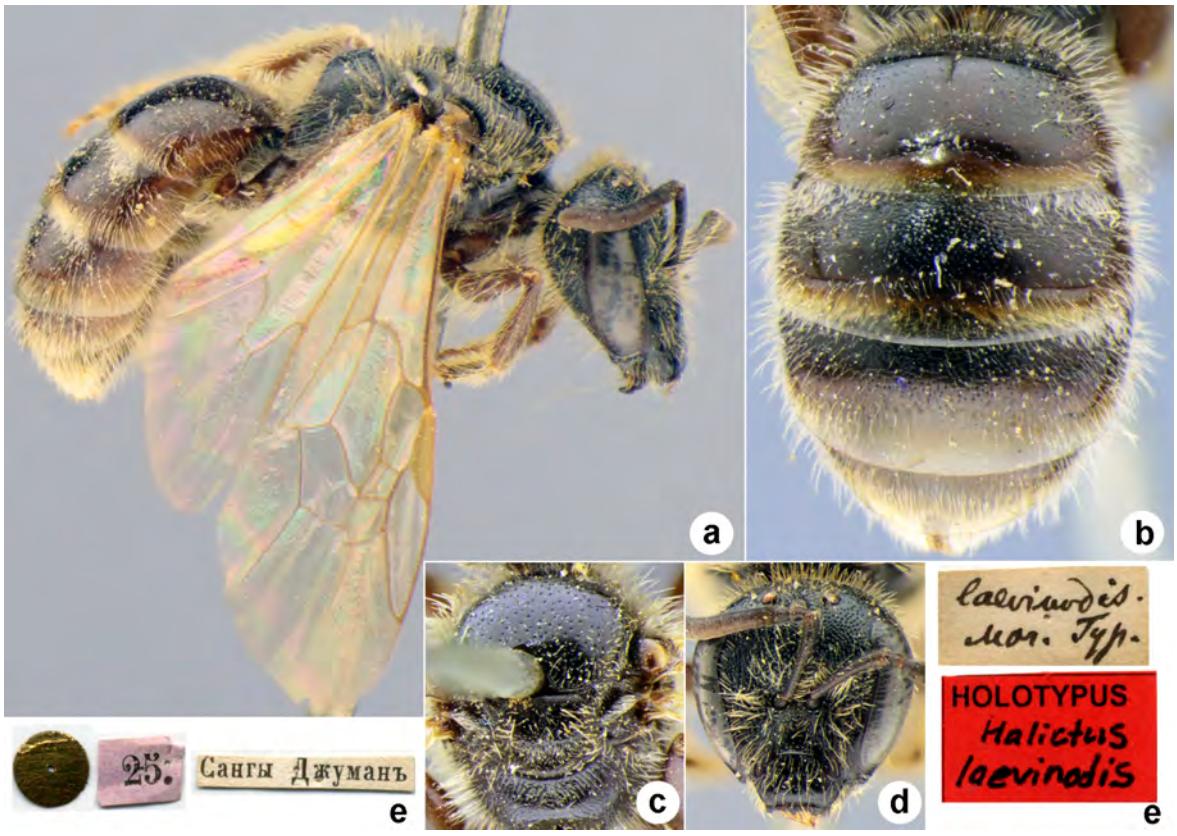
(Figs 23a–e)

Halictus laevinodis Morawitz, 1876b: 218 (key to females), 248, ♀.

Type locality. Seravchan valley (Uzbekistan).



FIGURES 22a–e. *Halictus keriensis* Blüthgen, 1931. Holotype, female(!): a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.



FIGURES 23a–e. *Halictus laevinodis* Morawitz, 1876. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

Holotype: ♀, <golden circle> // Сангы-джуманъ [Uzbekistan, Sangy-dzhuman, 30 km SSE Samarkand, Zeravshan Ridge, 39°27′N 67°14′E] // 25.[III.1869] // *laevinodis* Mor. Typ. // Holotypus *Halictus laevinodis* <red label>.

Current status. *Lasioglossum* (*Hemihalictus*) *laevinode* (Morawitz, 1876).

24. *Halictus laticeps* Morawitz, 1890

(Figs 24a–e)

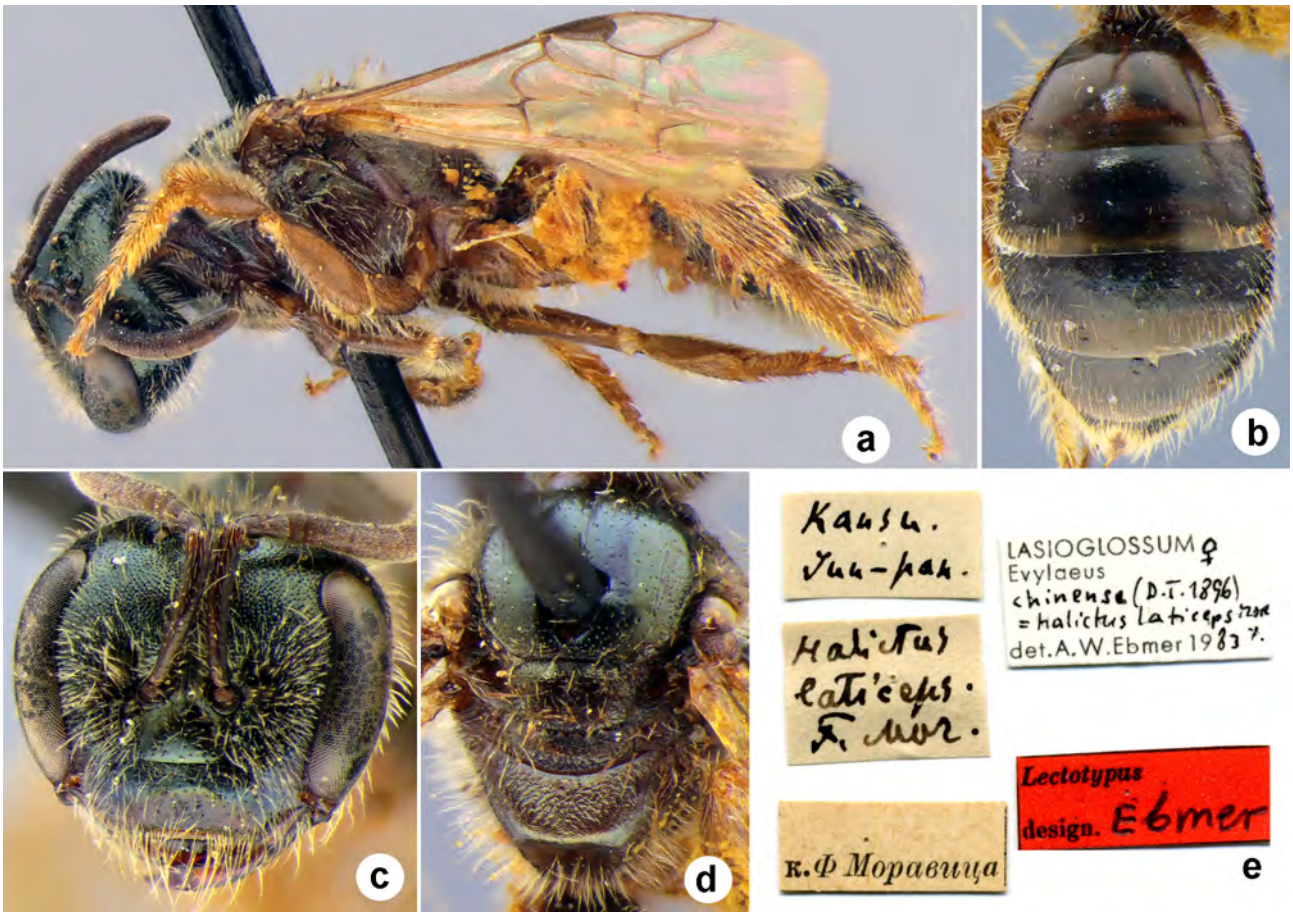
Halictus laticeps Morawitz, 1890: 367, ♀.

Type locality. Sun-pan (China).

Lectotype: ♀, designated by Ebmer 1985a: 218, Kansu, Sun-pan [China, Sichuan Province, Song Pan, Sungqu, 32°39′N 103°36′E] // *Halictus laticeps* F. Mor. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // *Lasioglossum Evylaeus chinense* (D.T. 1886) = *Halictus laticeps* Mor., ♀, det. A.W. Ebmer 1983 // Lectotypus design Ebmer <red label>.

Paralectotype: 1 ♀, the same label as in lectotype.

Current status. *Lasioglossum* (*Dialictus s.l.*) *chinense* (Dalla Torre, 1896), replacement name for *Halictus laticeps* Morawitz, 1890, nec *H. laticeps* Schenck, 1869.



FIGURES 24a–b. *Halictus laticeps* Morawitz, 1889. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

25. *Halictus lativentris sotschica* Blüthgen, 1931

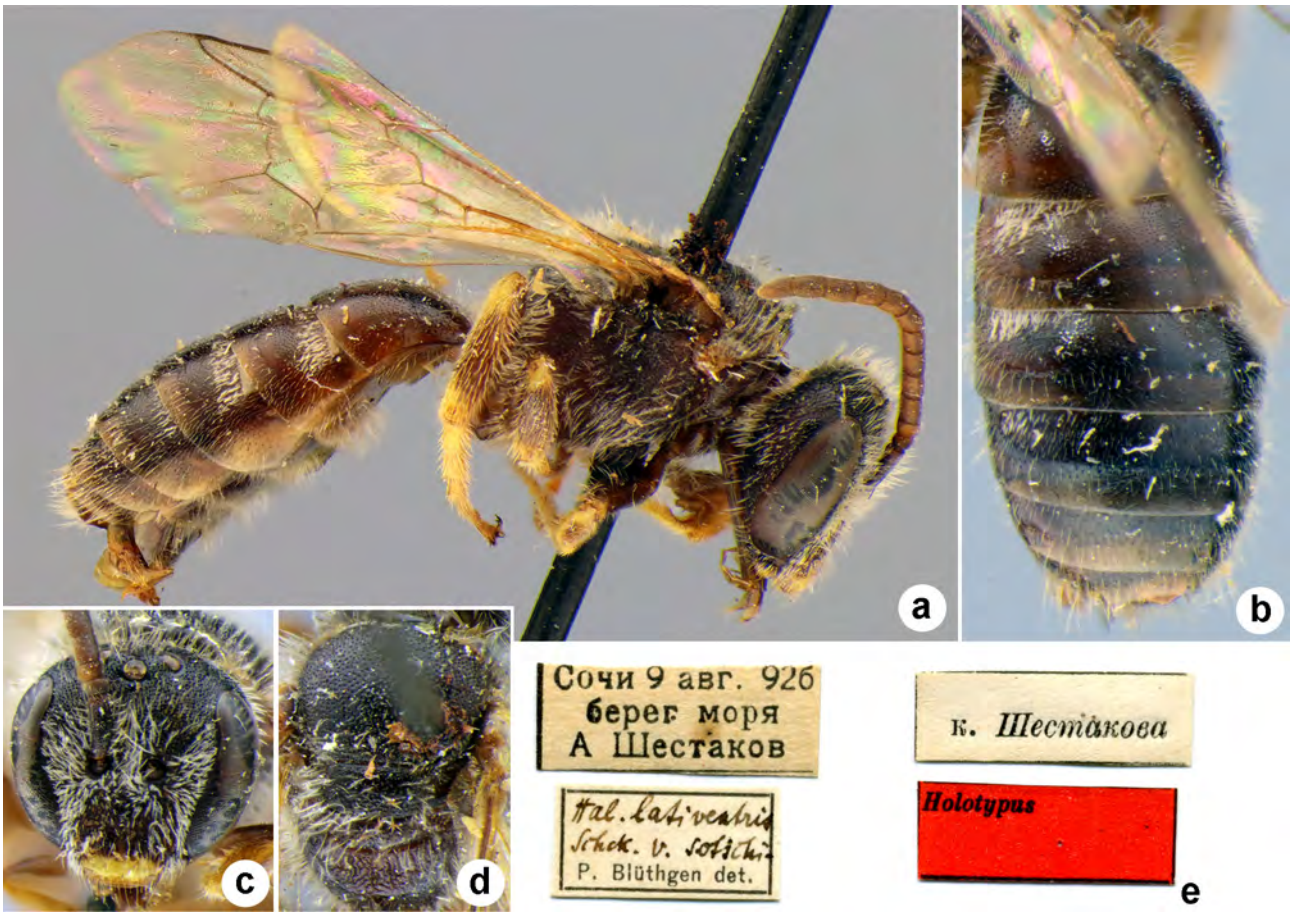
(Figs 25a–e)

Halictus lativentris var. *sotschica* Blüthgen, 1931: 350, ♂.

Type locality. Sotschi (Russia).

Holotype: ♂, Сочи, берег моря [Russia, Krasnodar Province, Sochi, sea shore, 43°36′N 39°43′E], 9 авг.[уста] 926 [9.VIII.1926], А Шестаков [A. Shestakov] // к.[оллекция] Шестакова [Collection of A. Shestakov] // Hal. lativentre Schck. var. sotschica, P. Blüthgen det. // Holotypus <red label>.

Current status. *Lasioglossum* (*Lasioglossum*) *lativentre* (Schenck, 1853) (synonymy by Warncke 1973: 287).



FIGURES 25a–e. *Halictus lativentris sotschica* Blüthgen, 1931. Holotype, male: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

26. *Halictus maculipes tschulica* Blüthgen, 1931

(Figs 26a–e)

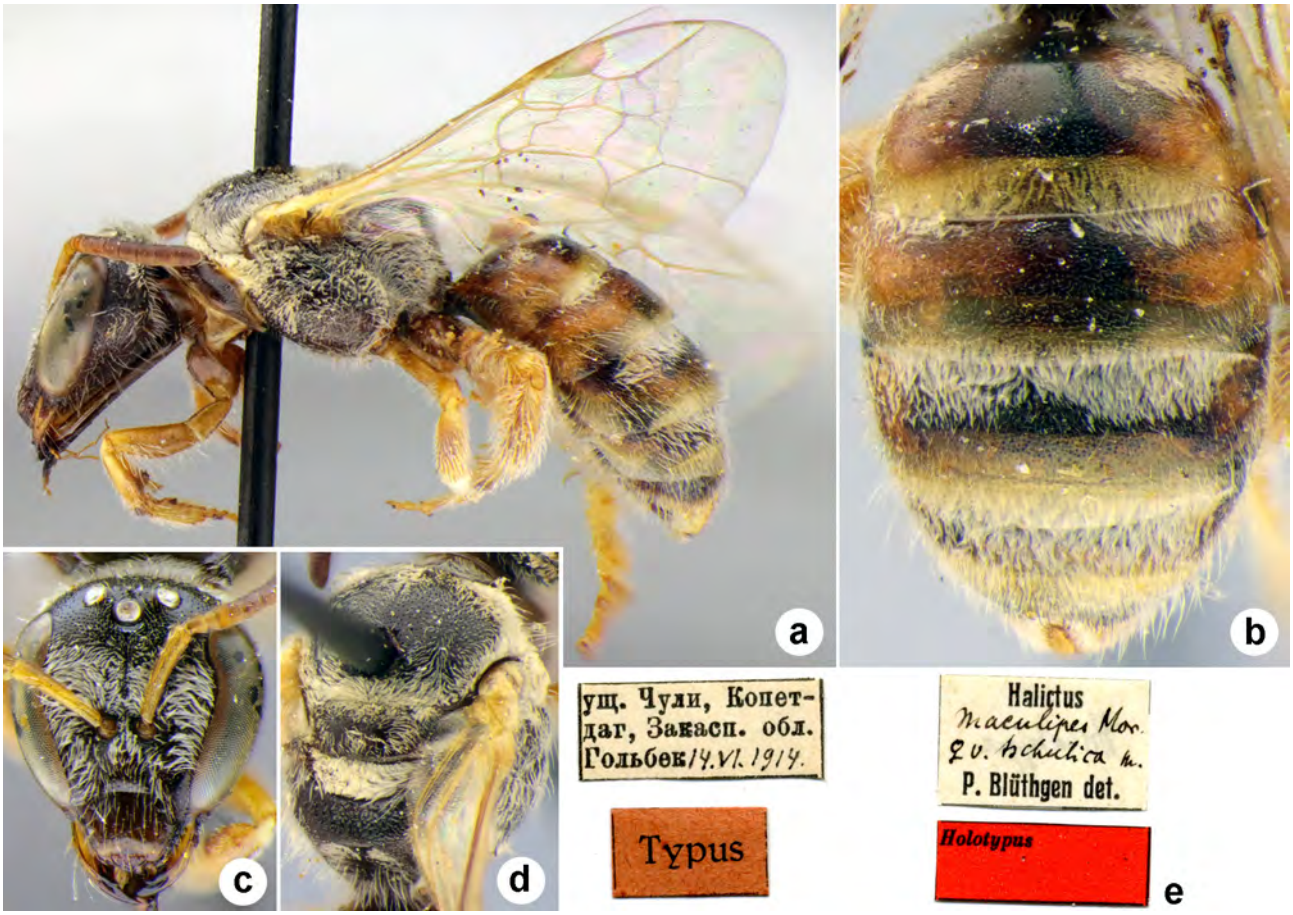
Halictus maculipes var. *tschulica* Blüthgen, 1931: 372, Fig. 14, ♀.

Type locality. Tschuli, Kopet-Dagh (Turkmenistan).

Holotype: ♀, ущ.[елье] Чули, Копетдаг, Закасп.[ийская] обл.[асть] [Turkmenistan, Kopet Dagh Ridge, Chuli Gorge, Gyocdere, 37°59'N 58°01'E], 14.VI.1914, Гольбек [A. Golbek] // Typus <red label> // *Halictus maculipes* Mor. v.[ar] *tschulica* m.[ichi], ♀, P. Blüthgen det. // Holotypus <red label>.

Paratypes: 1 ♀, label as in holotype, but 10.VI.1914; 3 ♀, Фараб, Бухара [Farab, Buchara], 14.IV.1917, Вольманн [L. Wollman] // Typus <red label> // *Halictus maculipes* Mor. v.[ar] *tschulica* m.[ichi], ♀, P. Blüthgen det.

Current status. *Lasioglossum* (*Hemihalictus*) *tschulicum* (Blüthgen, 1931) (according to Ebmer 1986: 419, 427).



FIGURES 26a–e. *Halictus maculipes tschulica* Blüthgen, 1931. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

27. *Halictus mandibularis* Morawitz, 1866

(Figs 27a–e)

Halictus mandibularis Morawitz, 1866: 23, ♀.

Type locality. Saratov (Russia).

Holotype: ♀, Sarepta [Russia, Volgograd, 48°30′N 44°32′E, at that time Sarepta was situated in the territory of Saratov Gubernie] // *Halictus mandibularis* F. Morawitz // Holotypus <red label>.

Current status. *Lasioglossum* (*Evylaeus s.l.*) *mandibulare* (Morawitz, 1866).

Remarks. This species belongs to *politum* group of species with problematic subgenetic status (see remarks to *Halictus atomarius* Morawitz, above).

28. *Halictus monstrificus* Morawitz, 1891

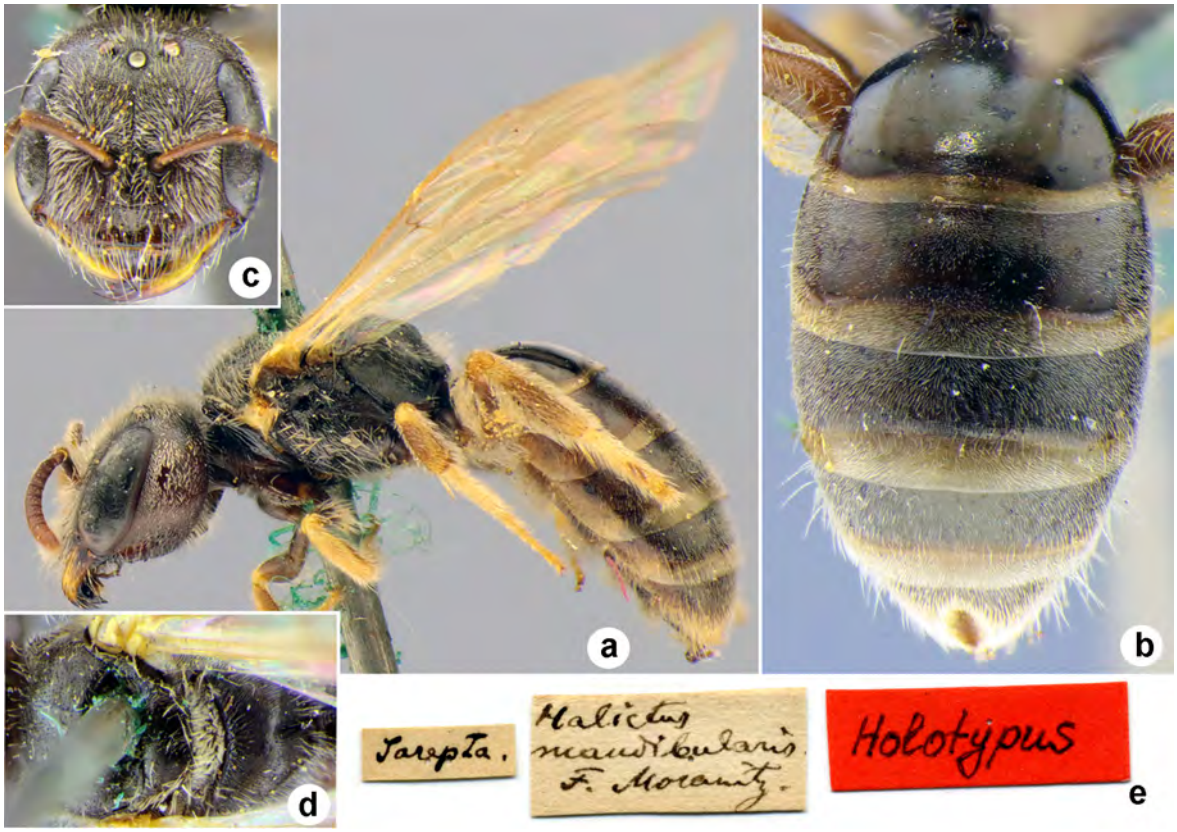
(Figs 28a–e)

Halictus monstrificus Morawitz, 1891: 147, ♂.

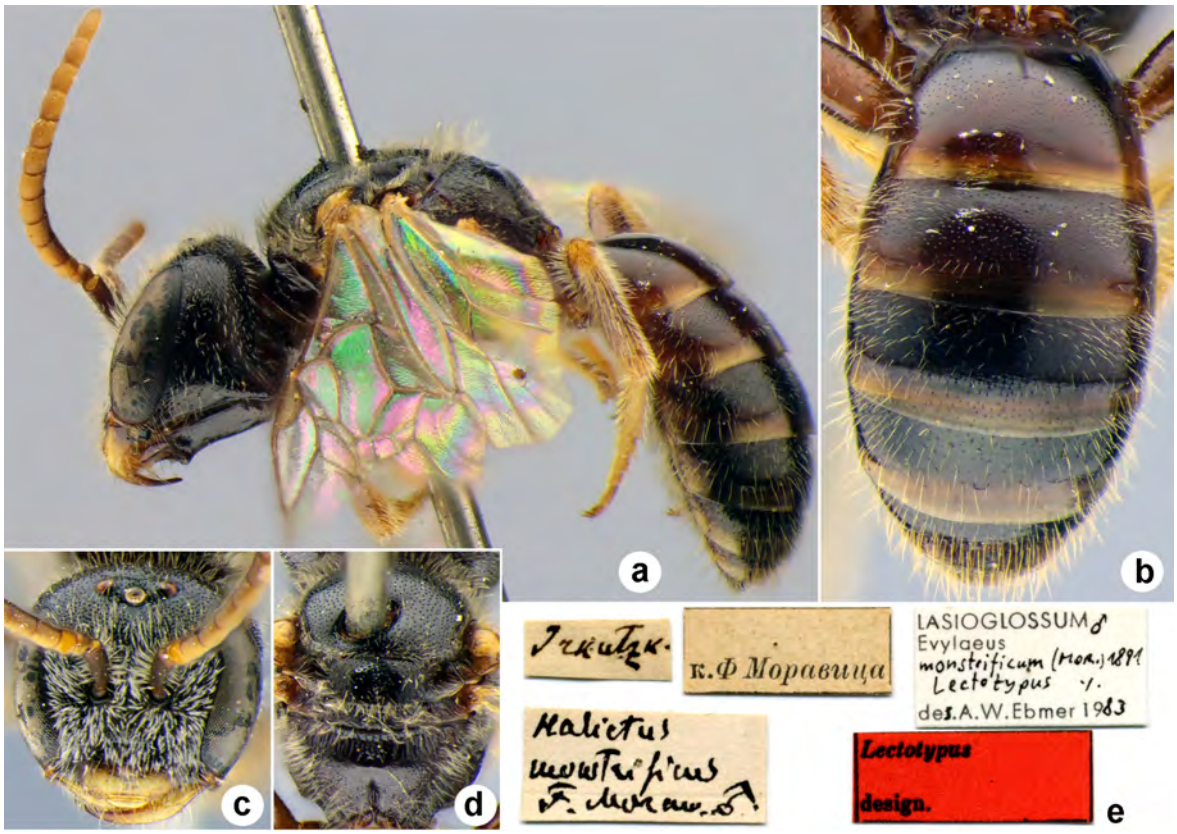
Type locality. Irkutsk (Russia).

Lectotype: ♂, designated by Ebmer 1985a: 219, Irkutsk [Russia, 51°17′N 104°18′E] // *Halictus monstrificus* F. Moraw., ♂ // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // *Lasioglossum Evylaeus monstrificum* (Mor.) 1891, ♂, Lectotypus, des. A.W. Ebmer 1983 // Lectotypus, design. <red label>.

Current status. *Lasioglossum* (*Hemihalictus*) *monstrificum* (Morawitz, 1891).



FIGURES 27a–e. *Halictus mandibularis* Morawitz, 1866. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.



FIGURES 28a–e. *Halictus monstrificus* Morawitz, 1891. Lectotype, male: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

29. *Halictus morbillosus orientis* Cockerell, 1924
(Figs 29a–e)

Halictus morbillosus race *orientis* Cockerell, 1924: 583, ♀.

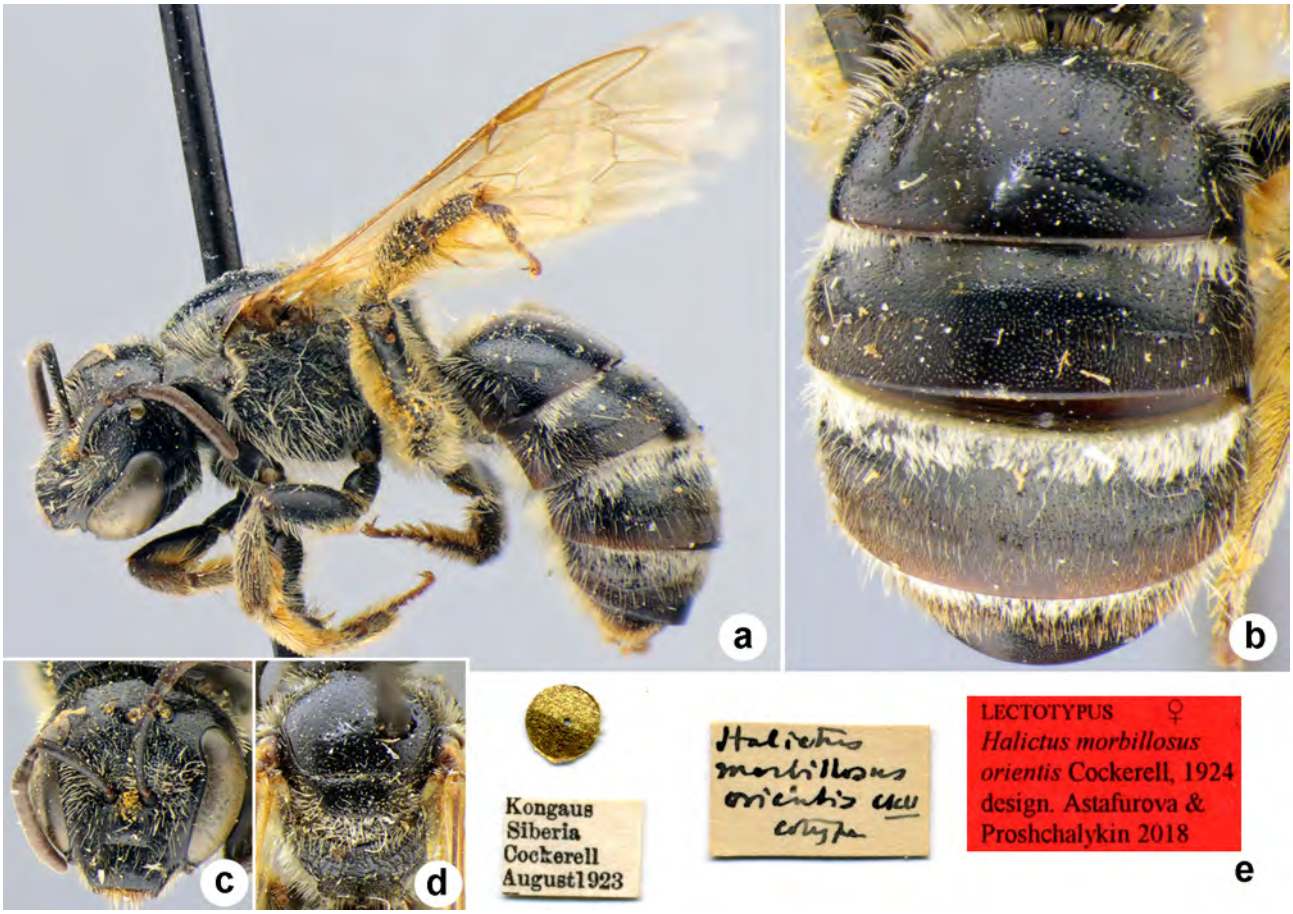
Type locality. "Siberia" (Russia).

Lectotype (designated here): ♀, <golden circle> // Kongaus, Siberia [Russia, Primorskiy Territory, Anisimovka, 43°10′N 132°47′E], August 1923, Cockerell // *Halictus morbillosus orientis* Ckll., cotype // Lectotypus *Halictus morbillosus orientis* Cockerell, 1924, ♀, design. Astafurova & Proshchalykin 2018 <red label>.

Paralectotype: 1 ♀, the same as in holotype.

Remark. *Halictus morbillosus orientis* Cockerell, 1924 was described from females collected in Kongaus, Siberia [Anisimovka, Primorskiy Territory, Russia]. There are two females in ZISP from this locality, which corresponds to the original description of T. Cockerell. One of these females is designated here as the lectotype of *H. morbillosus orientis* to avoid any confusion about the status of its type specimens and to properly diagnose this species.

Current status. *Lasioglossum* (*Leuchalictus*) *denticolle* (Morawitz, 1891) (synonymy by Blüthgen 1931: 211; 326).



FIGURES 29a–e. *Halictus morbillosus orientis* Cockerell, 1924. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

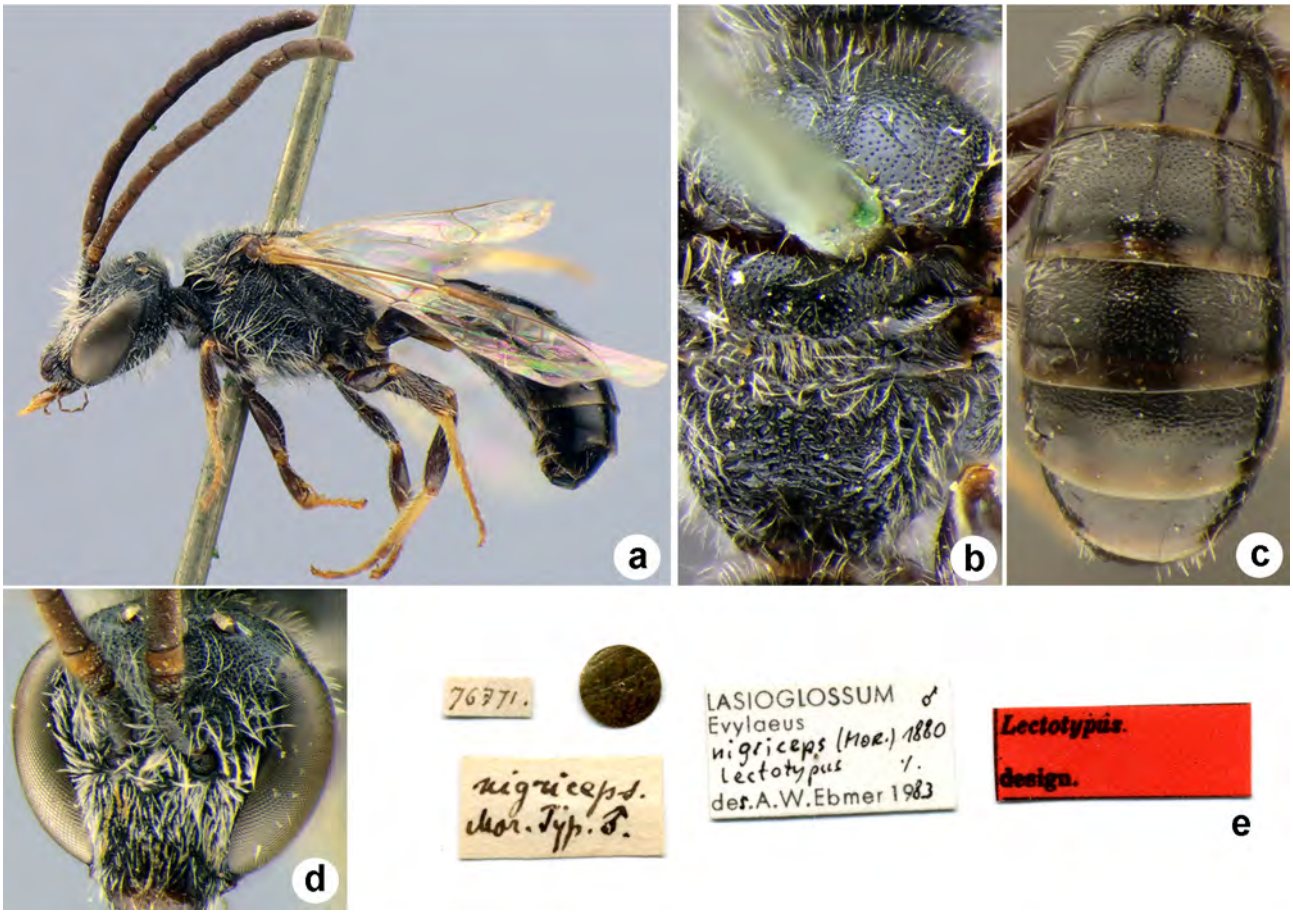
30. *Halictus nigriceps* Morawitz, 1880
(Figs 30a–e)

Halictus nigriceps Morawitz, 1880: 366, ♂.

Type locality. Mongolei, Ordoss am Chuan-che (Northern China).

Lectotype: ♂, designated by Ebmer 1985a: 216, <golden circle> // 76771 [Shaanxi Province, Mu Us Shamo on Huang-He River; locality see Ebmer 2005: 273] // *nigriceps* Mor., Typ., ♂ // *Lasioglossum Evylaeus nigriceps* (Mor.) 1880, ♂, Lectotypus, des. A.W. Ebmer 1983 // Lectotypus, design. <red label>.

Current status. *Lasioglossum* (*Sphecodogastra*) *nigriceps* (Morawitz, 1880).



FIGURES 30a–e. *Halictus nigriceps* Morawitz, 1880. Lectotype, male: a—habitus, lateral view; b—mesosoma, dorsal view; c—metasoma, dorsal view; d—head, frontal view; e—labels.

31. *Halictus nigricornis* Morawitz, 1887

(Figs 31a–e)

Halictus nigricornis Morawitz, 1887: 223, ♀, ♂.

Type locality. Keria Gebirge (China).

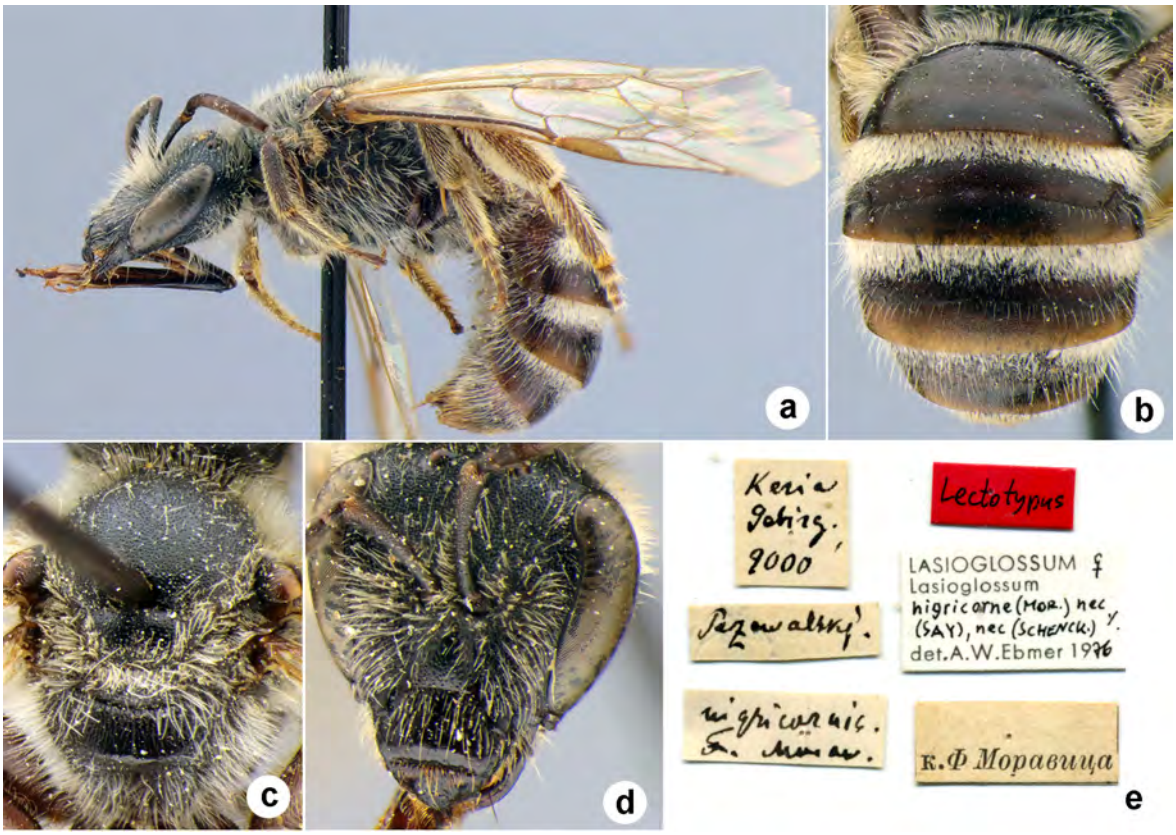
Lectotype: ♀, designated by Ebmer 1978a: 192, Keria Gebirge [China, Xinjiang, Keria (Russian) Ridge, 36°28′N 83°27′E], 9000’[ft] // Przewalsky // *nigricornis* F. Moraw. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Lectotypus <red label> // *Lasioglossum Lasioglossum nigricorne* (Mor.) nec (Say), nec (Schenck), ♀, det. A.W. Ebmer 1976.

Current status. *Lasioglossum* (*Lasioglossum*) *jultschinicum* Ebmer, 1972 (synonymy by Ebmer 1978a: 192).

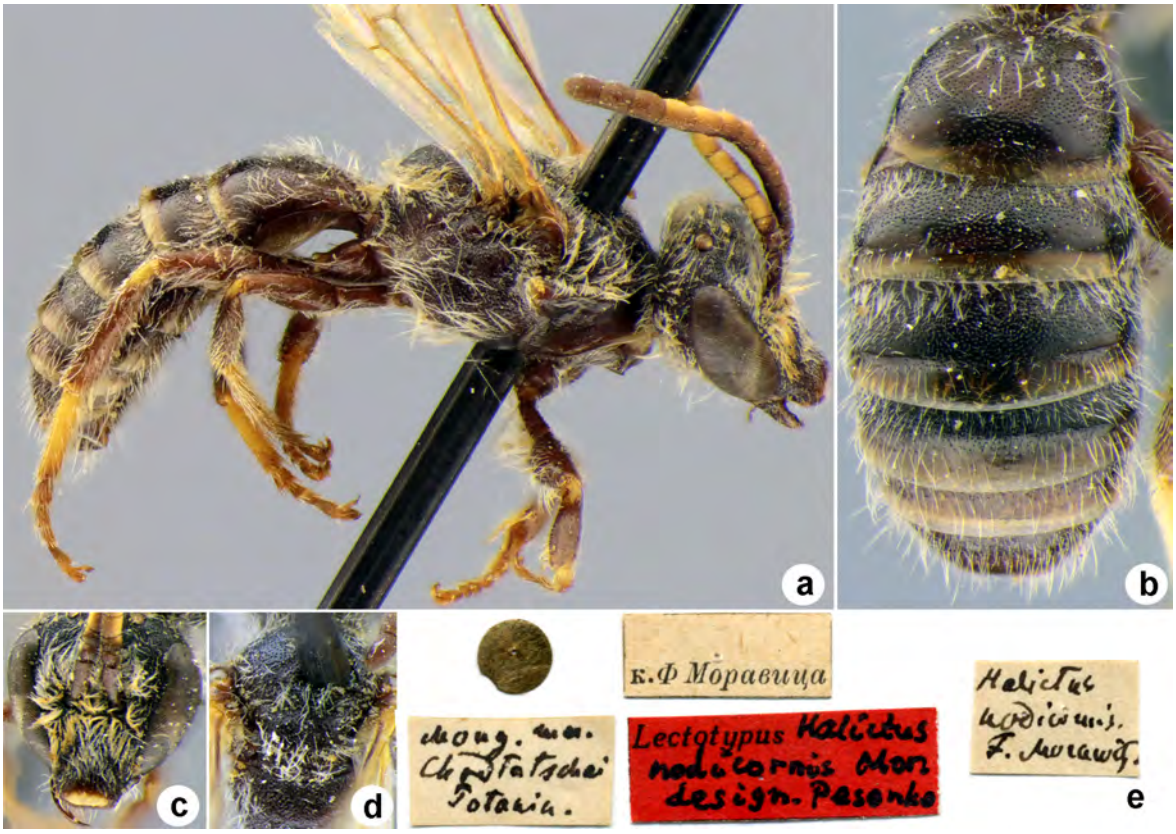
32. *Halictus nodicornis* Morawitz, 1890

(Figs 32a–e)

Halictus nodicornis Morawitz, 1890: 364, ♂.



FIGURES 31a–e. *Halictus nigricornis* Morawitz, 1887. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.



FIGURES 32a–e. *Halictus nodicornis* Morawitz, 1890. Lectotype, male: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

Type locality. Mongolei (China).

Lectotype: ♂, designated by Pesenko, 2007: 99, <golden circle> // Mong., Chodtatschai [China, Gansu Province, Etsin-gol (Ruo Shui) valley], [leg. G.] Potanin // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // *Halictus nodicornis* F. Morawitz // Lectotypus *Halictus nodicornis* Mor., design. Pesenko <red label>.

Current status. *Lasioglossum* (*Sphecodogastra*) *nodicorne* (Morawitz, 1890).

33. *Halictus ocularis* Morawitz, 1893

(Figs 33a–e)

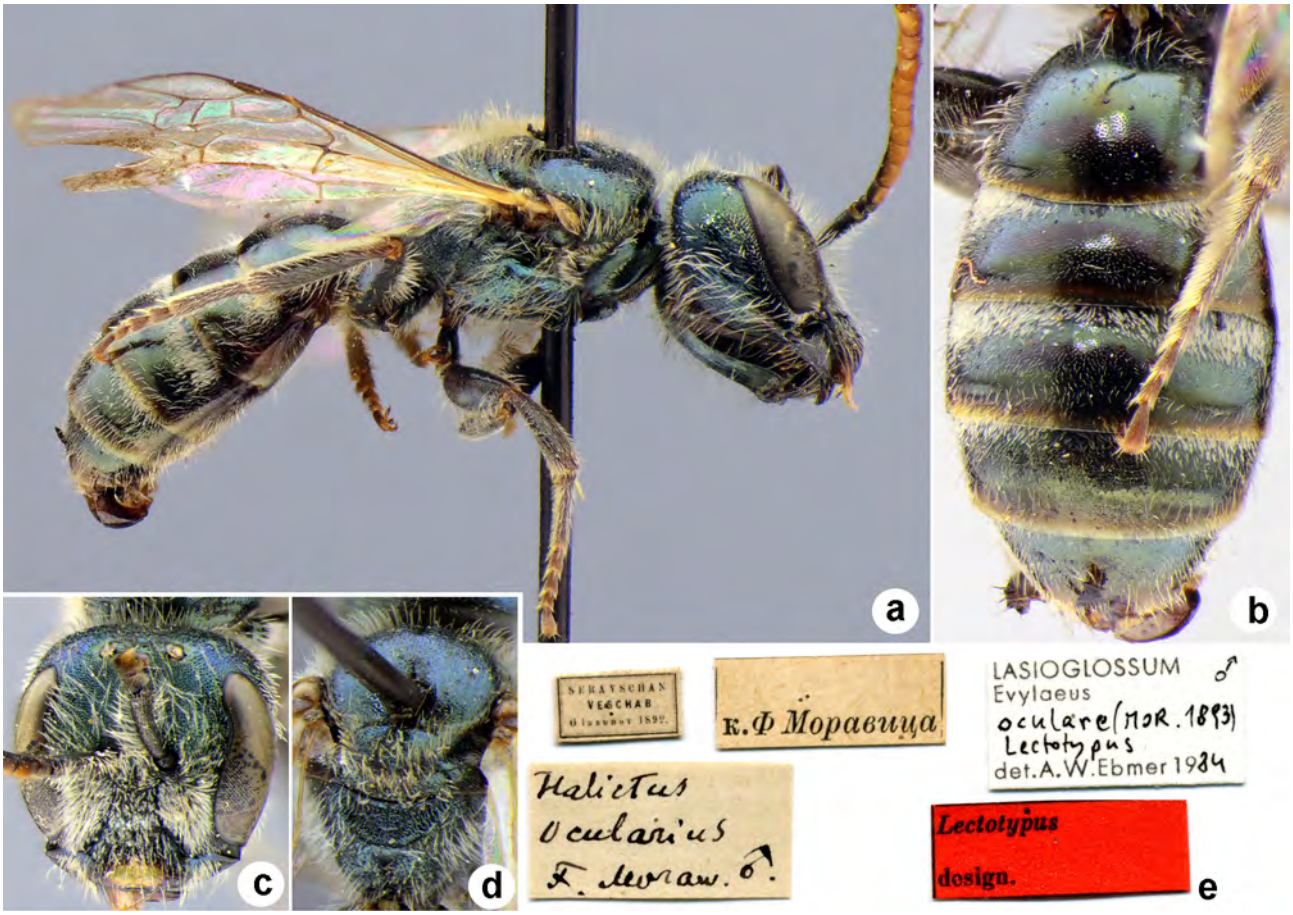
Halictus ocularis Morawitz, 1893: 71, ♂.

Type locality. Veschab (Tajikistan).

Lectotype: ♂, designated by Ebmer 1988: 625, Seravschan, Veschab [Tajikistan: Veshab, 39°25′N 68°56′E], [leg. D.] Glasunov, 1892 // *Halictus ocularis* F. Moraw. 1893, ♂ // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Lasioglossum Evylaeus oculare (Mor. 1893), ♂, Lectotypus, det. A.W. Ebmer 1984 // Lectotypus, design. <red label>.

Paralectotype: 1 ♂, the same labels as in lectotype.

Current status. *Lasioglossum* (*Dialictus*) *nitidulum oculare* (Morawitz, 1893) (according to Ebmer 1982: 214; 1988: 625).



FIGURES 33a–e. *Halictus ocularis* Morawitz, 1893. Lectotype, male: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

34. *Halictus olivaceus* Morawitz, 1890
(Figs 34a–e)

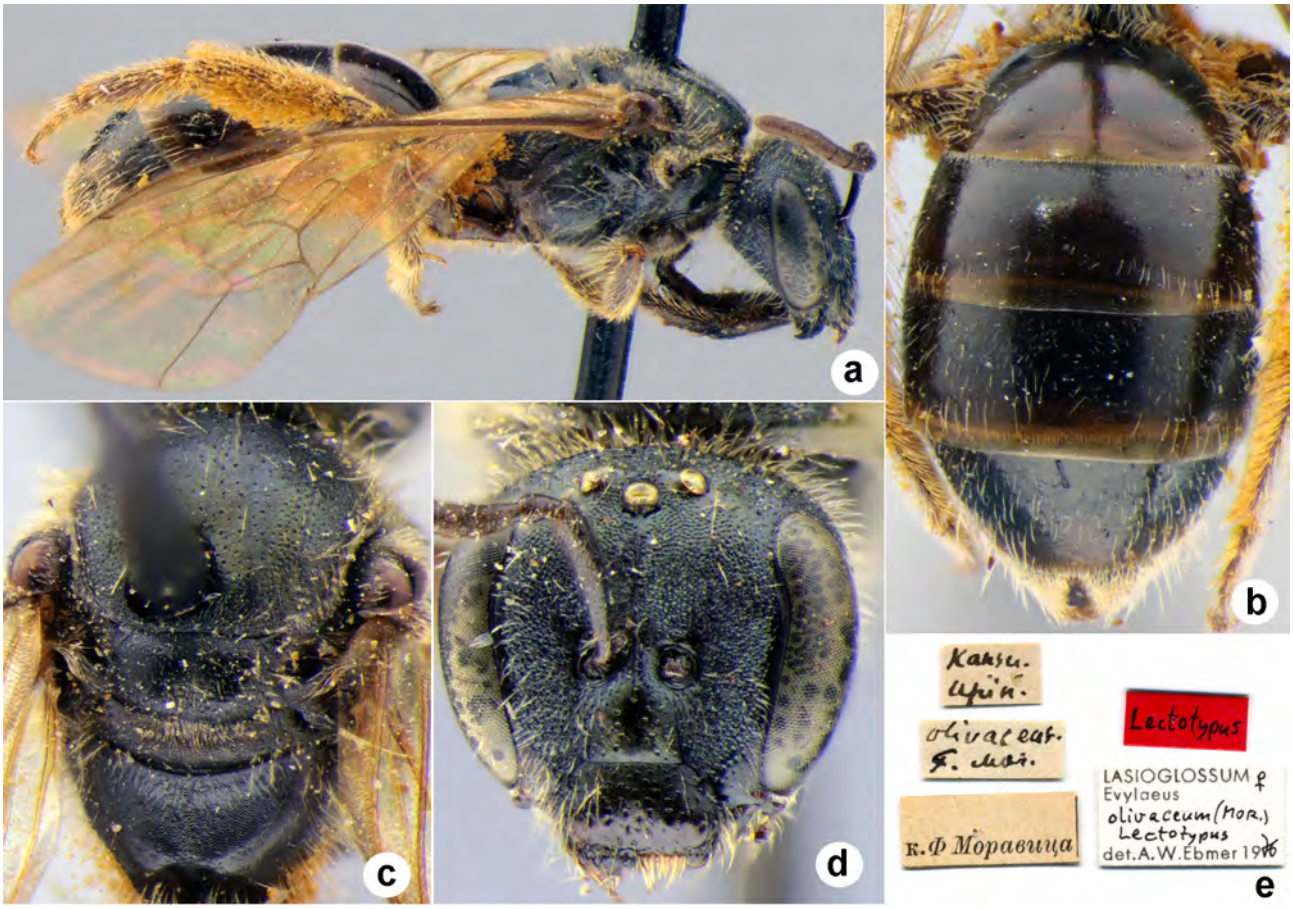
Halictus olivaceus Morawitz, 1890: 366, ♀.

Type locality. Kan-ssu, Ssetschuan (China).

Lectotype: ♀, designated by Ebmer 1978b: 313, Kansu, Upin [China, Gansu, 50 km NW Lanzhou, 36°01′N 103°2′E] // *olivaceus* F. Mor. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // *Lasioglossum Evylaeus olivaceum* (Mor.), ♀, Lectotypus, det. A.W. Ebmer 1976 // Lectotypus <red label>.

Paralectotypes: 1 ♀, Kansu, Przhevalsky // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // *olivaceus* F. Mor.; 10 ♀, Vallis Teiho, 23.VII, [G.] Potanin // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // *olivaceus* F. Mor. // Paralectotypus, design. <red label> [this label for every paralectotype specimens].

Current status. *Lasioglossum* (*Sphecodogastra*) *olivaceum* (Morawitz, 1890).



FIGURES 34a–e. *Halictus olivaceus* Morawitz, 1890. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

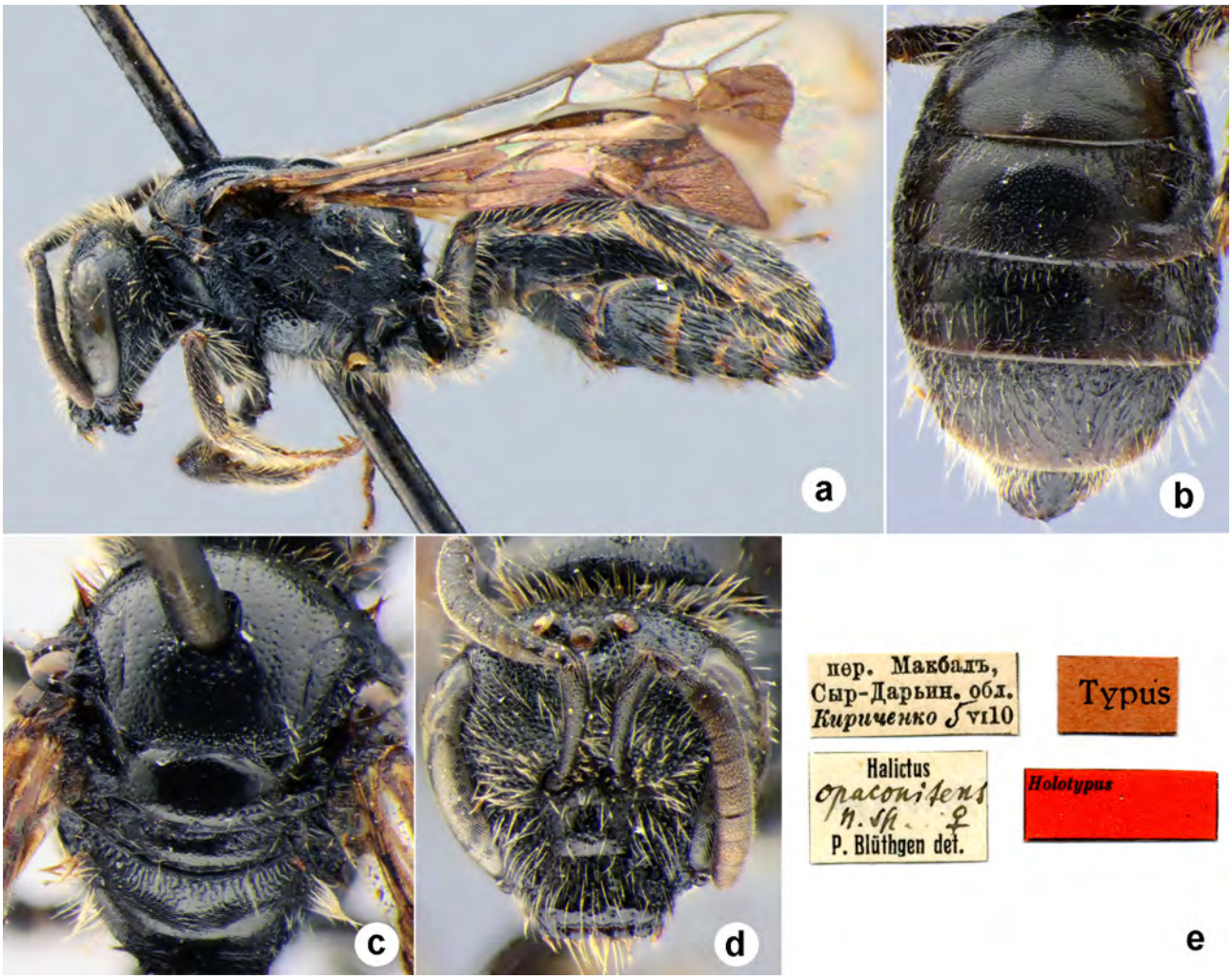
35. *Halictus opaconitens* Blüthgen, 1931
(Figs 35a–e)

Halictus opaconitens Blüthgen, 1931: 385, ♀.

Type locality. Makbal, Ssir-Darja (Kyrgyzstan).

Holotype: ♀, пер[евал] Макбалъ, Сыр-Дарьин.[ская] обл.[асть] [Kyrgyzstan, Makbal Pass, 42°45′N 72°04′E], 5.VI.[19]10, Кириченко [A. Kirichenko] // *Halictus opaconitens* n. sp., ♀, P. Blüthgen det. // Typus <red label> // Holotypus <red label>.

Current status. *Lasioglossum* (*Evylaeus*) *opaconitens* (Blüthgen, 1931).



FIGURES 35a–e. *Halictus opaconitens* Blüthgen, 1931. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

36. *Halictus orpheopsis* Blüthgen, 1931
(Figs 36a–e)

Halictus orpheopsis Blüthgen, 1931: 374, Fig. 15, ♀.

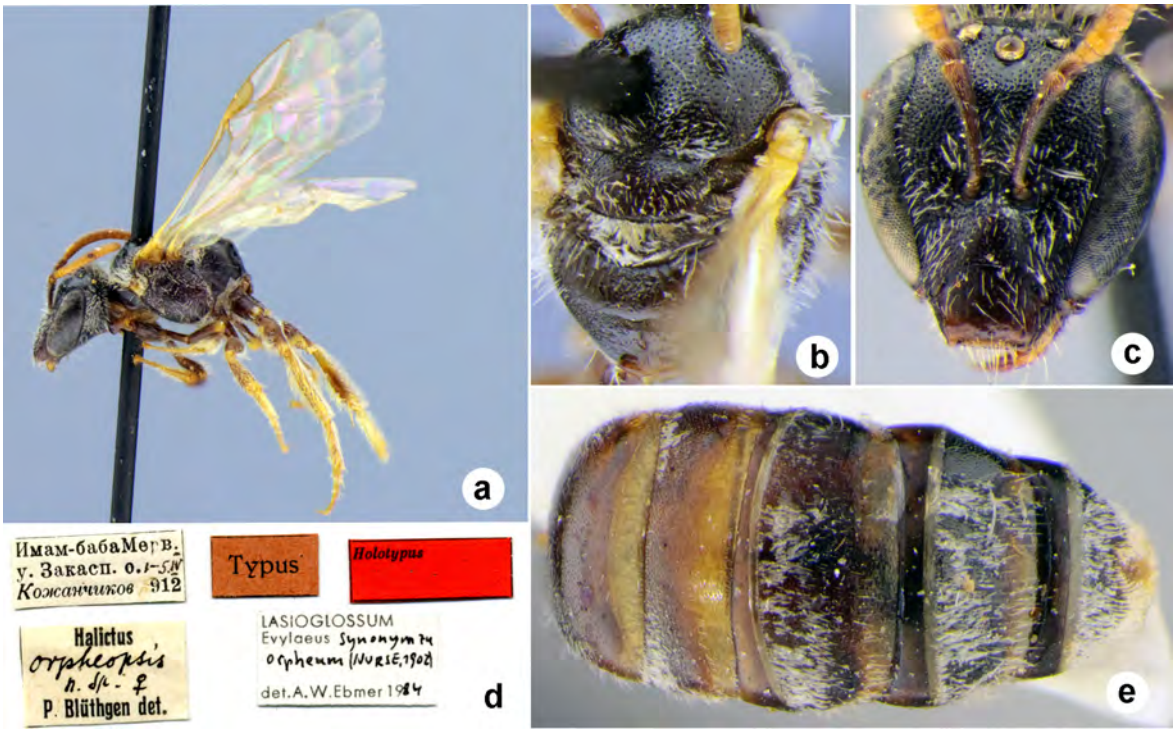
Type locality. Imam-Baba bei Merw (Turkmenistan).

Holotype: ♀, Имам-баба, Мерв.[ский] у.[езд], Закасп.[ийской] о.[бласти] [Turkmenistan, Mary Region, Imambaba (=imeni Niyazova), 36°42'N 62°27'E], 1-5.IV.[1]912, Кожанчиков [V. Kozhanchikov] // *Halictus orpheopsis* n. sp., ♀, P. Blüthgen det. // Typus <red label> // Holotypus <red label> // *Lasioglossum Evylaeus orpheum* (Nurse, 1902), synonym, det. A.W. Ebmer 1984.

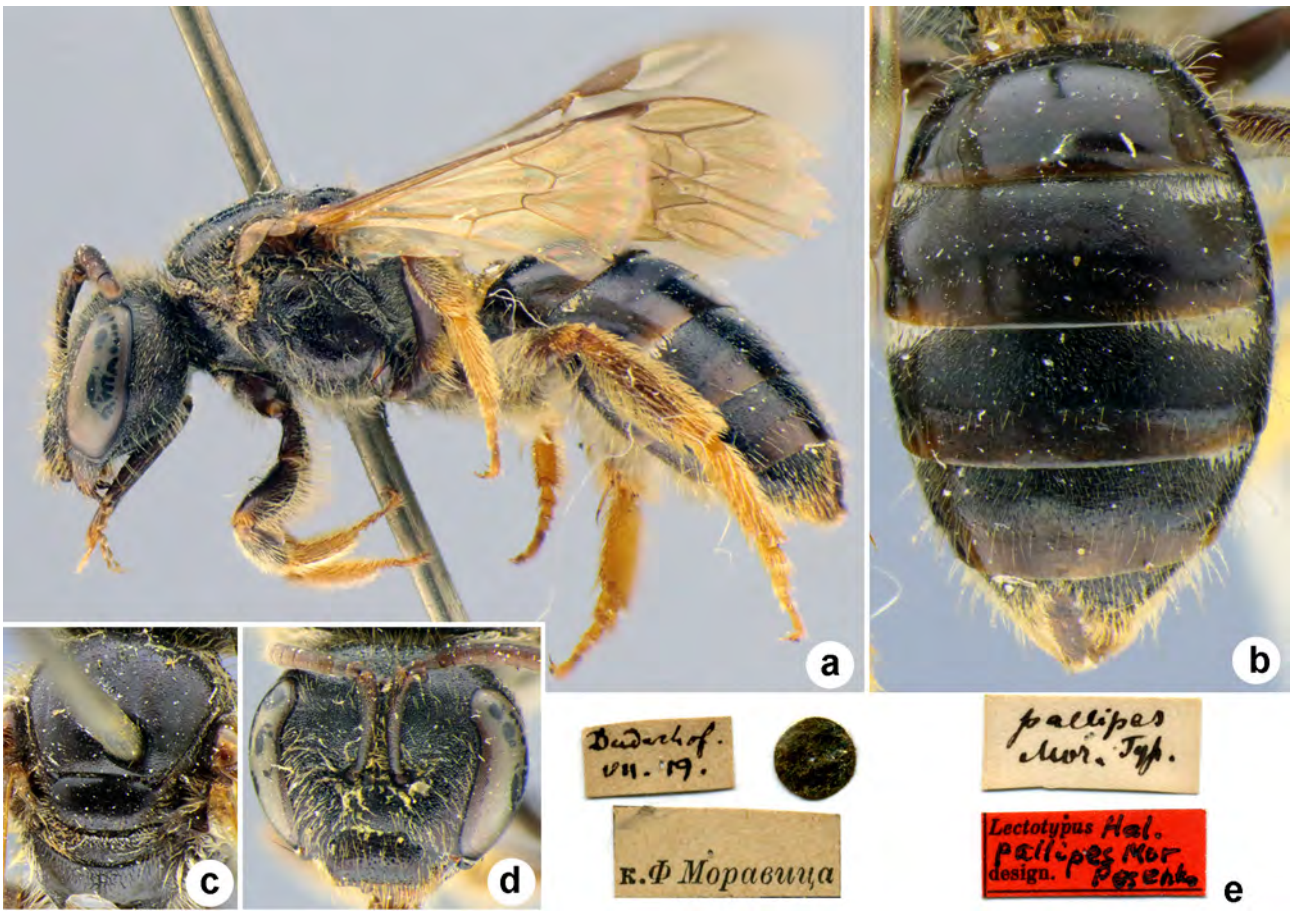
Current status. *Lasioglossum* (*Hemihalictus*) *orpheopse* (Blüthgen, 1931).

37. *Halictus pallipes* Morawitz, 1865
(Figs 37a–e)

Halictus pallipes Morawitz, 1865: 72, ♀, ♂.



FIGURES 36a–e. *Halictus orpheopsis* Blüthgen, 1931. Holotype, female: a—habitus, lateral view; b—mesosoma, dorsal view; c—head, frontal view; d—metasoma, dorsal view; e—labels.



FIGURES 37a–e. *Halictus pallipes* Morawitz, 1865. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

Type locality. Duderhof (Russia).

Lectotype: ♀, designated by Pesenko 2007: 108, <golden circle> // Duderhof [Russia, Sankt-Petersburg, Krasnoye Selo, 59°42′N 30°07′E], VI.[19]19 // *pallipes* Mor., Typ. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Lectotypus Hal. *pallipes* Mor, design. Pesenko <red label>.

38. *Halictus convexiusculus pendschakenticus* Blüthgen, 1935

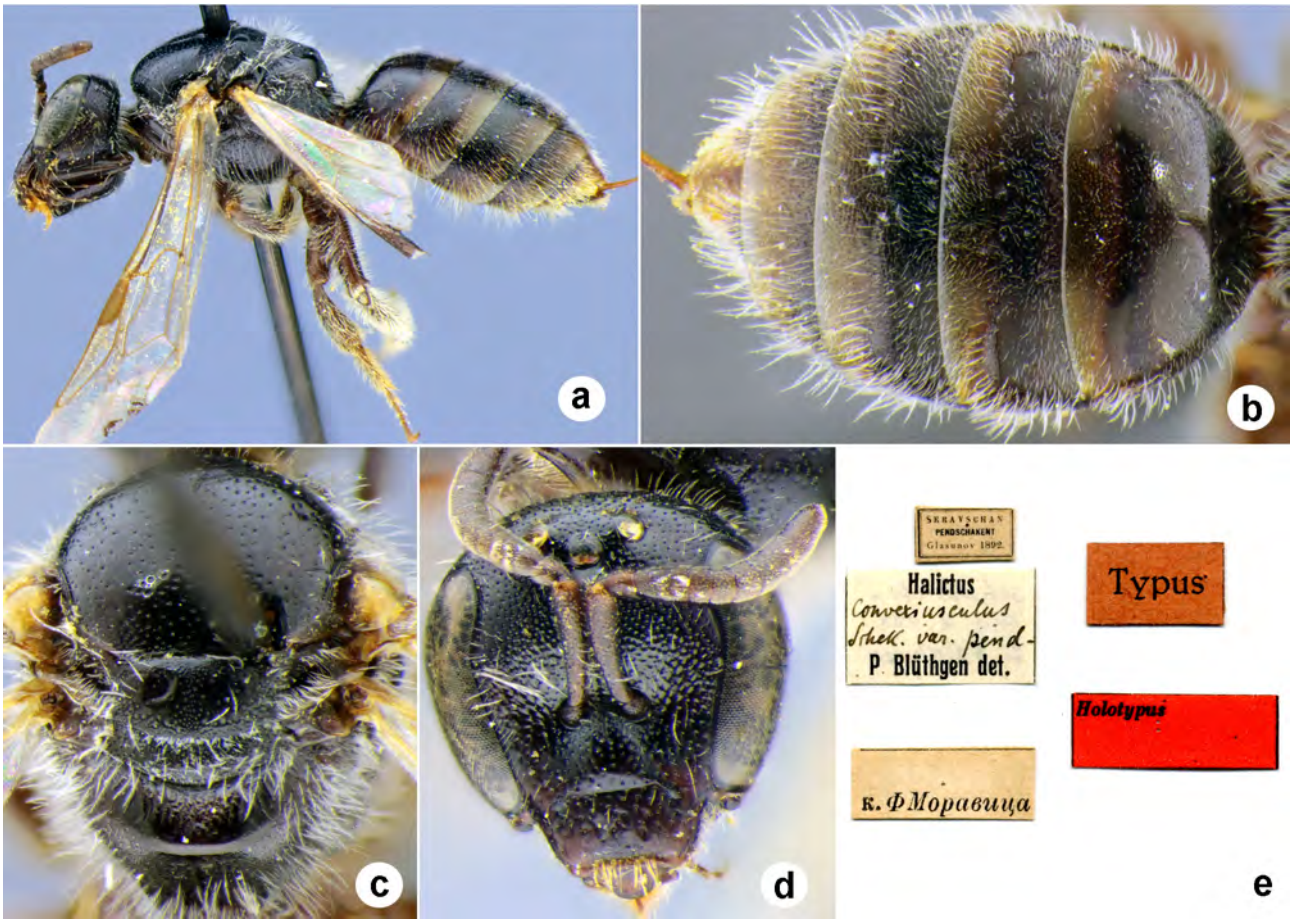
(Figs 38a–e)

Halictus convexiusculus ssp. *pendschakenticus* Blüthgen, 1935: 115 (key), 118, ♀.

Type locality. Pendschakent (Tajikistan).

Holotype: ♀, Seravchan, Pendschakent [Tajikistan, Sogd Prov., Panjakent, 39°30′N 67°37′E], [leg. D.] Glasunov, 1892 // *Halictus convexiusculus* Schenk var. pend-, P. Blüthgen det. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Typus <red label> // Holotypus <red label>.

Current status. *Lasioglossum* (*Hemihalictus*) *pendschakenticum* (Blüthgen, 1935) (according to Ebmer 1986: 418).



FIGURES 38a–e. *Halictus convexiusculus pendschakenticus* Blüthgen, 1935. Holotype, a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

39. *Halictus pleuralis* Morawitz, 1872

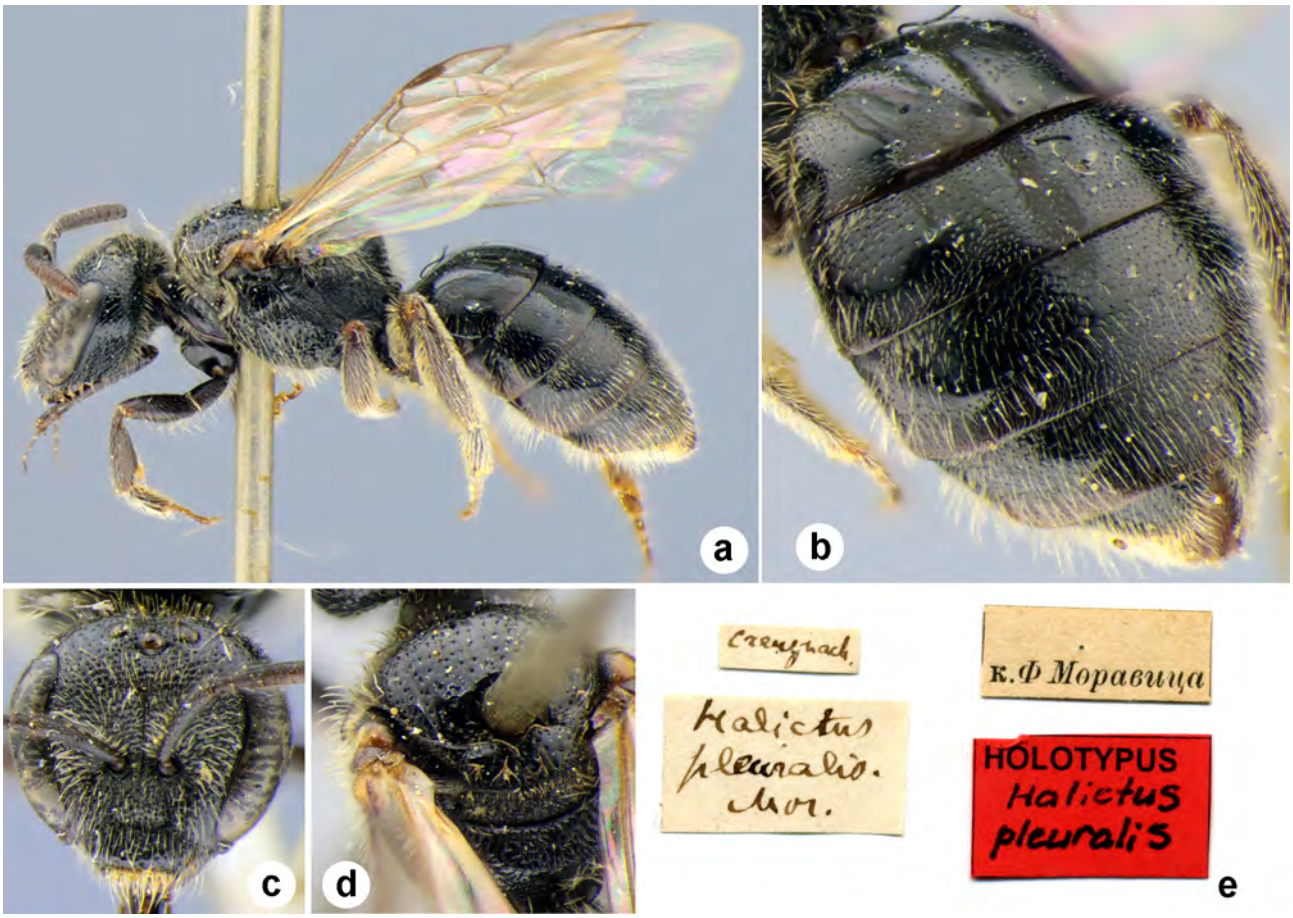
(Figs 39a–e)

Halictus pleuralis Morawitz, 1872: 371, ♀.

Type locality. Creuznach (Germany).

Holotype: ♀, Creuznach [Germany, Bad Kreuznach, 49°50′N 7°52′E] // *Halictus pleuralis* Mor. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Holotypus *Halictus pleuralis* <red label>.

Current status. *Lasioglossum* (*Hemihalictus*) *quadrisignatum* (Schenck, 1853) (synonymy by Alfken 1904: 1).



FIGURES 39a–e. *Halictus pleuralis* Morawitz, 1872. Holotype, female: a—habitus, lateral view; b—metasoma, postero-lateral view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

40. *Halictus popovi* Blüthgen, 1931

(Figs 40a–e)

Halictus popovi Blüthgen, 1931: 376, Figs 16a–c, ♀, ♂.

Type locality. Golodnaja-Steppe, Farab, Bagir, Margelan (Uzbekistan), Talas (Kazakhstan), Tedzhen (Turkmenistan).

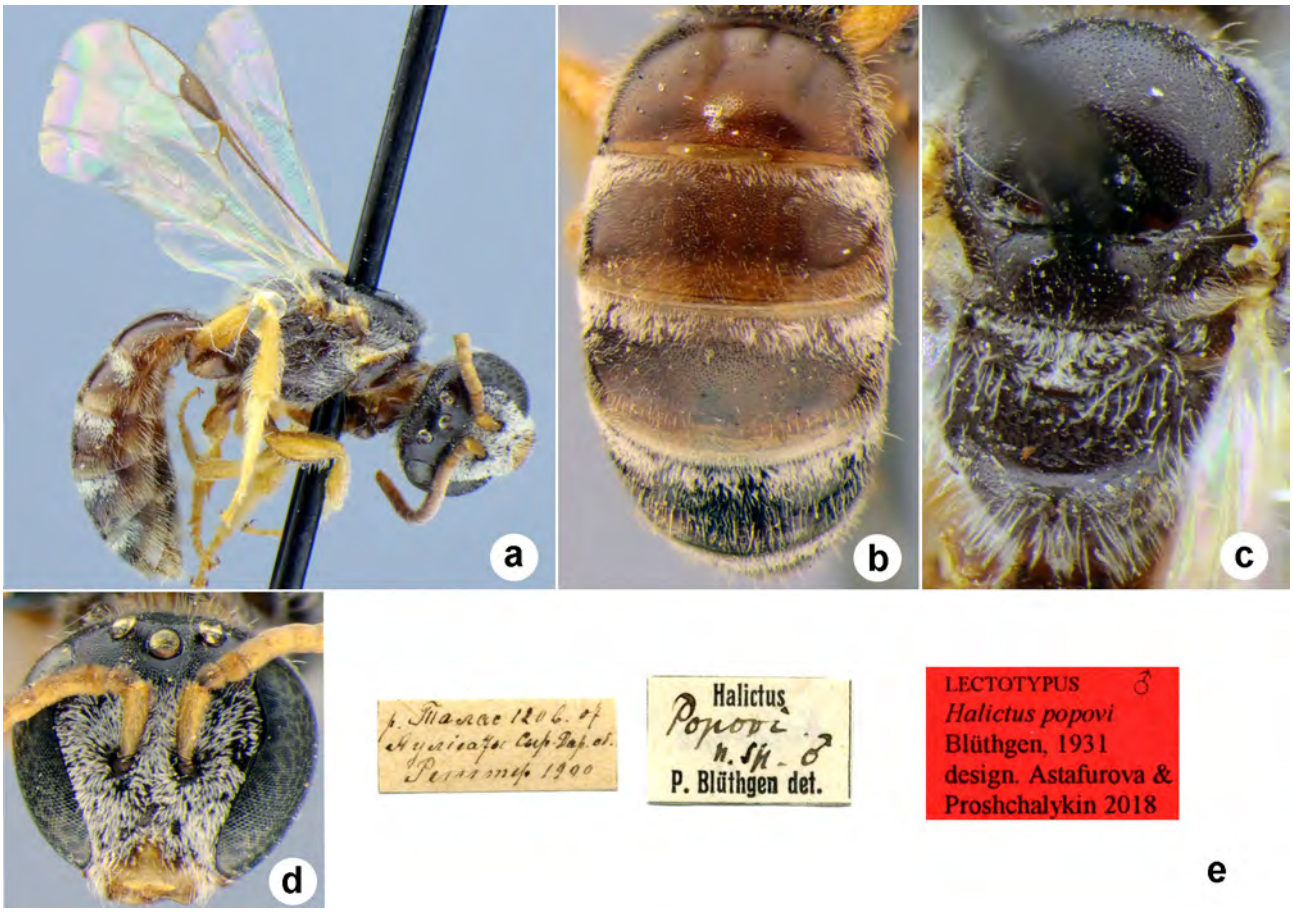
Lectotype (designated here): ♂, р.[ека] Талас, 120 в.[ерст] от Ауліеаты Сыр-Дар.[ьинской] обл.[асти] [Kazakhstan, Jambul Province, 127 km from Taraz] // *Halictus popovi* n. sp., ♂, P. Blüthgen det. // Lectotypus *Halictus popovi* Blüthgen, 1931, ♂, design. Astafurova & Proshchalykin 2018 <red label>.

Paralectotypes: 1 ♀, ст[анция]. Голодная Степь, Ср.Аз. ж.д. [Среднеазиатская железная дорога], Ходж[ентский]. у[езд]. [Golodnaja-Steppe(=Gulistan, Uzbekistan), Central Asia railway, Khodzhent district], 1.VI.[19]03, Г. Якобсон [G. Yakobson] // *Halictus popovi* n. sp., ♀, P. Blüthgen det. // Paraectotypus *Halictus popovi* Blüthgen, 1931, ♀, design. Astafurova & Proshchalykin 2018 <red label>; 1 ♀, Farab, Buchara [Uzbekistan], 14.IV.1917, L. Wolmann // Typus <red label> // к.[оллекция] Вольмана [Collection of L. Wolmann] // *Halictus popovi* n. sp., ♀, P. Blüthgen det. // Paraectotypus *Halictus popovi* Blüthgen, 1931, ♀, design. Astafurova & Proshchalykin 2018 <red label>; 1 ♀, Теджен [Tedzhen, Turkmenistan], 21.V.[18]89, А. Семенов

[A. Semenov] // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // *Halictus popovi* n. sp., ♀, P. Blüthgen det. // Paraectotypus *Halictus popovi* Blüthgen, 1931, ♀, design. Astafurova & Proshchalykin 2018 <red label>.

Remark. Blüthgen (1931) incorrectly indicated two specimens as holotype (male from Talas and female from Golodnaja-Steppe), so we designate here the male as lectotype to avoid any confusion about the status of its type specimens and to properly diagnose this species.

Current status. *Lasioglossum* (*Hemihalictus*) *popovi* (Blüthgen, 1931).



FIGURES 40a-e. *Halictus popovi* Blüthgen, 1931. Lectotypes, male: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

41. *Halictus porcus* Morawitz, 1872

(Figs 41a–e)

Halictus porcus Morawitz, 1872: 369, ♀, ♂.

Type locality. Meran (Italy), Graz (Austria).

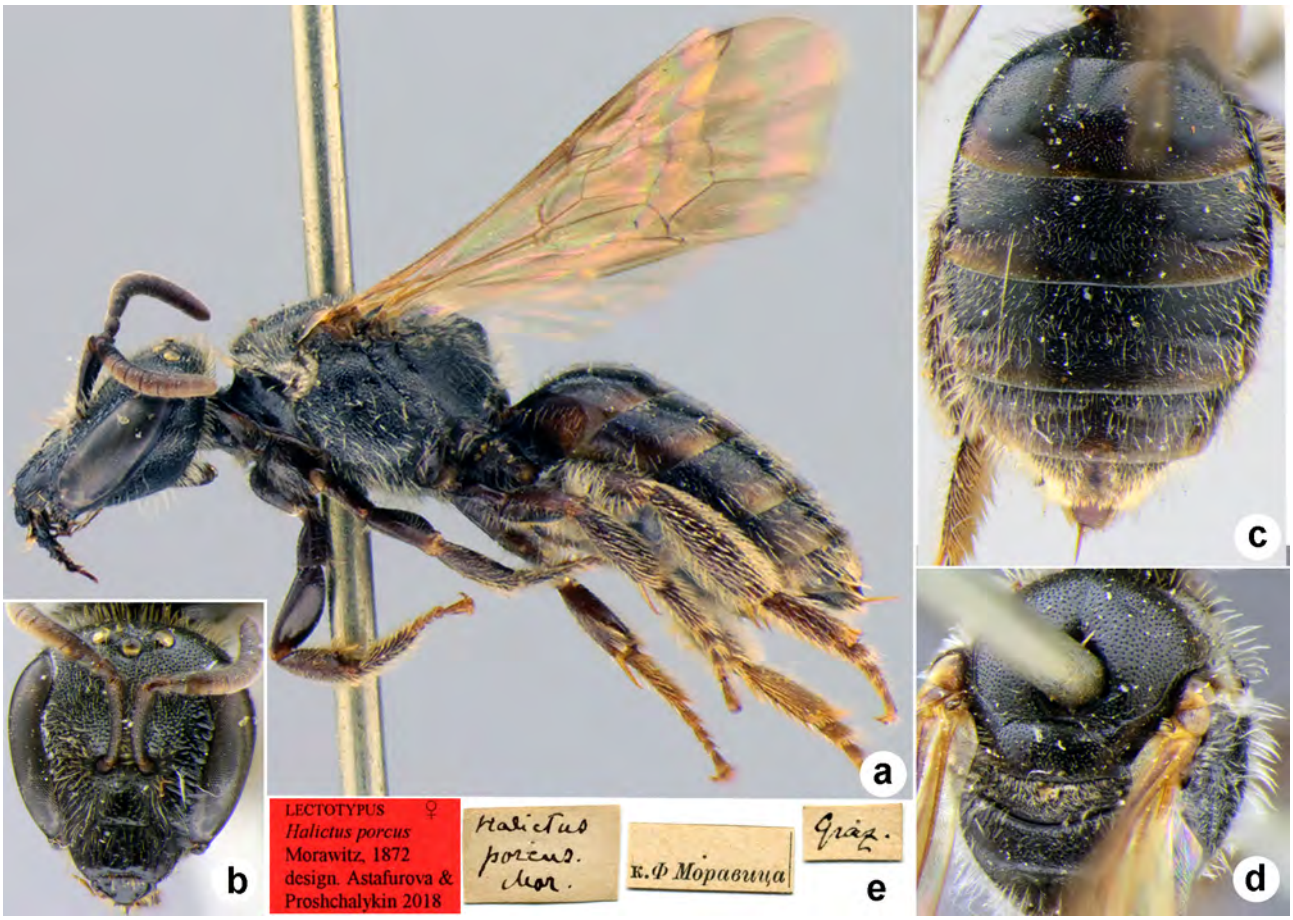
Lectotype (designated here): ♀, Graz [Austria, 47°04′N 15°26′E] // *Halictus porcus* Mor. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Lectotypus *Halictus porcus* Morawitz, 1872, ♀, design. Astafurova & Proshchalykin 2018 <red label>.

Paralectotypes: 1 ♂, Merano // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Paralectotypus *Halictus porcus* Morawitz, 1872, ♂, design. Astafurova & Proshchalykin 2018 <red label>; 1 ♂, Graz // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Paralectotypus *Halictus porcus* Morawitz, 1872, ♂, design. Astafurova & Proshchalykin 2018 <red label>; 1 ♂, <gold circle> // Graz // *porcus* Mor. Typ. // Paralectotypus *Halictus porcus* Morawitz, 1872, ♂, design. Astafurova & Proshchalykin 2018 <red label>.

Remark. *Halictus porcus* Morawitz, 1872 was described from specimens of both sexes collected in Graz [Austria] and "Meran" [Merano, Italy]. There are four specimens (one female and three males) in ZISP from Graz,

which correspond to the original description of F. Morawitz. One of these specimens (female) is designated here as the lectotype of *H. porcus* to avoid any confusion about the status of its type specimens and to properly diagnose this species.

Current status. *Lasioglossum* (*Hemihalictus*) *punctatissimum* (Schenck, 1853) (synonymy by Blüthgen 1934b: 303).



FIGURES 41a–e. *Halictus porcus* Morawitz, 1872. Lectotype, female: a—habitus, lateral view; b—head, frontal view; c—metasoma, dorsal view; d—mesosoma, dorsal view; e—labels.

42. *Halictus przewalskyi* Blüthgen, 1931

(Figs 42a–e)

Halictus przewalskyi Blüthgen, 1931: 358, Fig. 8, ♀.

Type locality. Russische Gebirge (China).

Holotype: ♀, Russische Gebirge [China, Xinjiang, Keria (Russian) Ridge, 36°28′N 83°27′E], 7500’[ft] // Przewalsky // Typus <red label> // *Halictus przewalskyi* n. sp., ♀, P. Blüthgen det. // Holotypus <red label>.

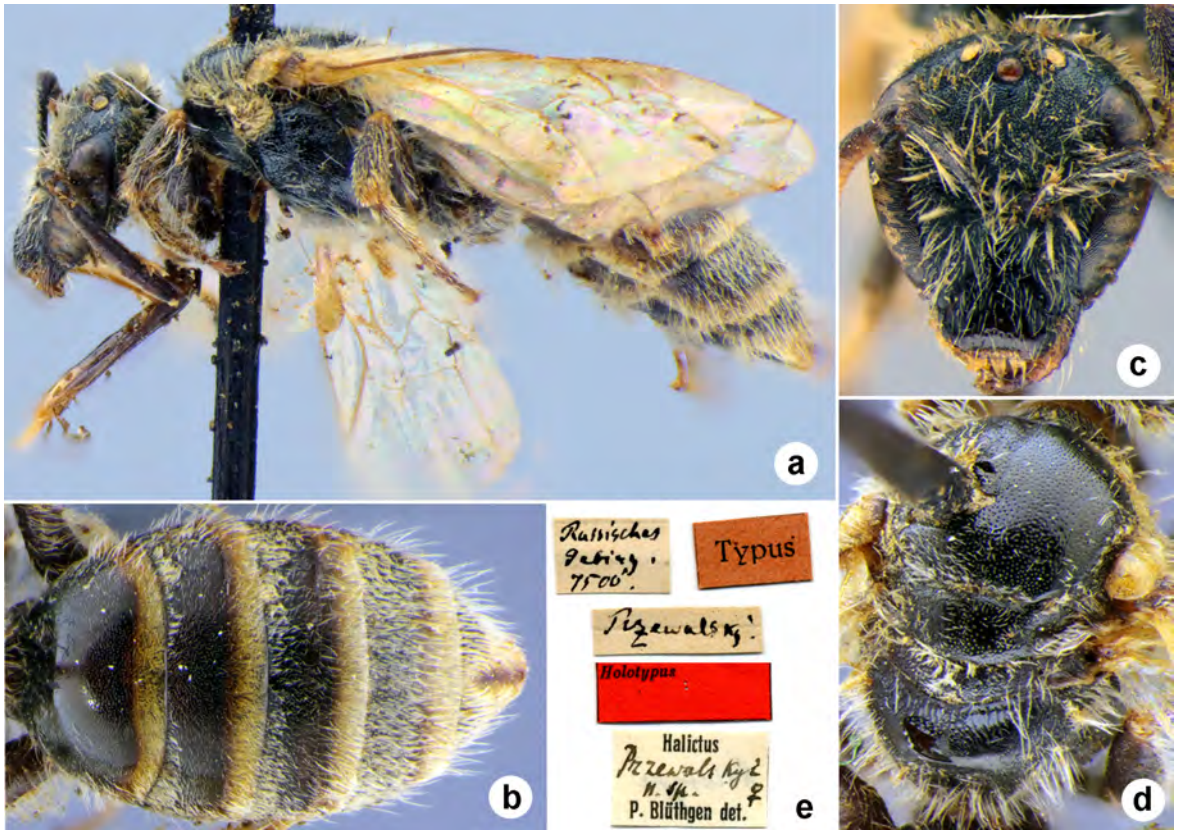
Current status. *Lasioglossum* (*Sphecodogastra*) *przewalskyi* (Blüthgen, 1931).

43. *Halictus puncticollis* Morawitz, 1872

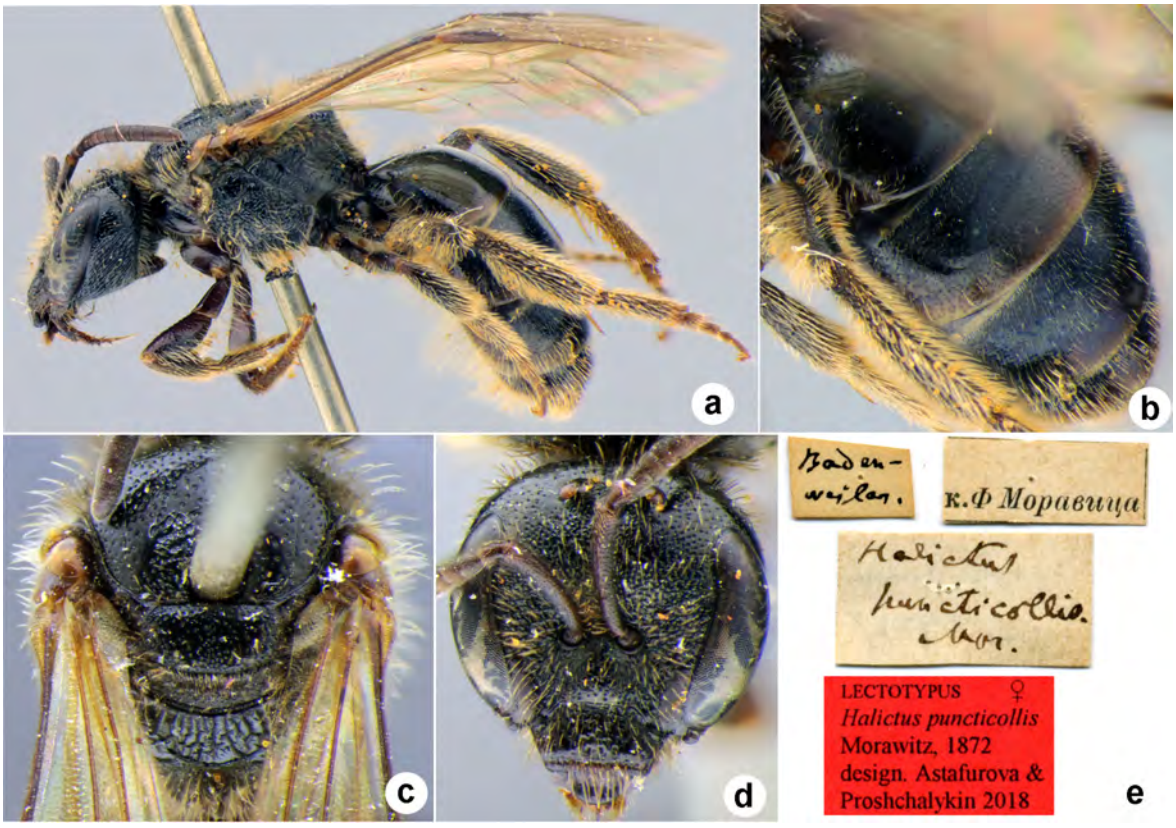
(Figs 43a–e)

Halictus puncticollis Morawitz, 1872: 370, ♀.

Type locality. Badenweiler, Bamberg (Germany).



FIGURES 42a–e. *Halictus przewalskyi* Blüthgen, 1931. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.



FIGURES 43a–e. *Halictus puncticollis* Morawitz, 1872. Lectotype, female: a—habitus, lateral view; b—metasoma, postero-lateral view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

Lectotype (designated here): ♀, Badenweiler [Germany, 47°48′N 7°40′E] // *Halictus puncticollis* Mor. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Lectotypus *Halictus puncticollis* Morawitz, 1872, ♀, design. Astafurova & Proshchalykin 2018 <red label>.

Paralectotypes: 1 ♀, Bamberg // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Paralectotypus *Halictus puncticollis* Morawitz, 1872, ♀, design. Astafurova & Proshchalykin 2018 <red label>; 2 ♀, Badenweiler // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Paralectotypus *Halictus puncticollis* Morawitz, 1872, ♀, design. Astafurova & Proshchalykin 2018 <red label>.

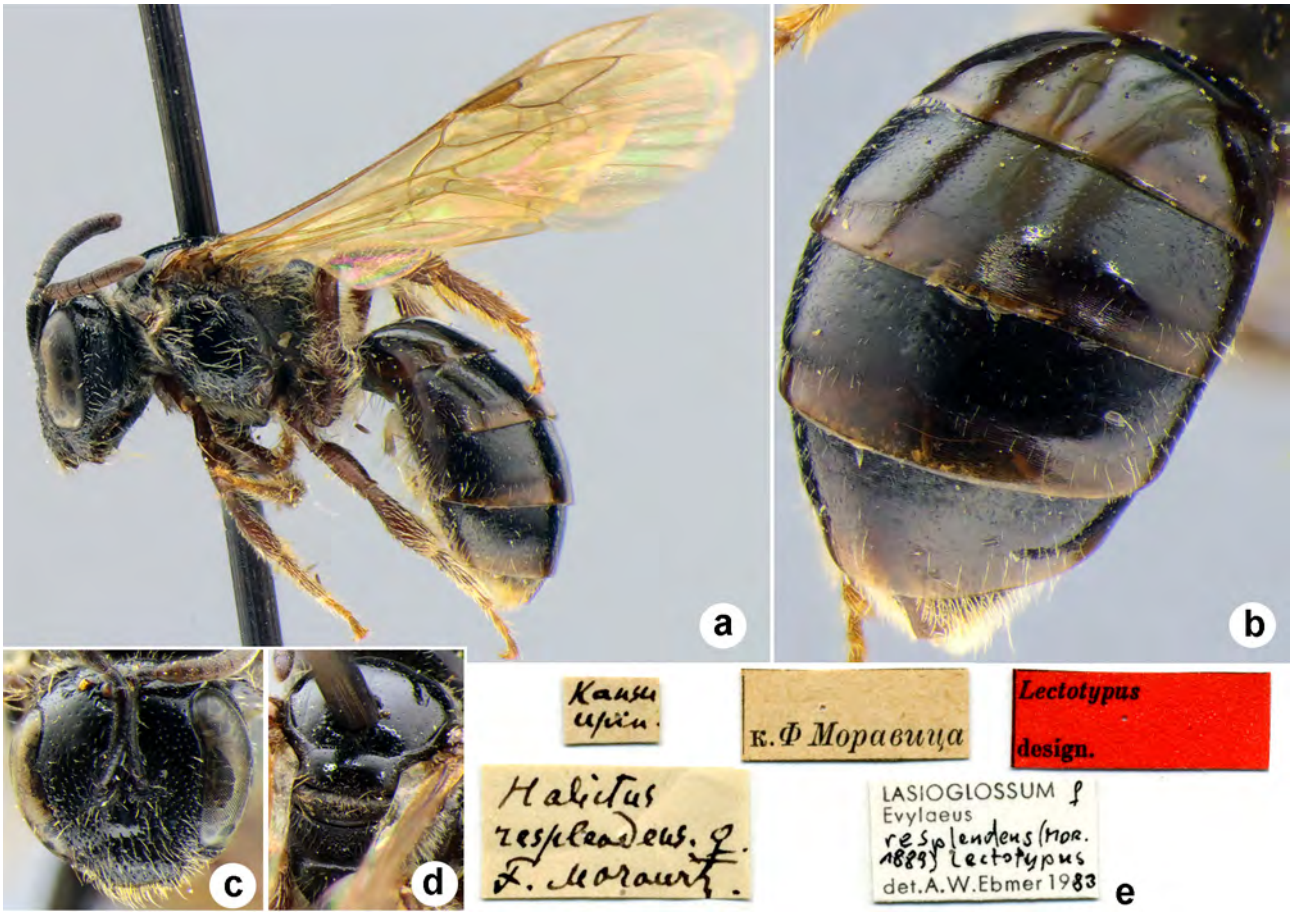
Remark. *Halictus puncticollis* Morawitz, 1872 was described from females collected in Badenweiler and Bamberg [Germany]. There are four females in ZISP from these localities, which correspond to the original description of F. Morawitz. One of these females is designated here as the lectotype of *H. puncticollis* to avoid any confusion about the status of its type specimens and to properly diagnose this species.

Current status. *Lasioglossum* (*Hemihalictus*) *puncticolle* (Morawitz, 1872).

44. *Halictus resplendens* Morawitz, 1890

(Figs 44a–e)

Halictus resplendens Morawitz, 1890: 365, ♀.



FIGURES 44a–e. *Halictus resplendens* Morawitz, 1890. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

Type locality. Kan-ssu: Upin (China).

Lectotype: ♀, designated by Ebmer 1985a: 217, Kansu, Upin [China, Gansu, about 50 km NW Lanzhou, 36°01′N 103°2′E] // *Halictus resplendens* F. Moraw. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // *Lasioglossum Evylaeus resplendens* (Mor. 1889), ♀, Lectotypus, det. A.W. Ebmer 1983 // Lectotypus, design. <red

label>.

Current status. *Lasioglossum* (*Hemihalictus*) *resplendens* (Morawitz, 1890).

45. *Halictus riparius* Morawitz, 1874

(Figs 45a–e)

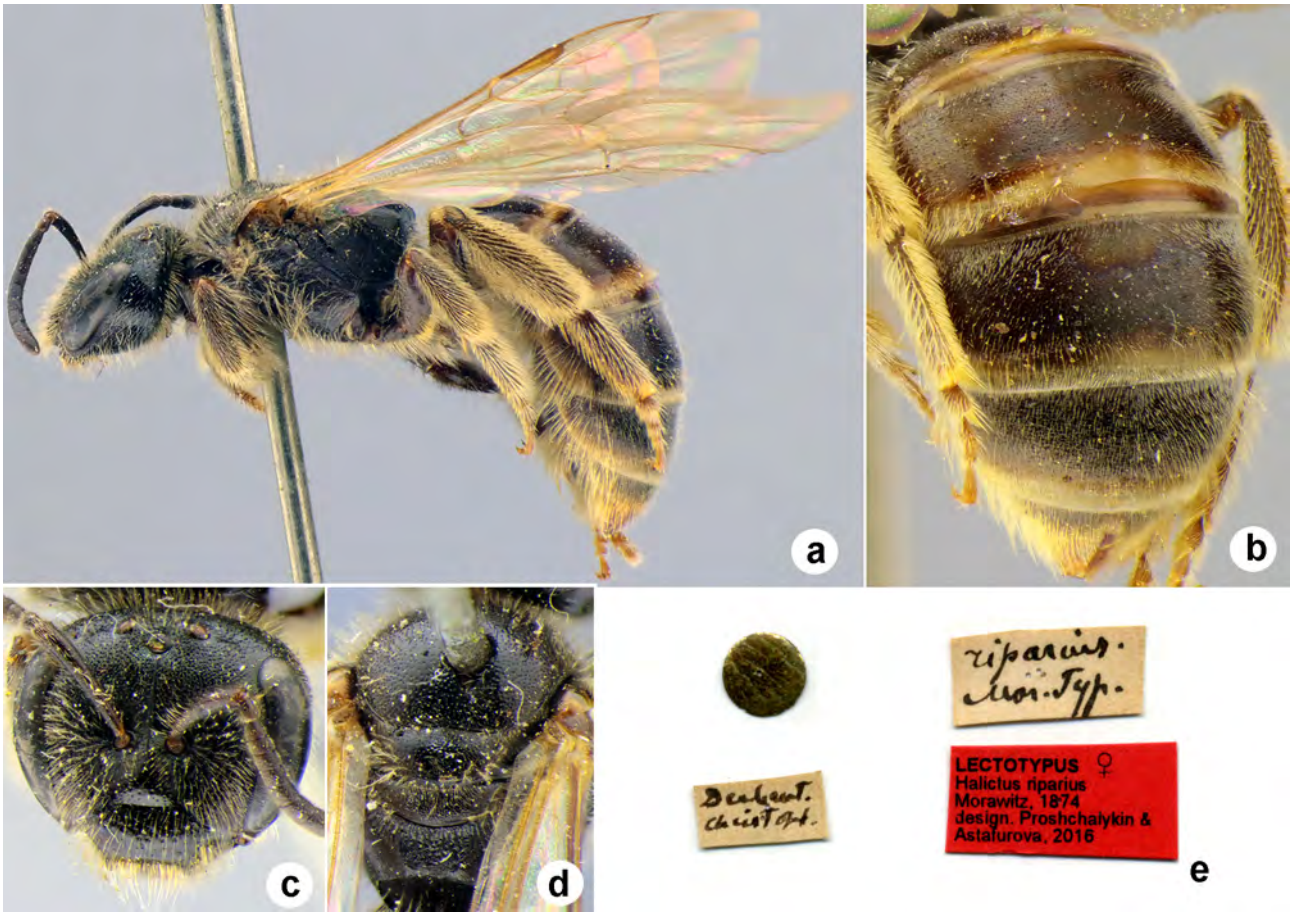
Halictus riparius Morawitz, 1874: 165, ♀.

Type locality. Derbent (Russia), Bacu (Azerbaijan).

Lectotype: ♀, designated by Proshchalykin & Astafurova 2016: 14, <golden circle> // Derbent [Russia, Dagestan Republic, 42°03′N 48°17′E], [leg. G.] Cristoph // *riparius* Mor., Typ. // Lectotypus *Halictus riparius* Morawitz, 1874, ♀, design. Proshchalykin & Astafurova, 2016 <red label>.

Paralectotypes: 2 ♀, Bacu [Azerbaijan, Baku] // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Paralectotypus <red label>; 4 ♀, Derbent // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Paralectotypus, design. <red label>.

Current status. *Lasioglossum* (*Evylaeus s.l.*) *marginatum* (Brullé, 1832) (synonymy by Alfken 1905: 145).



FIGURES 45a–e. *Halictus riparius* Morawitz, 1874. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

46. *Halictus salebrosus* Blüthgen, 1934

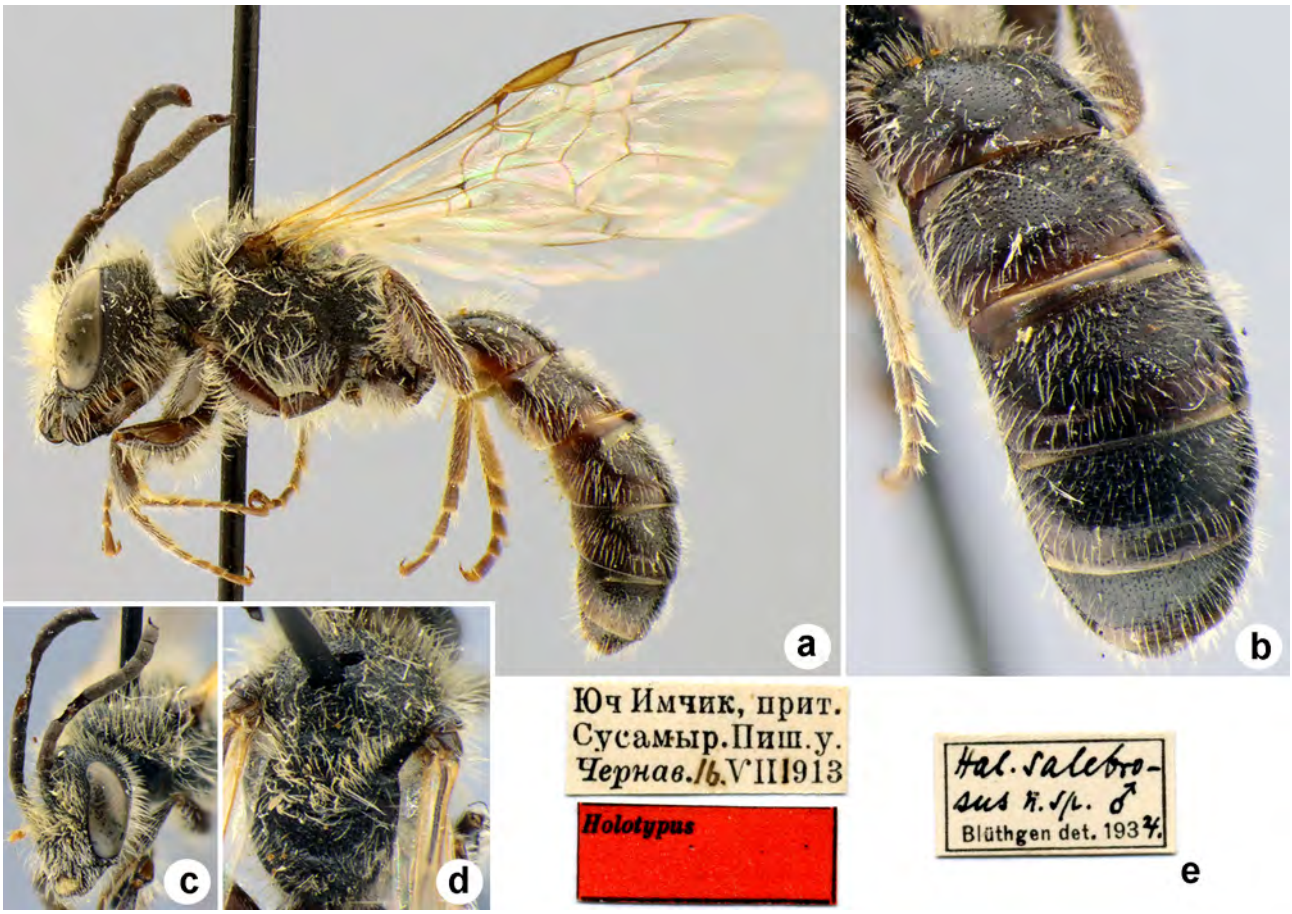
(Figs 46a–e)

Halictus salebrosus Blüthgen, 1934a: 156, Fig. 4, ♂.

Type locality. Yuch-Imchik (Kyrgyzstan).

Holotype: ♂, Юч Имчик, прит.[ок] Сусамыр.[а], Пиш.[пекского] у.[езда] [Kyrgyzstan, Chui Region, Uch-Echmek, 42°41′N 74°46′E], 16.VIII.[1]916, Чернав.[ский] [Chernavsky] // *Halictus salebrosus* n. sp., ♂, Blüthgen det. 1934 // Holotypus <red label>.

Current status. *Lasioglossum* (*Sphecodogastra*) *salebrosum* (Blüthgen, 1934).



FIGURES 46a–e. *Halictus salebrosus* Blüthgen, 1934. Holotype, male: a—habitus, lateral view; b—metasoma, dorsal view; c—head, lateral view; d—mesosoma, dorsal view; e—labels.

47. *Halictus salinus* Morawitz, 1876

(Figs 47a–e)

Halictus salinus Morawitz, 1876a: 56, ♀.

Type locality. Sardarabad (Armenia).

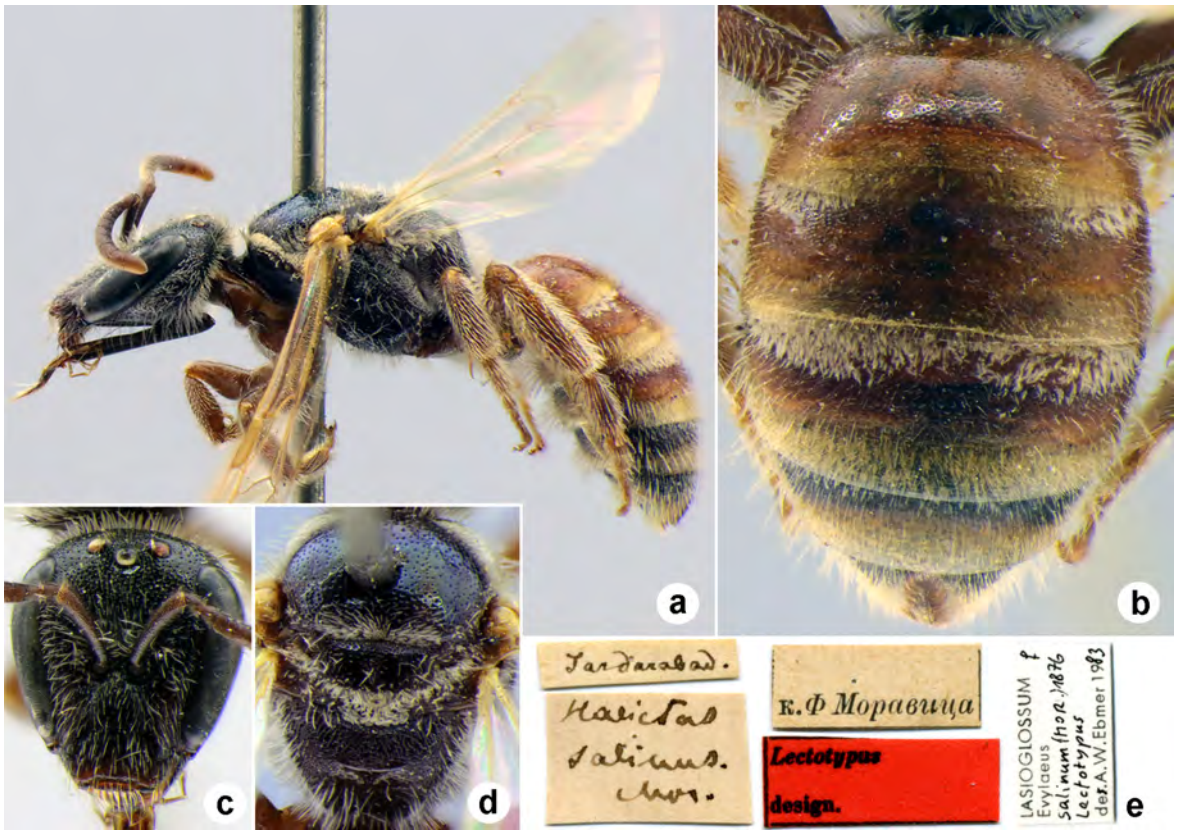
Lectotype: ♀, designated by Ebmer 1985a: 215, Sardarabad [Armenia, Armavir, 40°09′N 44°02′E] // *Halictus salinus* Mor. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // *Lasioglossum Evylaeus salinum* (Mor.) 1876, ♀, Lectotypus, des. A.W. Ebmer 1983 // Lectotypus, design. <red label>.

Current status. *Lasioglossum* (*Hemihalictus*) *salinum* (Morawitz, 1876).

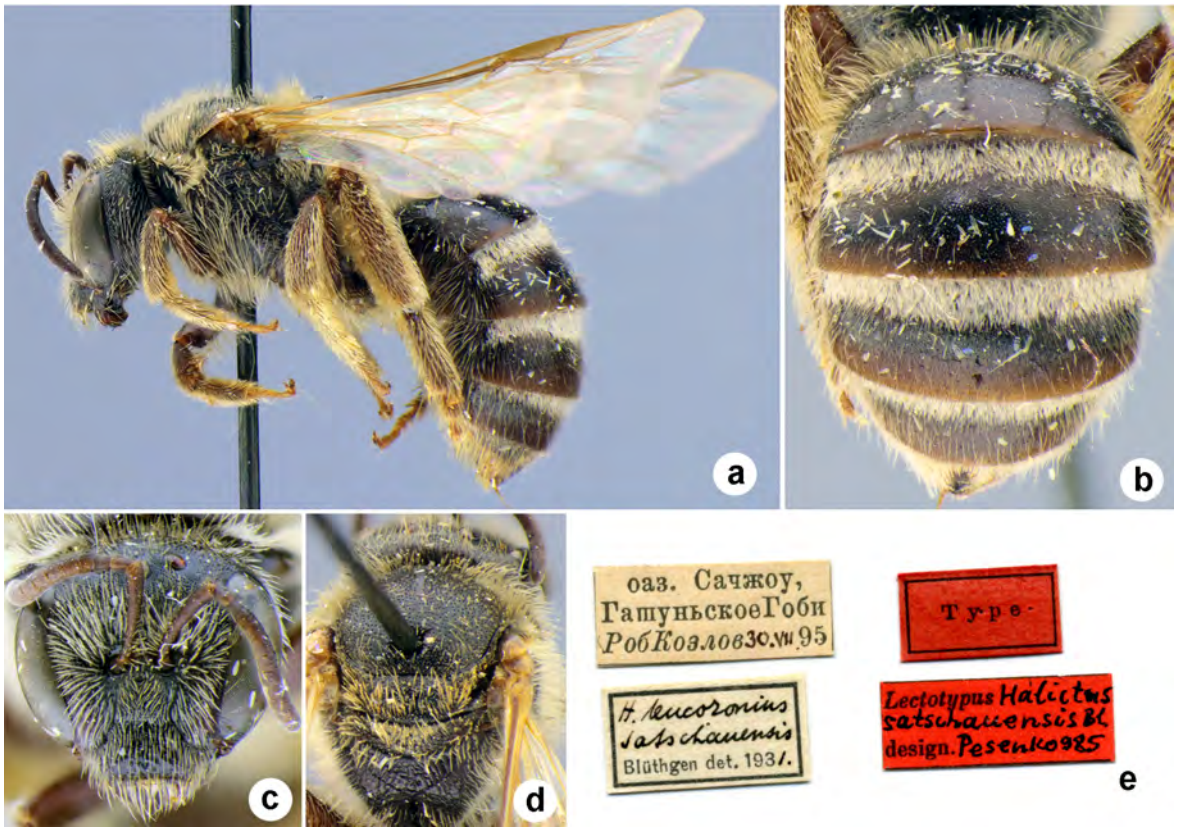
48. *Halictus satschauensis* Blüthgen, 1934

(Figs 48a–e)

Halictus satschauensis Blüthgen, 1934a: 145, ♀, ♂.



FIGURES 47a–e. *Halictus salinus* Morawitz, 1876. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.



FIGURES 48a–e. *Halictus satschauensis* Blüthgen, 1934. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

Type locality. Oase Sachzhou (China).

Lectotype: ♀, designated by Pesenko 1986: 142, оаз.[ис] Сачжоу, Гашуньское Гоби [China, Gansu, Dunhuang, 40°09′N 94°40′E], 30.VIII.[18]95, Роб[оровский] [V. Roborovsky], Козлов [P. Kozlov] // *H. leucozonius satschauensis* Blüthgen det. 1931 // Type <red label> // Lectotypus *Halictus satschauensis* Bl., design. Pesenko [1]985 <red label>.

Paralectotypes: 2 ♂, 3 ♀, the same labels as in lectotype, but 3.VIII.[18]95; 1 ♀, idem, 4.VIII.18]95; 2 ♀, 3 ♂, idem, 30.VII.[18]95; 1 ♂, idem, 28.VII.[18]95.

Current status. *Lasioglossum* (*Leuchalictus*) *leucozonium* (Schrank, 1781) (synonymy by Pesenko 2006: 154).

49. *Halictus subequestris* Blüthgen, 1931

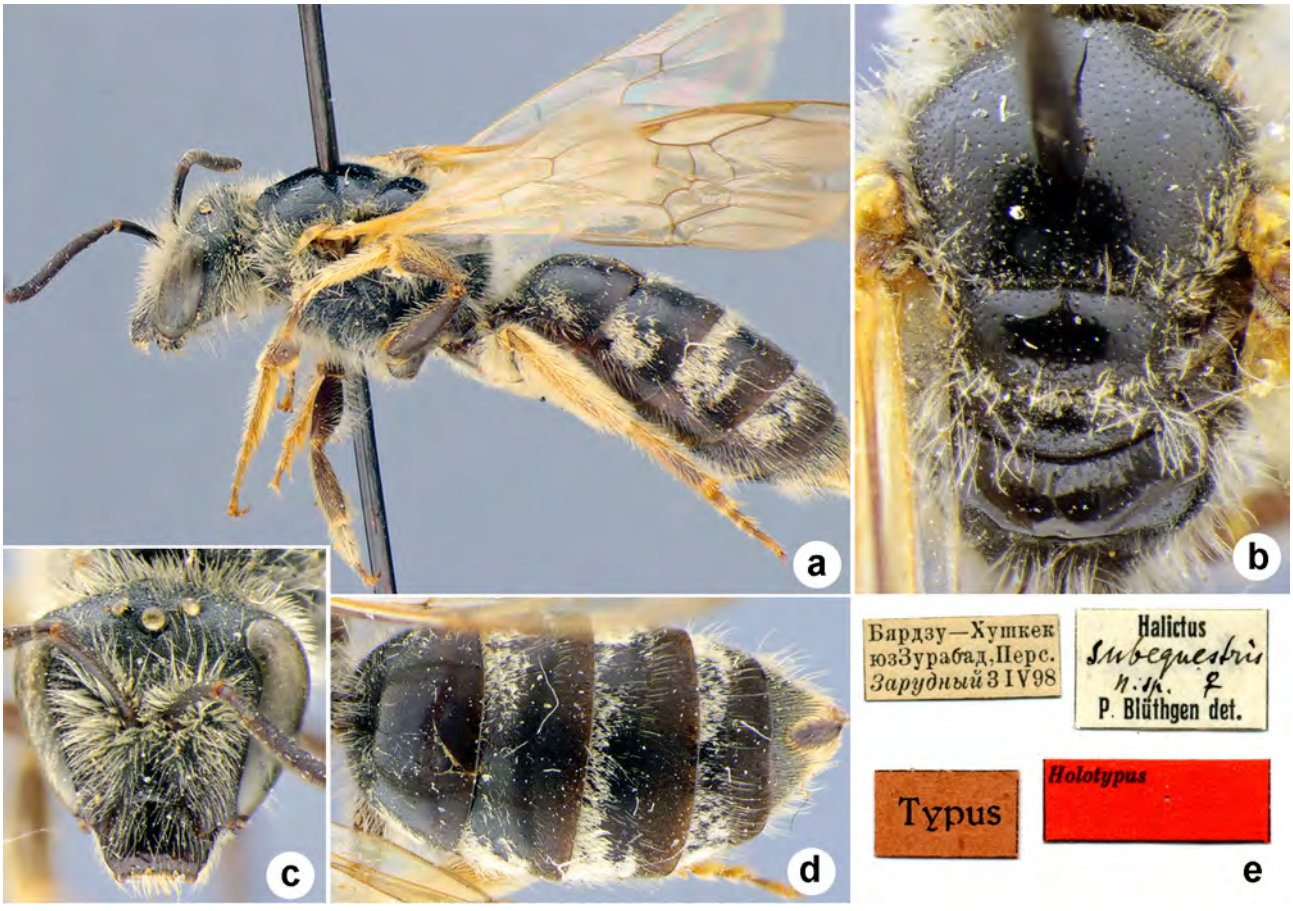
(Figs 49a–e)

Halictus subequestris Blüthgen, 1931: 338, Fig. 5b, ♀.

Type locality. "zwischen Bjardsu und Chuschkek bei Surabad" (Iran).

Holotype: ♀, Бярдзу–Хушкек, юз Зурабад, Перс.[ия] [Iran, SE Zurabad, 36°44′N 57°20′E], 3.IV.[19]98, Зарудный [N. Zarydny] // *Halictus subequestris* n. sp., ♀, P. Blüthgen det. // Typus <red label> // Holotypus <red label>.

Current status. *Lasioglossum* (*Lasioglossum*) *subequestre* (Blüthgen, 1931).



FIGURES 49a–e. *Halictus subequestris* Blüthgen, 1931. Holotype, female**:** a—habitus, lateral view; b—mesosoma, dorsal view; c—head, frontal view; d—metasoma, dorsal view; e—labels.

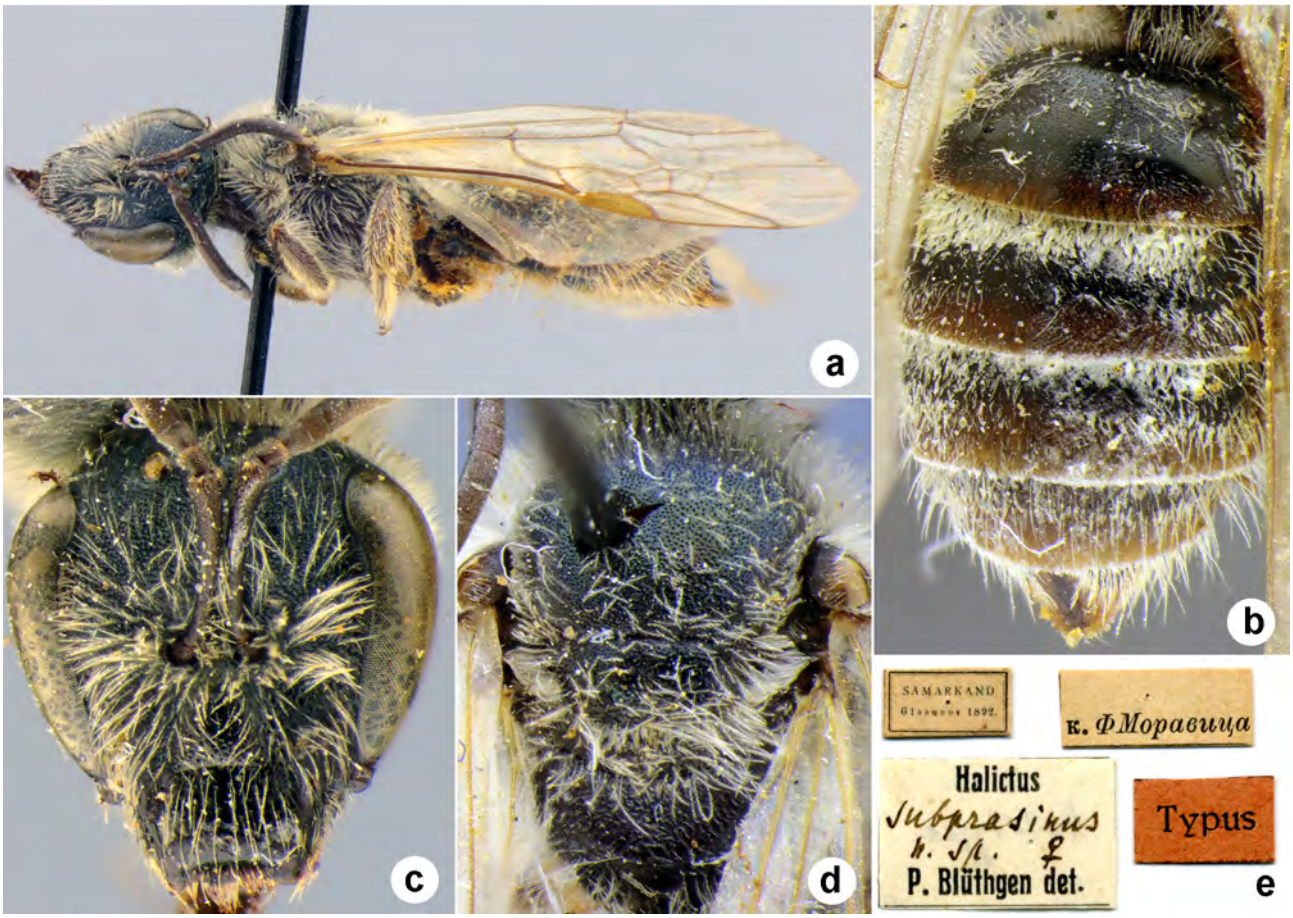
50. *Halictus subprasinus* Blüthgen, 1931
(Figs 50a–e)

Halictus subprasinus Blüthgen, 1931: 336, ♀.

Type locality. Samarkand, Boschara, Ak-tasch, Ak-baba (Uzbekistan).

Holotype: ♂, Samarkand [Uzbekistan, 39°39′N 66°56′E], [leg. D.] Glasunov, 1892 // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // *Halictus subprasinus* n. sp., ♀, P. Blüthgen det. // Typus <red label>.

Current status. *Lasioglossum* (*Lasioglossum*) *nigrilabre* (Morawitz, 1876) (synonymy by Ebmer 1978c: 39).



FIGURES 50a–e. *Halictus subprasinus* Blüthgen, 1931. Holotype, male: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

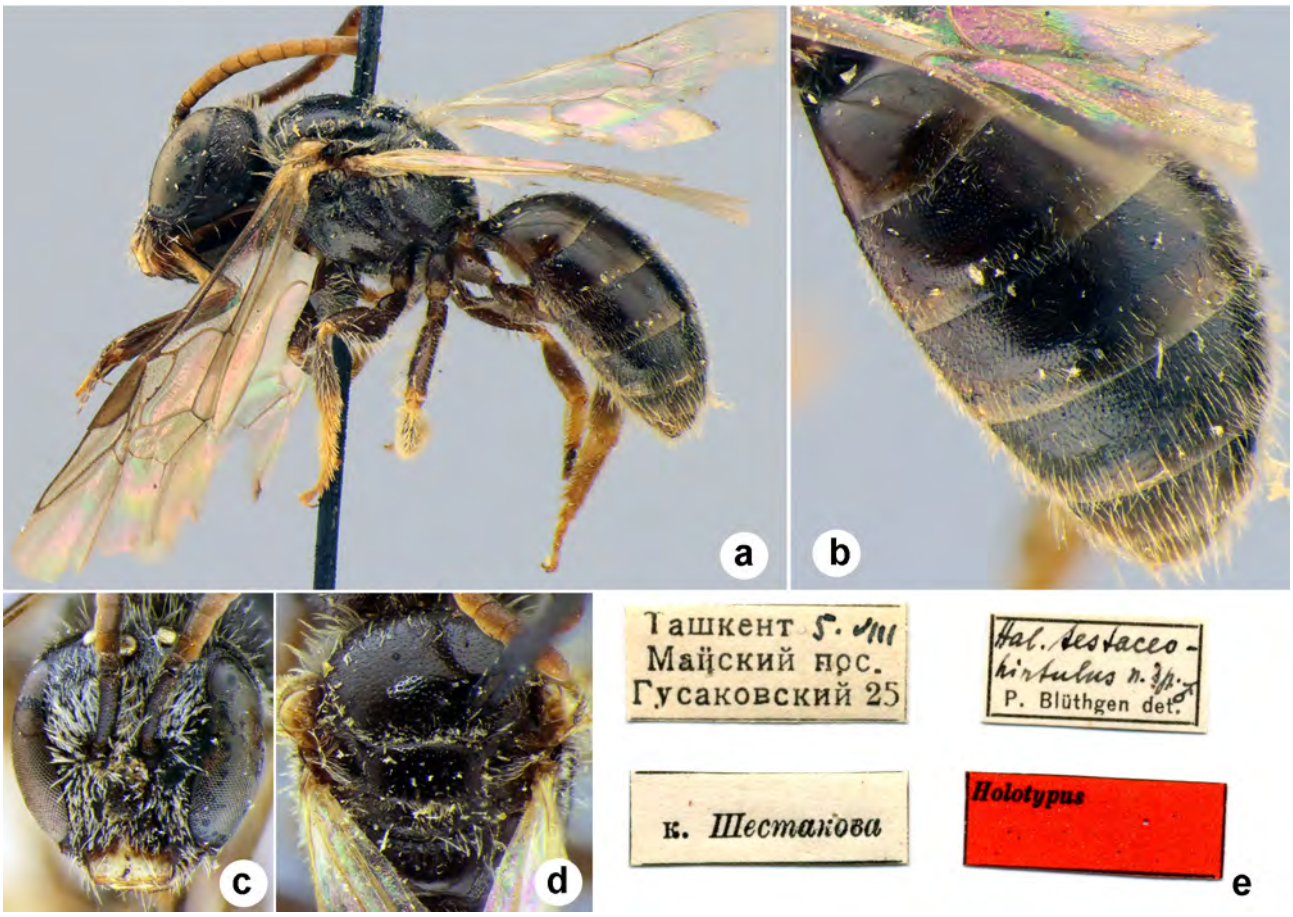
51. *Halictus testaceohirtulus* Blüthgen, 1929
(Figs 51a–e)

Halictus testaceohirtulus Blüthgen, 1929: 65, Fig. 3, ♂.

Type locality. Tashkent (Uzbekistan).

Holotype: ♂, Ташкент, Майский пос.[елок] [Uzbekistan, Tashkent, 41°18′N 69°16′E], 5.VIII.[19]25, Гуссаковский [V. Gussakovskij] // к.[оллекция] Шестакова [Collection of A. Shestakov] // *Halictus testaceohirtulus* n. sp., ♂, P. Blüthgen det. // Holotypus <red label>.

Current status. *Lasioglossum* (*Hemihalictus*) *clypeiferellum* (Strand, 1909) (synonymy by Blüthgen 1931: 214).



FIGURES 51a–e. *Halictus testaceohirtulus* Blüthgen, 1929. Holotype, male: a—habitus, lateral view; b—metasoma, postero-lateral view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

52. *Halictus truncaticollis* Morawitz, 1877

(Figs 52a–e)

Halictus truncaticollis Morawitz, 1877: 90–91, ♀.

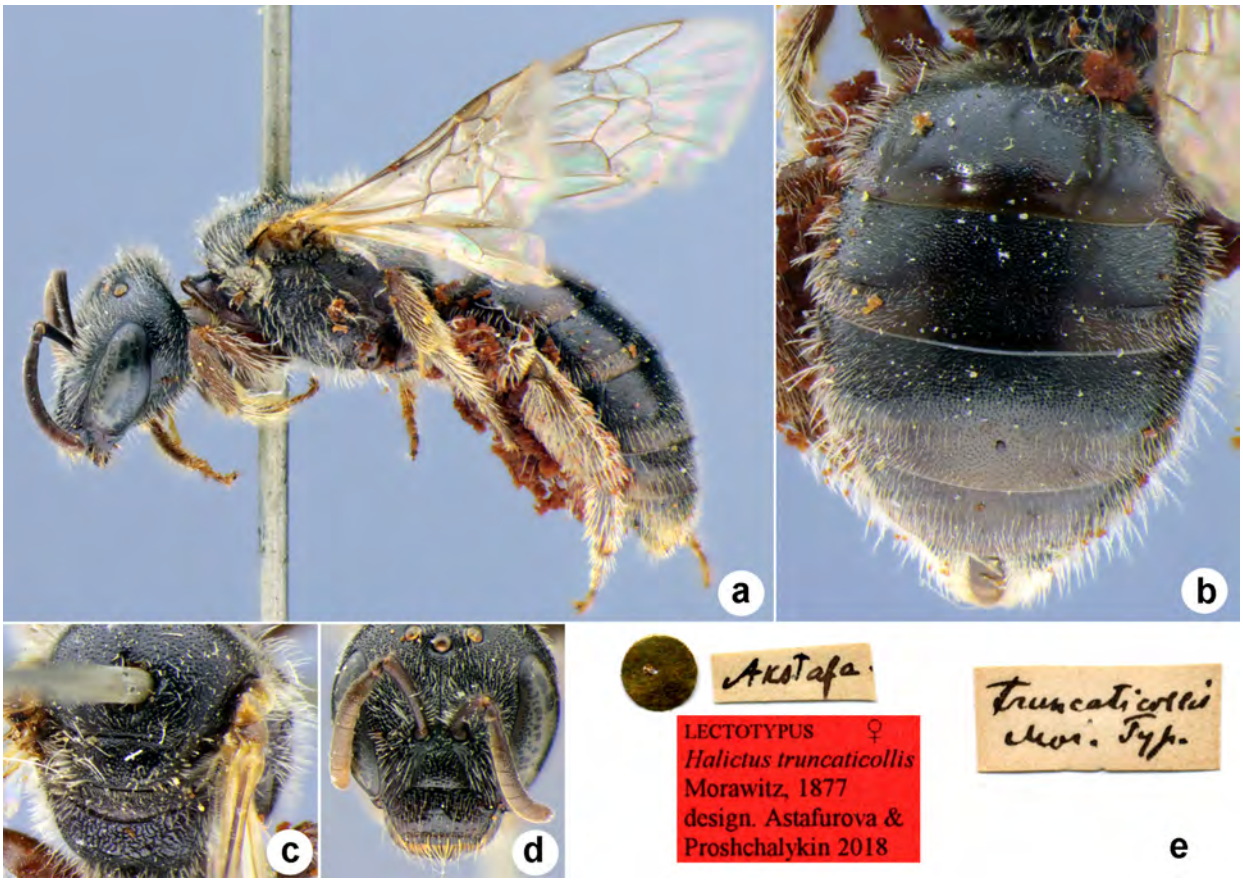
Type locality. Alget, Marienfeld, Tiflis, Signach (Georgia), Akstafinskaja (Azerbaijan).

Lectotype (designated here): ♀, <golden circle> // Akstafa [Azerbaijan, Aghstafa 41°07′N 45°27′E] // *truncaticollis* Mor., Typ. // Lectotypus *Halictus truncaticollis* Morawitz, 1877, ♀, design. Astafurova & Proshchalykin 2018 <red label>.

Paralectotypes: 3 ♀, Akstafa [Azerbaijan] // к.[оллекция] Ф. Моравица [Collection of F. Morawitz]; 2 ♀, Tiflis [Georgia] // к.[оллекция] Ф. Моравица [Collection of F. Morawitz]; 1 ♀, Marienfeld [Georgia], к.[оллекция] Ф. Моравица [Collection of F. Morawitz]; 1 ♀, Signach [Georgia] // к.[оллекция] Ф. Моравица [Collection of F. Morawitz]; 1 ♀, Alget [Georgia] // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Paralectotypus *Halictus truncaticollis* Morawitz, 1877, ♀, design. Astafurova & Proshchalykin 2018 <red label> [this label for every paralectotype specimens].

Remark. *Halictus truncaticollis* Morawitz, 1877 was described from females collected in Alget, Marienfeld, Tiflis, Signach [Georgia] and Akstafinskaja [Azerbaijan]. There are nine females in ZISP from these localities, which correspond to the original description of F. Morawitz. One of these females is designated here as the lectotype of *H. truncaticollis* to avoid any confusion about the status of its type specimens and to properly diagnose this species.

Current status. *Lasioglossum* (*Hemihalictus*) *truncaticolle* (Morawitz, 1877).



FIGURES 52a–e. *Halictus truncaticollis* Morawitz, 1877. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

53. *Halictus upinensis* Morawitz, 1890

(Figs 53a–e)

Halictus upinensis Morawitz, 1890: 363–364, ♀.

Type locality. Kan-ssu: Upin (China).

Lectotype: ♀, designated by Pesenko 1986: 142, Kansu, Upin [China Gansu, about 50 km NW Lanzhou, 36°01′N 103°2′E] // *Halictus upinensis* F. Moraw. // к.[оллекция] Ф. Моравица [Collection of F. Morawitz] // Lectotypus *Halictus upinensis* Mor., ♀, design. Pesenko [1]985 <red label>.

Paralectotype: 1 ♀, the same label as in lectoype.

Current status. *Lasioglossum* (*Leuchalictus*) *upinense* (Morawitz, 1890).

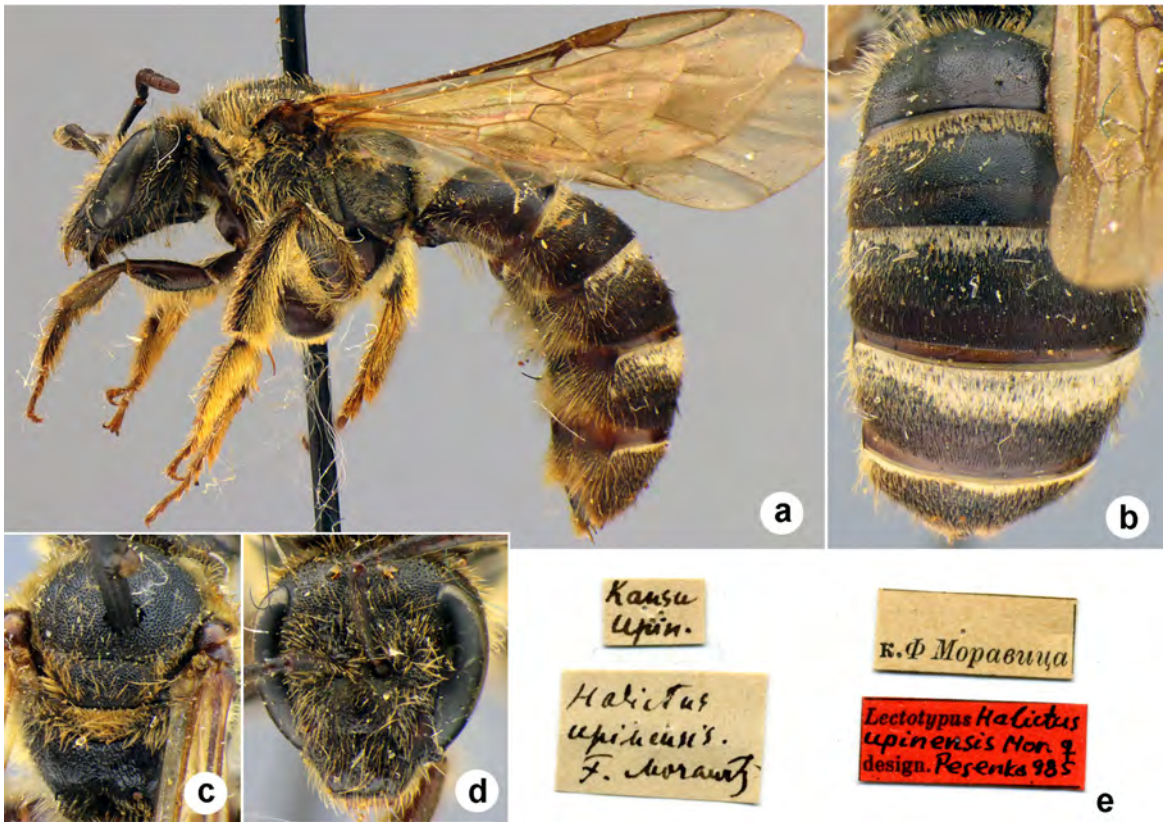
54. *Hylaeus fulvicrus* Eversmann, 1852

(Figs 54a–e)

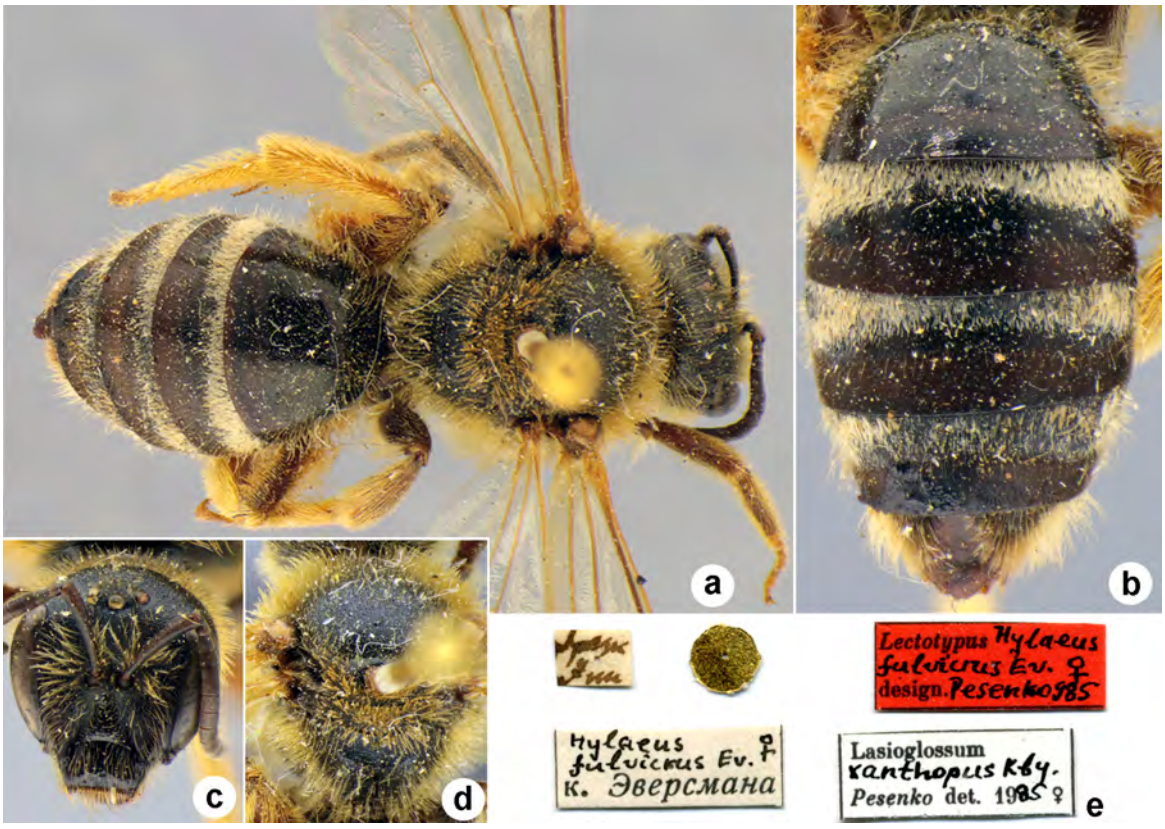
Hylaeus fulvicrus Eversmann, 1852: 33 (key), 35 (key), 39, ♀, ♂.

Type locality. Prov. Orenburgensi (Russia).

Lectotype: ♀, designated by Pesenko 1986: 126, <golden circle> // Spask [Russia, Orenburg Prov., Spasskoe, 52°00′N 56°32′E], Jun[e] // *Hylaeus fulvicrus* Ev., ♀, к.[оллекция] Эверсманна [Collection of E. Eversmann] // Lectotypus *Hylaeus fulvicrus* Ev., ♀, design. Pesenko [1]985 <red label> // *Lasioglossum xanthopus* Kby., ♀, Pesenko det. 1985.



FIGURES 53a–e. *Halictus upinensis* Morawitz, 1890. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.



FIGURES 54a–e. *Hylaeus fulvicrus* Eversmann, 1852. Lectotype, female: a—habitus, dorsal view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

Paralectotypes: 2 ♀, the same label as in lectotype; 1 ♂, <golden circle> // *Hylaeus fulvicrus* Ev., ♂, к.[оллекция] Эверсманна [Collection of E. Eversmann] // Paralectotypus <red label> // *Evylaeus* sp., ♂, Pesenko det.; 4 ♀, *Hylaeus fulvicrus* Ev., ♀, к.[оллекция] Эверсманна [Collection of E. Eversmann] // Paralectotypus <red label> // *Lasioglossum xanthopus* Kby., ♀, Pesenko det. 1985.

Current status. *Lasioglossum* (*Lasioglossum*) *xanthopus* (Kirby, 1802) (synonymy by Blüthgen 1931: 209).

55. *Hylaeus rostratus* Eversmann, 1852

(Figs 55a–e)

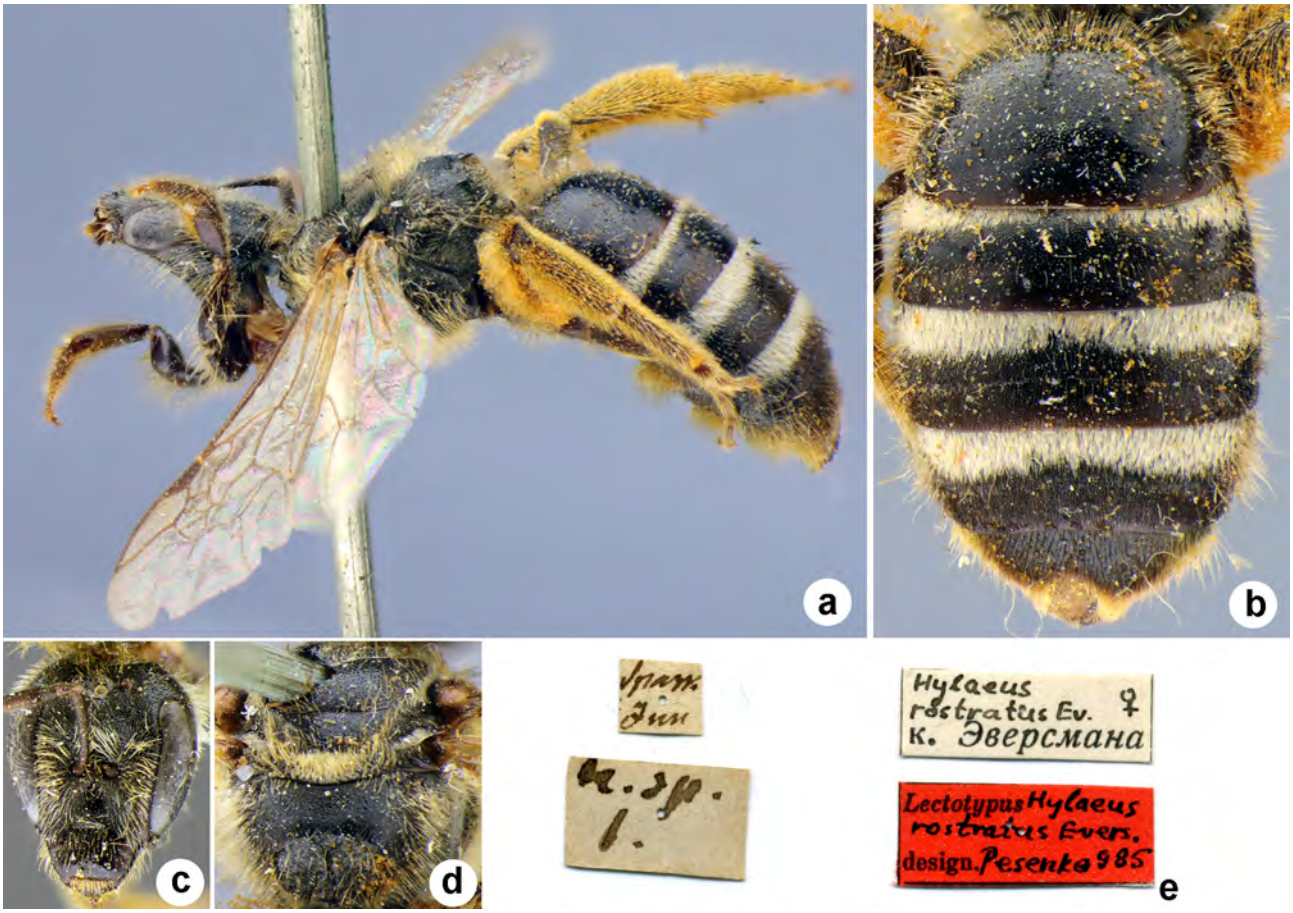
Hylaeus rostratus Eversmann, 1852: 35 (key), 38, ♀.

Type locality. Promontoriis uralensibus australibus et in terris transuralensibus (Russia).

Lectotype: ♀, designated by Pesenko 1986: 138, Spask [Russia, Orenburg Prov., Spasskoe, 52°00′N 56°32′E], Jun[e] // n. sp. I. // *Hylaeus rostratus* Ev., ♀, к.[оллекция] Эверсманна [Collection of E. Eversmann] // Lectotypus *Hylaeus rostratus* Evers., ♀, design. Pesenko [1]985 <red label>.

Paralectotypes: 1 ♀, Orb [Russia, Orenburg] // к.[оллекция] Эверсманна [Collection of E. Eversmann] // Paralectotypus *Hylaeus rostratus* Evers., ♀, design. Pesenko [1]985 <red label>; 1 ♀, Irkutzk [Russia, Irkutsk] // к.[оллекция] Эверсманна [Collection of E. Eversmann] // Paralectotypus <red label>.

Current status. *Lasioglossum* (*Leuchalictus*) *rostratum* (Eversmann, 1852).



FIGURES 55a–e. *Hylaeus rostratus* Eversmann, 1852. Lectotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

56. *Hylaeus rubellus* Eversmann, 1852
(Figs 56a–e)

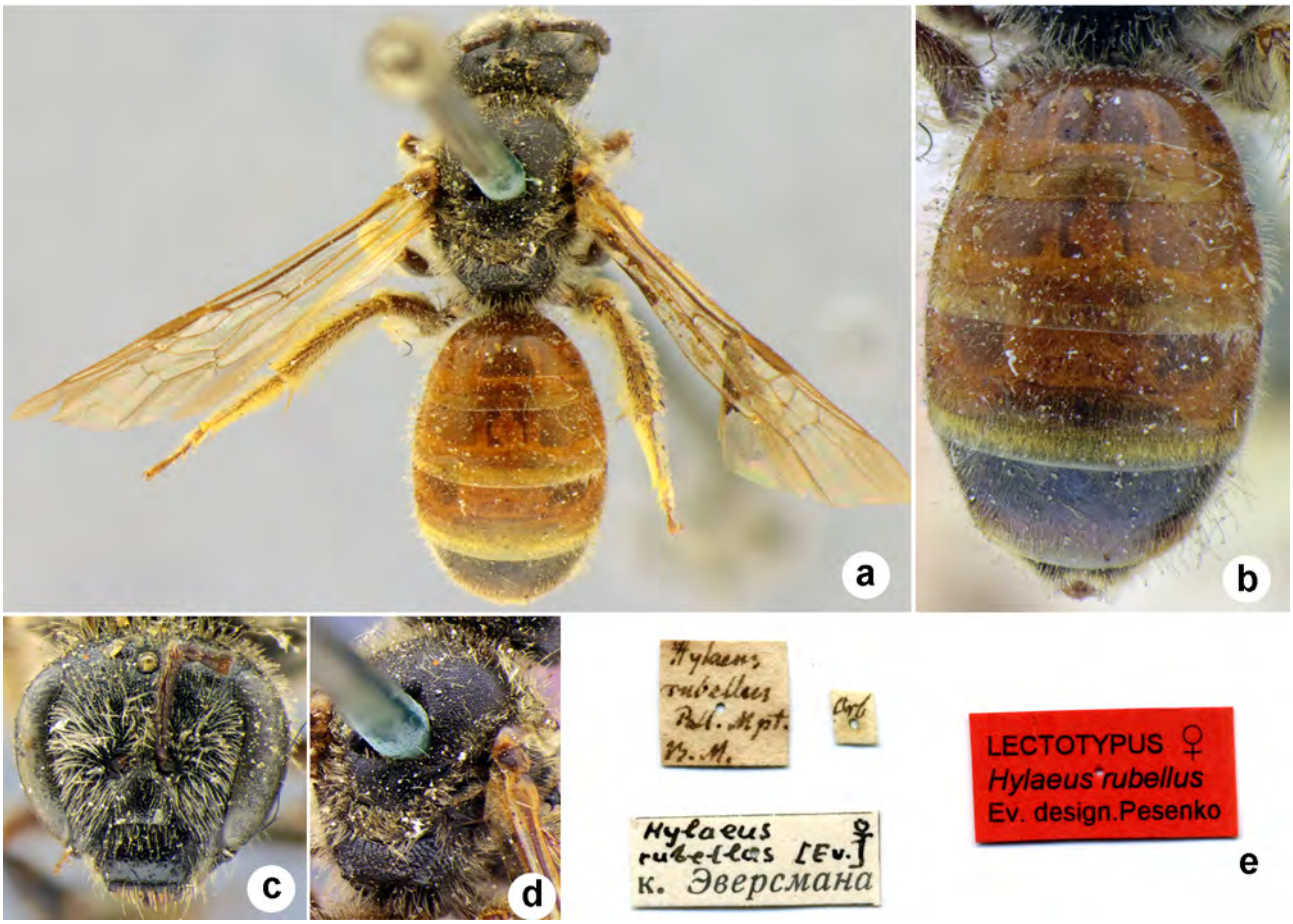
Hylaeus rubellus Eversmann, 1852: 35 (key), 40, ♀.

Type locality. Promontoriis Uralensibus (Russia).

Lectotype: ♀, designated by Pesenko 2007: 102, Orb. [Russia, Orenburg, 51°46′N 55°06′E] // *Hylaeus rubellus* Pall., Mpt., B.M. // *Hylaeus rubellus* (Ev.), ♀, к.[оллекция] Эверсманна [Collection of E. Eversmann] // Lectotypus *Hylaeus rubellus* Ev., ♀, design. Pesenko <red label>.

Paralectotypes: 3 ♀, Spask [Russia, Orenburg Prov., Spasskoe], Jun[e] // *Hylaeus rubellus* (Ev.), ♀, к.[оллекция] Эверсманна [Collection of E. Eversmann] // Paralectotypus *Hylaeus rubellus* Ev., ♀, design. Pesenko <red label>.

Current status. *Lasioglossum* (*Sphecodogastra*) *calceatum* (Scopoli, 1763) (synonymy by Strand 1921: 274).



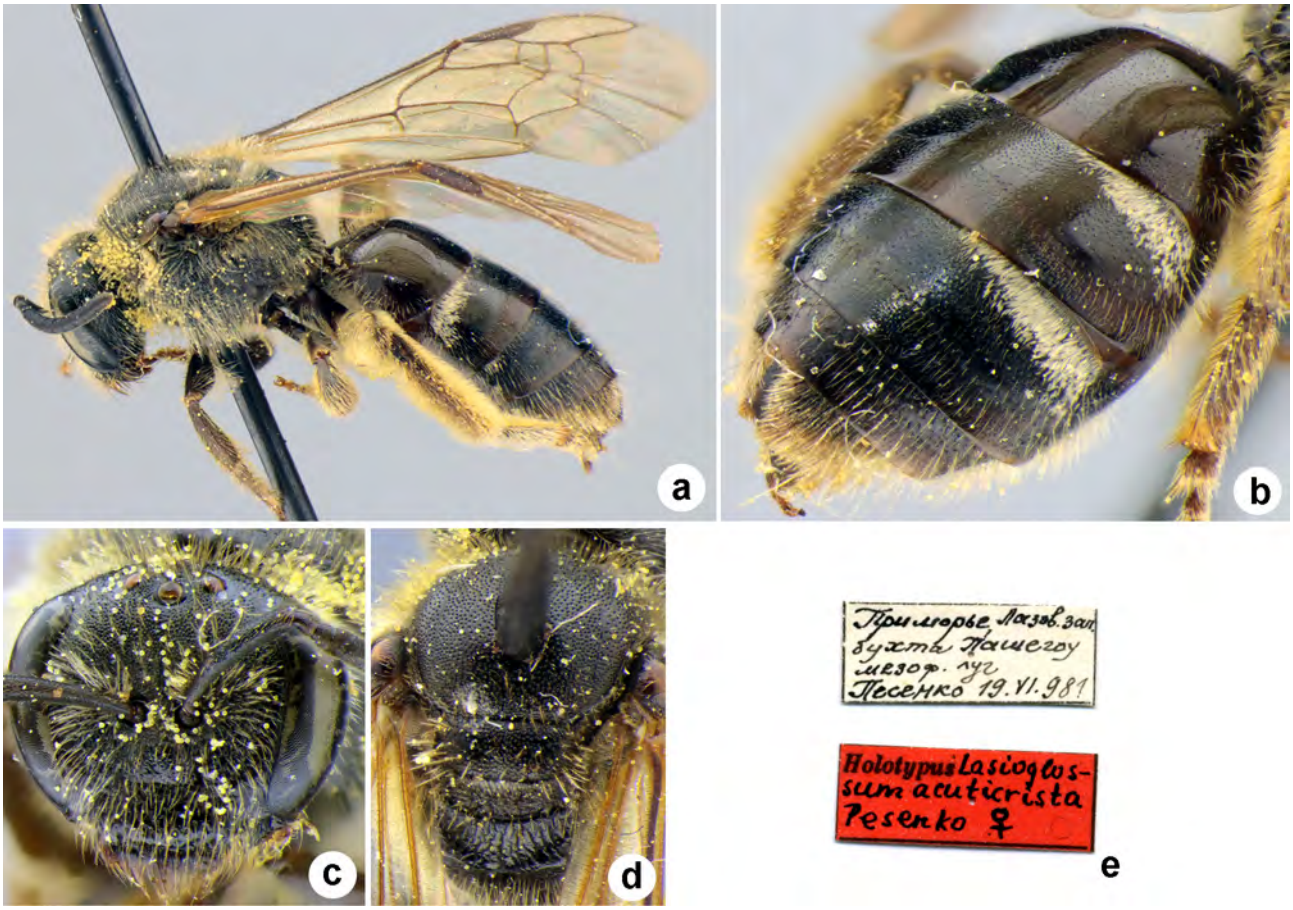
FIGURES 56a–e. *Hylaeus rubellus* Eversmann, 1852. Lectotype, female: a—habitus, dorsal view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

57. *Lasioglossum acuticrista* Pesenko, 1986
(Figs 57a–e)

Lasioglossum (*Lophalictus*) *acuticrista* Pesenko, 1986: 126 (key), 144, Figs 1–6, ♀, ♂.

Type locality. Lazovsky Nature Reserve (Russia).

Holotype: ♀, Приморье, Лазов.[ский] запов.[едник], бухта Пашегоу, мезоф.[ильный] луг [Russia, Primorsky Territory, Lazovsky Nature Reserve, Pashegou Bay, 43°14′N 133°24′E], 19.VI.1981, Песенко [Yu. Pesenko] // Holotypus *Lasioglossum acuticrista* Pesenko, ♀ <red label>.



FIGURES 57a–e. *Lasioglossum acuticrista* Pesenko, 1986. Holotype, female: a—habitus, lateral view; b—metasoma, postero-lateral view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

Paratypes: 2 ♀, the same labels as in holotype; 3 ♂, Приморье, бух.[та] Пашегоу, 12 км СВ Преображен.[ия] [Russia, Primorsky Territory, 12 km NE Preobrazheniya, Pashegou Bay], on *Patrinia sibirica*, 27-30.VIII.[1]981, Песенко [Yu. Pesenko]; 1 ♀, Приморье, Лазов.[ский] зап.[оведник], 15 км ССВ Преображения, кордон Сяухэ [Russia, Primorsky Territory, Lazovsky Nature Reserve, 15 km NNE Preobrazheniya, Syaukhe], 19.VI.[1]981, Песенко [Yu. Pesenko]; 1 ♀, Приморье, Лазов.[ский] зап.[оведник], 3 км ЮВ Киевки, опушка [Russia, Primorsky Territory, Lazovsky Nature Reserve, 3 km SE Kievka, edge of forest], on *Ranunculus* sp., 23.VI.[1]981, Песенко [Yu. Pesenko]; 1 ♀, Приморье, Лазов.[ский] зап.[оведник], кордон Сухой ключ, 20 км ССВ Киевки [Russia, Primorsky Territory, Lazovsky Nature Reserve, 20 km NNE Kievka, Sukhoi klyuch], 14.VI.[1]979, Романькова [T. Romankova]; 1 ♀, Приморье, Лазов.[ский] зап.[оведник], 12 км ССЗ Преображен.[ия], кордон Канихеза [Russia, Primorsky Territory, Lazovsky Nature Reserve, 12 km NNW Preobrazheniya, Kanikheza], 30.VII.[1]979, Романькова [T. Romankova]; 1 ♀, Приморье, В Лазо, ур.[очище] Перекатное [Russia, Primorsky Territory, E Lazo, Perekatnoe], 14.VI.[1]980, Романькова [T. Romankova]; 1 ♀, Приморье, Лазов.[ский] зап.[оведник], с.[ело] Киевка, опушка [Russia, Primorsky Territory, Lazovsky Nature Reserve, Kievka], 14.VI.[1]981, Песенко [Yu. Pesenko]; 1 ♂, 2 ♀, Приморский кр.[ай], ст.[анция] Анисимовка [Russia, Primorsky Territory, Anisimovka], 1.VII, 28.IX.1974, Березанцев [A. Berezantsev]; 1 ♂, idem, 15.VIII.[1]974, Лелей [A. Lelej]; 1 ♀, Приморский кр., Уссурийский зап-к[заповедник] [Russia, Primorsky Territory, Ussury Nature Reserve], 7.IX.[19]74, Березанцев [A. Berezantsev]; 1 ♂, Судзух.[инский] Зап.[оведник], Та-Чингоуз [Russia, Primorsky Territory, Lazovsky Nature Reserve, Ta-Chingouza Bay], 27.IX.1948, Гуссаковский [V. Gussakovskij]; 2 ♂, Приморский край, Комаровский заповедник [Russia, Primorsky Territory, Ussury Nature Reserve], 2, 12.VIII.[1]973, Лелей [A. Lelej]; 1 ♀, idem, 26. VII.[1]972, Куслицкий [Kuslitskiy]; 7 ♀, Приморье, Лазовский р-н[район] [Russia, Primorsky Territory, Lazo district], 30.V., 27.VI., 15.VII.1976, [without collector]; 2 ♀, Седанка-Океанская, бл.[из] Владив.[остока] [Russia, Primorsky Territory, Vladivostok, Sedanka-Okeanskaya] 1.VI.[1]913, Котельников [Kotelnikov]; 1 ♀,

idem, 2.V.[1]974, Лелей [A. Lelej]; 3 ♀, idem, 2-3.VI.[1]978, Лелей [A. Lelej]; 1 ♀, Тигровая, Сучан.[ский] р-н[район], Уссур.[ийского] кр.[ая] [Russia, Primorsky Territory, Partizansk district], 18.VI.[1]927, Соколов [Sokolov]; 1 ♀, Приморье, Хасанский р-н[район], зап-к[заповедник] Кедровая падь [Russia, Primorsky Territory, Kedrovaya pad Nature Reserve], 10.VI.[1]977, Н. Азарова [N. Azarova]; 2 ♀, idem, 6.VII.[19]75, Рябухин [Ryabukhin]; 1 ♀, idem, 3.VIII.[1]981, Каспарян [D. Kasparyan]; 1 ♀, Приморье, 24 км ЮЗ Славянки, на цветах [Russia, Primorsky Territory, 24 km SW Slavyanka, on flowers], 11.VI.[1]979, Купянская [A. Kupianskaya]; 1 ♀, о-в[остров] Кунасири, окр.[есности] Котанкэси [Russia, Kuril Islands, Kunashir, Alekhino], 3.VII.[1]946, Н. Конаков [N. Konakov] // Paratypus *Lasioglossum acuticrista* Pesenko, <red label> [this label for every paratype specimens].

Current status. *Lasioglossum* (*Lasioglossum*) *proximatum* (Smith, 1879) (synonymy by Sakagami & Tadauchi 1995: 187).

58. *Lasioglossum alaicum* Pesenko, 1986

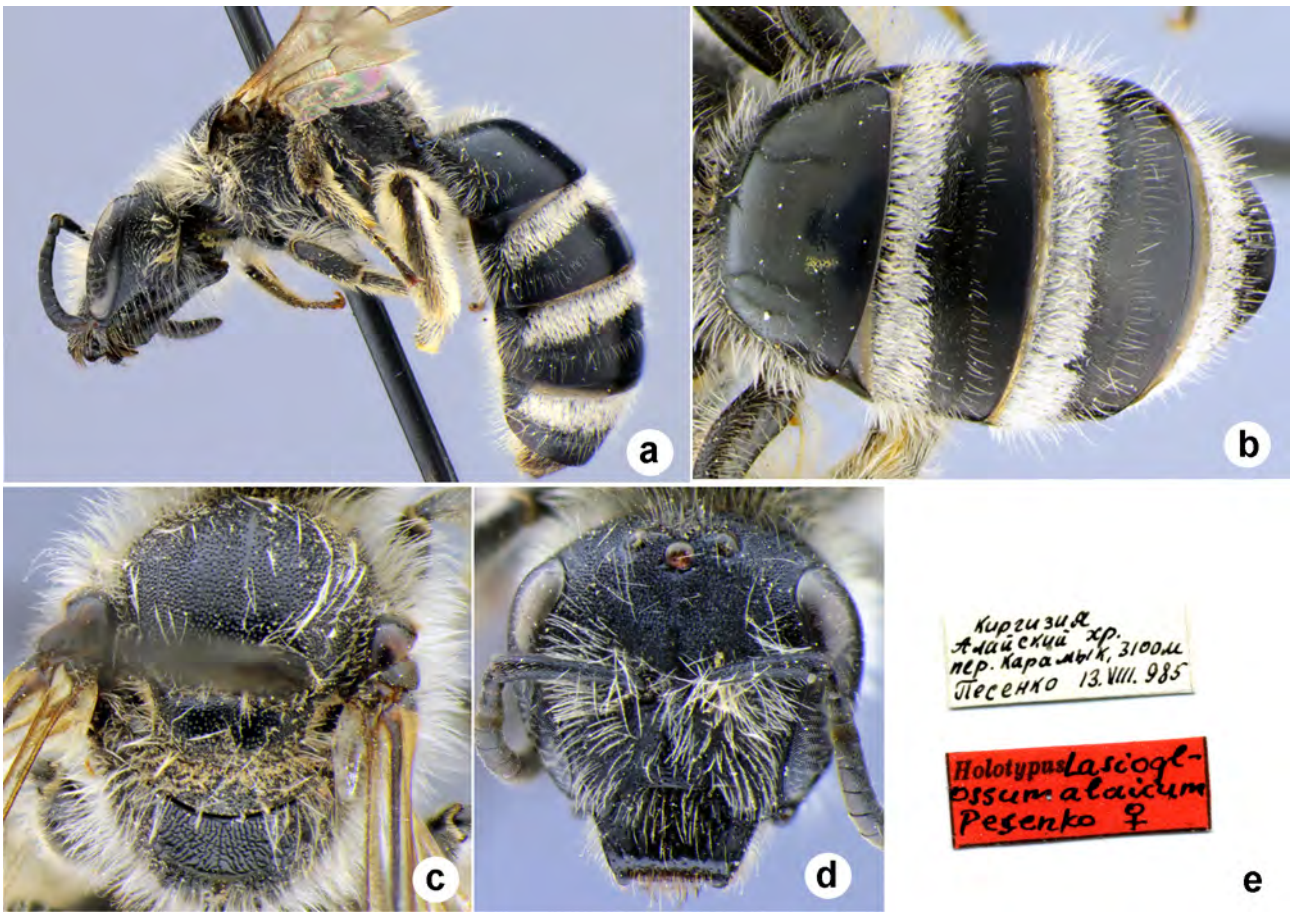
(Figs 58a–e)

Lasioglossum (*Lasioglossum*) *alaicum* Pesenko, 1986: 132, Fig. 22, ♀.

Type locality. Alai Ridge (Kyrgyzstan).

Holotype: ♀, Киргизия, Алайский хр.[ебет], пер.[евал] Карамык [Kyrgyzstan, Alai Ridge, Karamyk pass, 39°03′N 71°03′E], 3100 m, 13.VIII.[1]985, Песенко [Yu. Pesenko] // Holotypus *Lasioglossum alaicum* Pesenko, ♀ <red label>.

Current status. *Lasioglossum* (*Lasioglossum*) *alaicum* Pesenko, 1986.



FIGURES 58a–e. *Lasioglossum alaicum* Pesenko, 1986. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

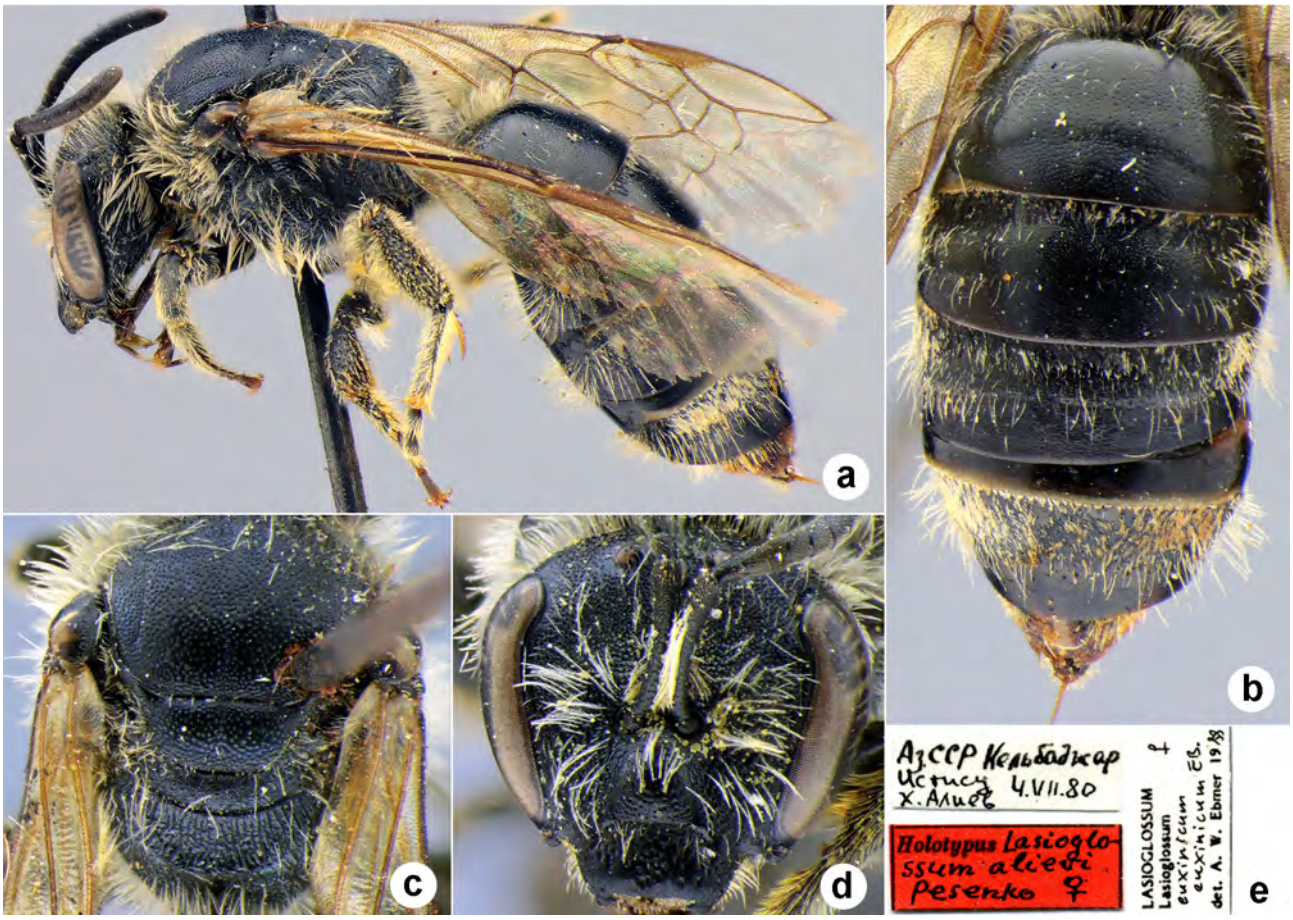
59. *Lasioglossum alievi* Pesenko, 1986
(Figs 59a–e)

Lasioglossum (*Lasioglossum*) *alievi* Pesenko, 1986: 128, Fig. 14, ♀.

Type locality. Kelbadzhar, Istisu (Azerbaijan).

Holotype: ♀, Аз.[ербайджанская] ССР, Кельбаджар, Истису [Azerbaijan, Istisu, 39°57′N 45°58′E], 4.VII.[19]80, Х. Алиев [Kh. Aliyev] // Holotypus *Lasioglossum alievi* Pesenko, ♀ <red label> // // *Lasioglossum Lasioglossum euxinicum euxinicum* Eb. 1876, ♀, det. A.W. Ebmer 1988.

Current status. *Lasioglossum* (*Lasioglossum*) *alievi* Pesenko, 1986.



FIGURES 59a–e. *Lasioglossum alievi* Pesenko, 1986. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

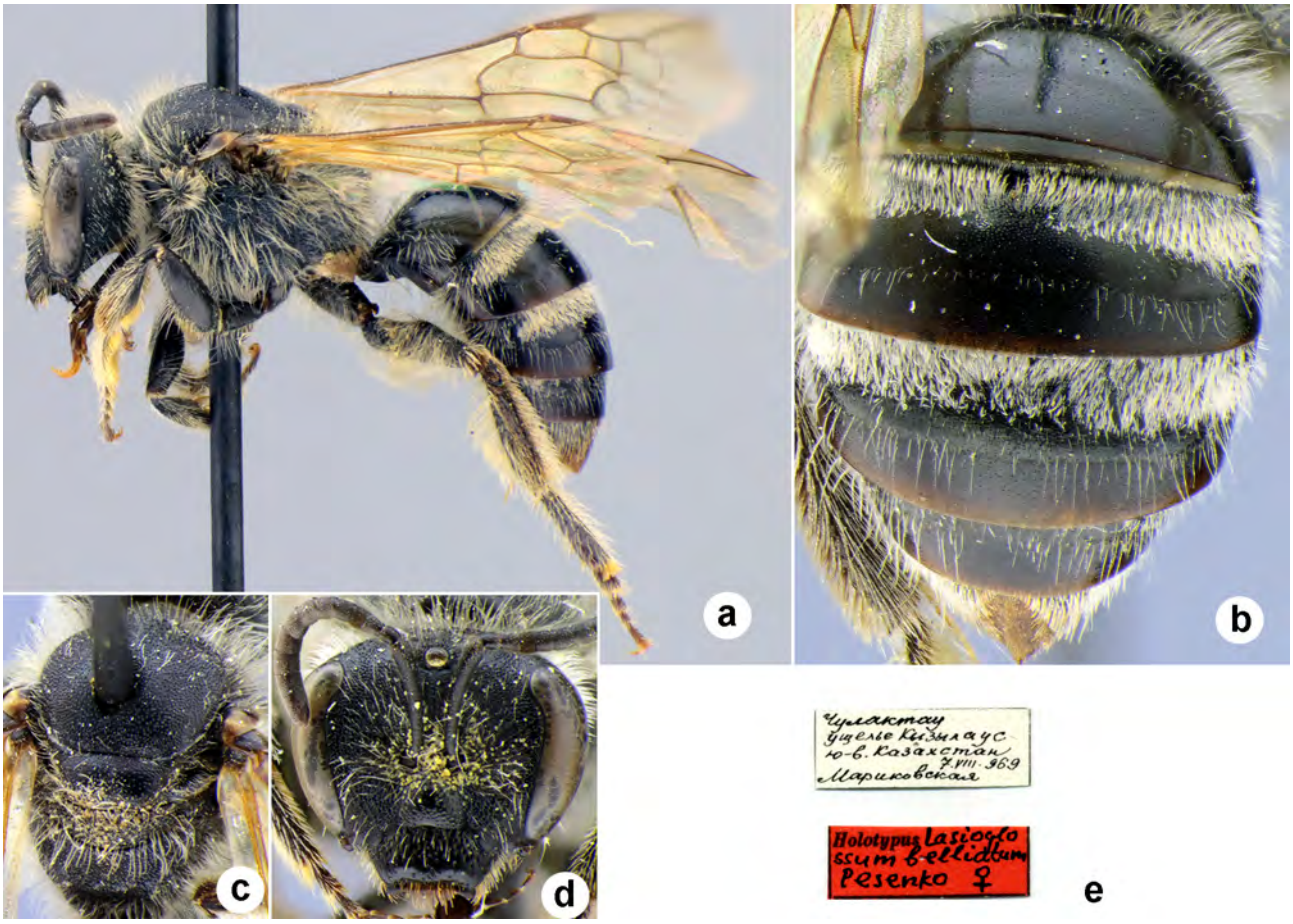
60. *Lasioglossum belliatum* Pesenko, 1986
(Figs 60a–e)

Lasioglossum (*Lasioglossum*) *belliatum* Pesenko, 1986: 131, Fig. 19, ♀.

Type locality. Chulak-tau Ridge (Kazakhstan).

Holotype: ♀, Чулактау, ущелье Кызылаус, ю[го]-в.[осточный] Казахстан [Kazakhstan, Almaty Province, Chulak-tau Ridge, Kyzyl-ays canyon, 43°20′N 78°08′E], 7.VIII.[1]969, Мариковская [T. Marikovskaya] // Holotypus *Lasioglossum belliatum* Pesenko, ♀ <red label>.

Current status. *Lasioglossum* (*Lasioglossum*) *belliatum* Pesenko, 1986.



FIGURES 60a–e. *Lasioglossum belliatum* Pesenko, 1986. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

61. *Lasioglossum benignum* Pesenko, 1986

(Figs 61a–e)

Lasioglossum (*Lasioglossum*) *benignum* Pesenko, 1986: 129, Fig. 17, ♀.

Type locality. Zailiisky Alatau Ridge (Kazakhstan).

Holotype: ♀, Заил.[ийский] Ала-Тау, ущ.[елье] Большой Далан [Kazakhstan, Bolshoi Dalan, 43°08′N 76°40′E], 1300 м, 4.VI.[19]65, Т. Мариковская [T. Marikovskaya] // Holotypus *Lasioglossum benignum* Pesenko, ♀ <red label>.

Current status. *Lasioglossum* (*Lasioglossum*) *benignum* Pesenko, 1986.

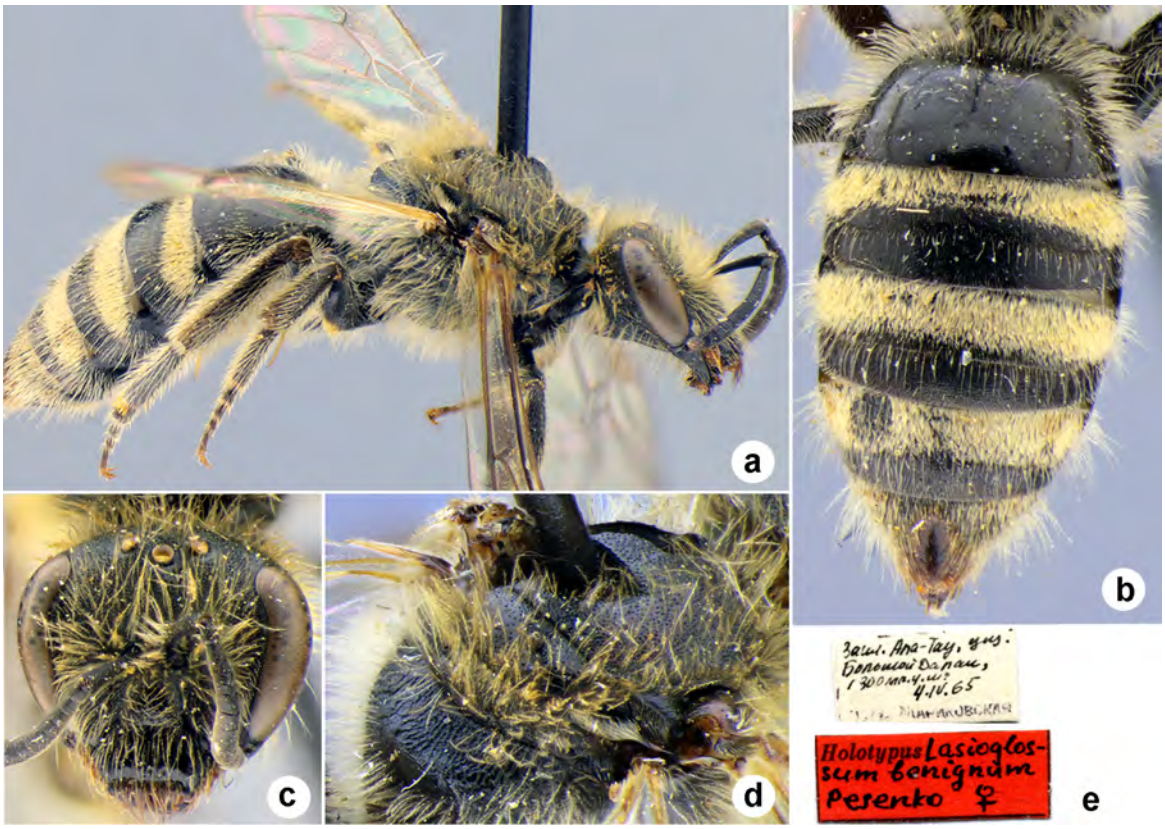
62. *Lasioglossum euxanthopus* Pesenko, 1986

(Figs 62a–e)

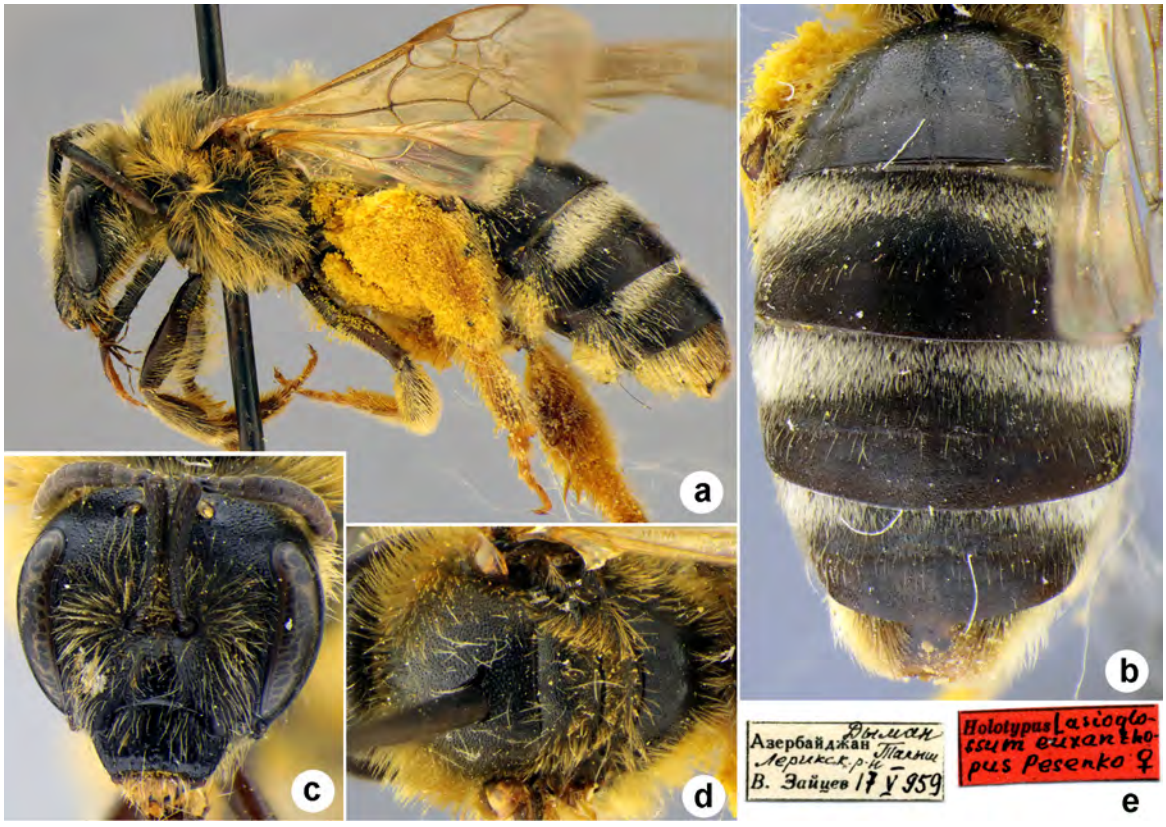
Lasioglossum (*Lasioglossum*) *euxanthopus* Pesenko, 1986: 127, Fig. 13, ♀.

Type locality. Dyman, Talysh (Azerbaijan).

Holotype: ♀, Азербайджан, Дыман, Талыш, Лерик.[ский] р-н[район] [Azerbaijan, Talysh district, Deman, 38°52′N 48°03′E], 17.V.[1]959, В. Зайцев [V. Zaitsev] // Holotypus *Lasioglossum euxanthopus* Pesenko, ♀ <red label>.



FIGURES 61a–e. *Lasioglossum benignum* Pesenko, 1986. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.



FIGURES 62a–e. *Lasioglossum euxanthopus* Pesenko, 1986. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

Paratypes: 1 ♀, ASSR, Zuwand, Kelvjaz [Azerbaijan, Zuvand National Park], 13.V.[19]36 // Paratypus *Lasioglossum euxanthopus* Pesenko, ♀ <red label>; 1 ♀, Зап.[адный] Копетдаг, г.[ора] Сюнт [Turkmenistan, Western Kopet Dagh Mts, Syunt Mts.], 14.V.[1]953, Штейнберг [D. Steinberg] // Paratypus *Lasioglossum euxanthopus* Pesenko, ♀ <red label>.

Current status. *Lasioglossum* (*Lasioglossum*) *euxanthopus* Pesenko, 1986.

63. *Lasioglossum hofferi* Pesenko, 1986

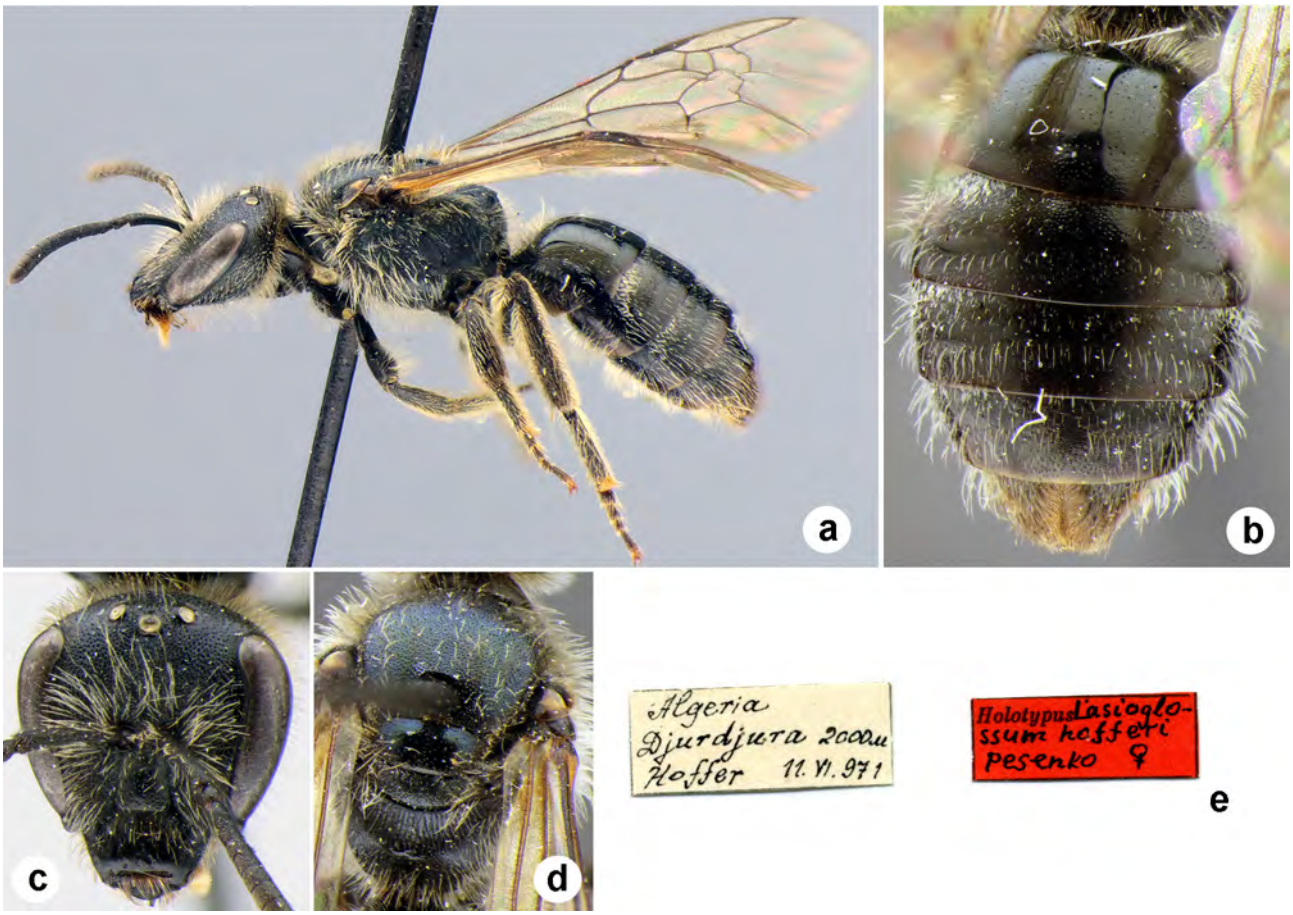
(Figs 63a–e)

Lasioglossum (*Lasioglossum*) *hofferi* Pesenko, 1986: 129, Fig. 16, ♀.

Type locality. Djurdjura (Algeria).

Holotype: ♀, Algeria, Djurdjura [36°26′N 4°13′E], 2000 m, 11.VI.[1]971, Hoffer // Holotypus *Lasioglossum hofferi* Pesenko, ♀ <red label>.

Current status. *Lasioglossum* (*Lasioglossum*) *hofferi* Pesenko, 1986.



FIGURES 63a–e. *Lasioglossum hofferi* Pesenko, 1986. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

64. *Lasioglossum kasparyani* Pesenko, 1986

(Figs 64a–e)

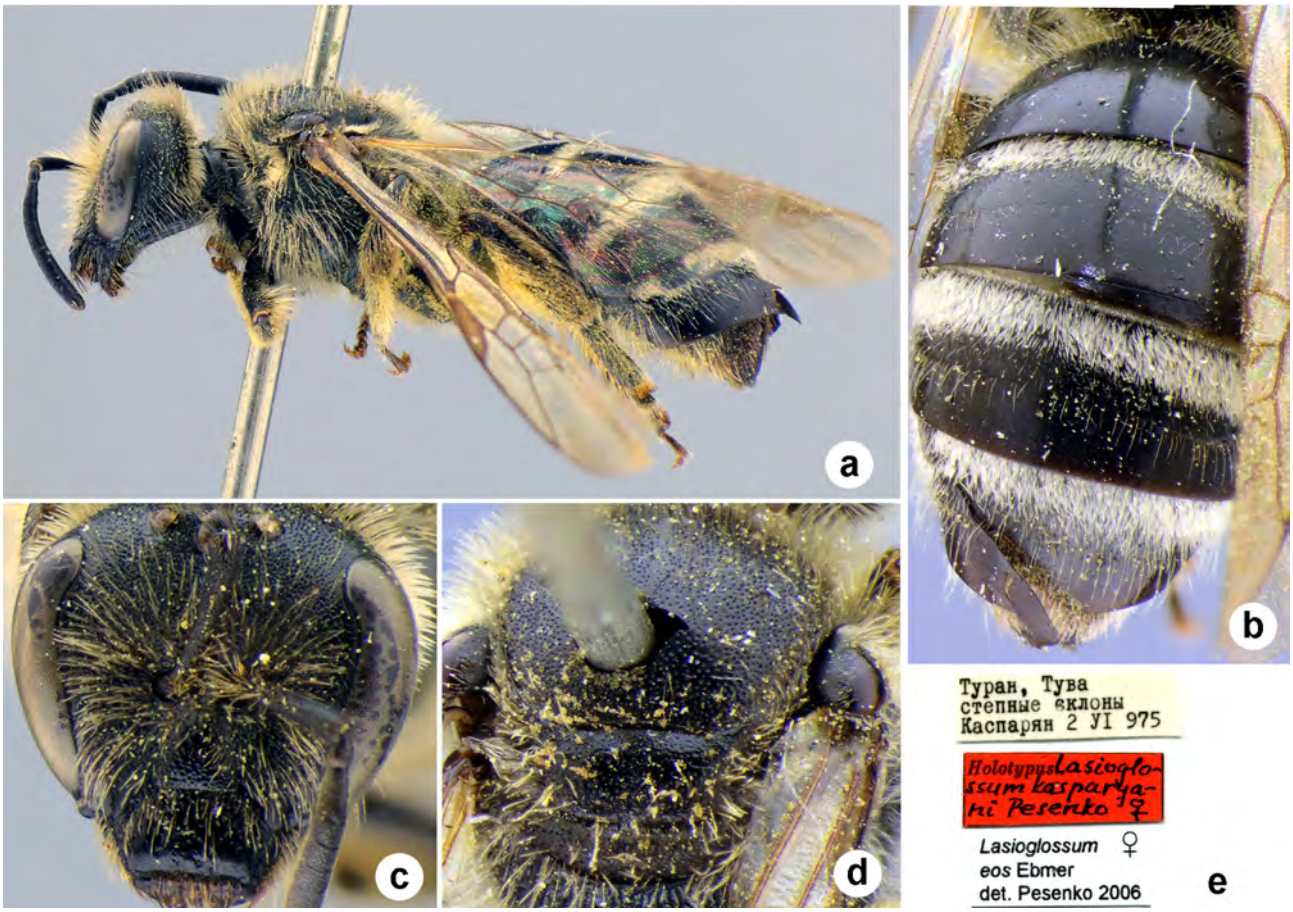
Lasioglossum (*Lasioglossum*) *kasparyani* Pesenko, 1986: 132, Fig. 20, ♀.

Type locality. Turan (Russia).

Holotype: ♀, Туран, Тува, степные склоны [Russia, Tyva Republic, Turan, 52°08′N 93°54′E], 2.VI.[1]975, Каспарян [D. Kasparyan] // Holotypus *Lasioglossum kasparyani* Pesenko, ♀ <red label> // *Lasioglossum eos* Ebmer, ♀, Pesenko det. 2006.

Paratypes: 1 ♀, Таграбатай, 20 км W Гусиного Озера, Бурятия [Russia, Buryatia Repoublic, Targabatay, 20 km W Gusinoye Lake], 27.V.[1]910, Каспарян [D. Kasparyan] // Paratypus *Lasioglossum kasparyani* Pesenko, ♀ <red label> // *Lasioglossum eos* Ebmer, ♀, Pesenko det. 2006.

Current status. *Lasioglossum* (*Lasioglossum*) *eos* Ebmer, 1978 (synonymised by Pesenko 2006: 146).



FIGURES 64a–e. *Lasioglossum kasparyani* Pesenko, 1986. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

65. *Lasioglossum kerzhneri* Pesenko, 1986

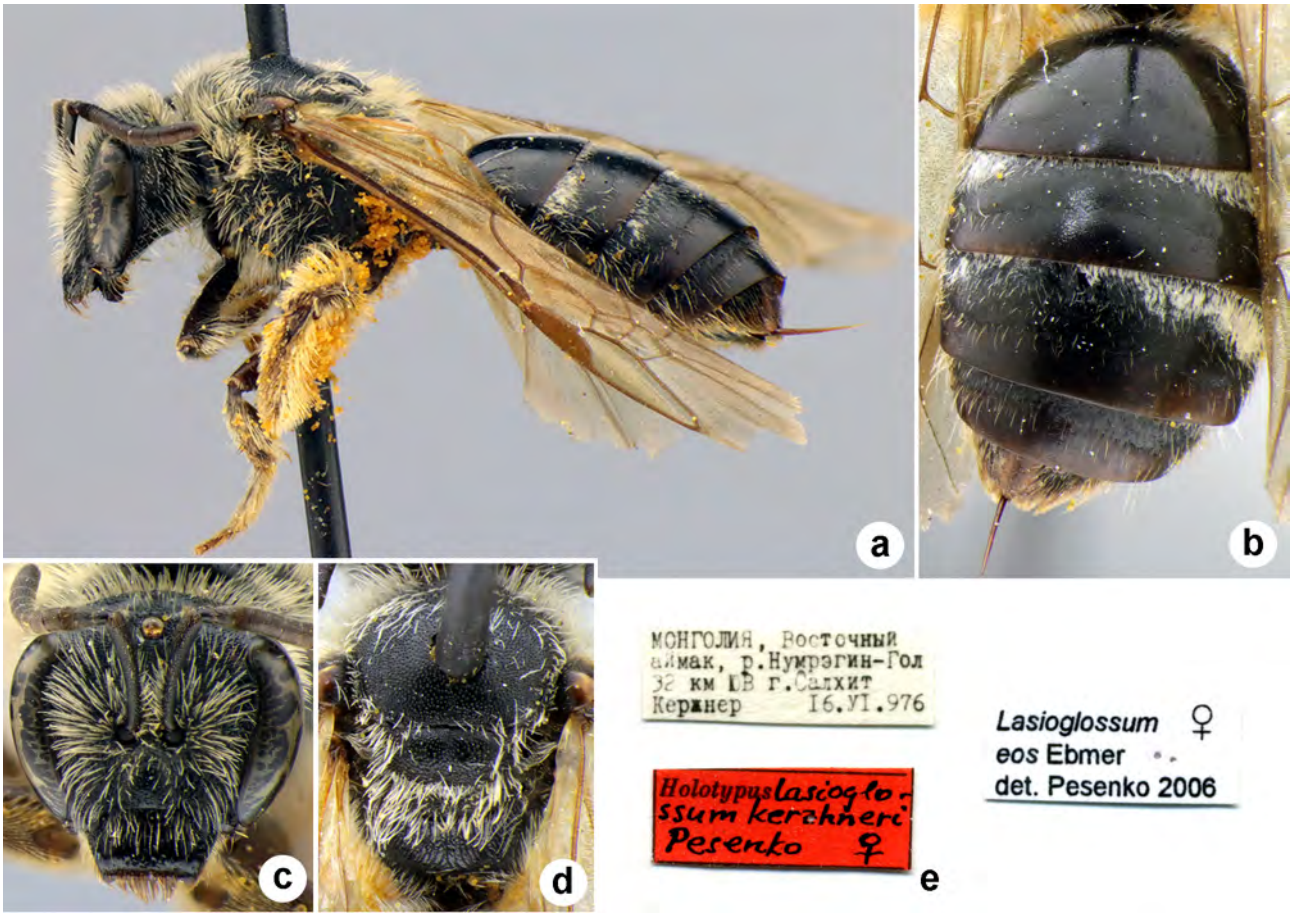
(Figs 65a–e)

Lasioglossum (*Lasioglossum*) *kerzhneri* Pesenko, 1986: 132, Fig. 21, ♀.

Type locality. Salkhit Mt. (Mongolia).

Holotype: ♀, Монголия, Восточный аймак, р.[ека] Нумрэгин-Гол, 32 км ЮВ г.[оры] Салхит [Mongolia, Dornod Aimag, Numregin-Gol River, 32 km SE Salkhit Mt., 47°00′N 119°45′E], 16.VI.[1]976, Кержнер [I. Kerzhner] // Holotypus *Lasioglossum kerzhneri* Pesenko, ♀ <red label> // *Lasioglossum eos* Ebmer, ♀, Pesenko det. 2006.

Current status. *Lasioglossum* (*Lasioglossum*) *eos* Ebmer, 1978 (synonimised by Ebmer 1996: 273).



FIGURES 65a–e. *Lasioglossum kerzhneri* Pesenko, 1986. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.

66. *Lasioglossum shestakovi* Pesenko, 1986

(Figs 66a–e)

Lasioglossum (*Lasioglossum*) *shestakovi* Pesenko, 1986: 129, Fig. 15, ♀.

Type locality. Bukhara (Uzbekistan).

Holotype: ♀, Бухара, Денаускоe бек.[ство], Горы Чульбаиръ, Гора Ходжа-Борку [Uzbekistan, Bukhara, Khodzha-Borku Mt., 39°46N 64°25′E], 7.VI.1911, А. Гольбекъ [A. Golbek] // *H. shestakovi* n. sp., ♀, P. Blüthgen det. 1930 // Holotypus *Lasioglossum shestakovi* Pesenko, ♀ <red label>.

Current status. *Lasioglossum* (*Lasioglossum*) *shestakovi* Pesenko, 1986.

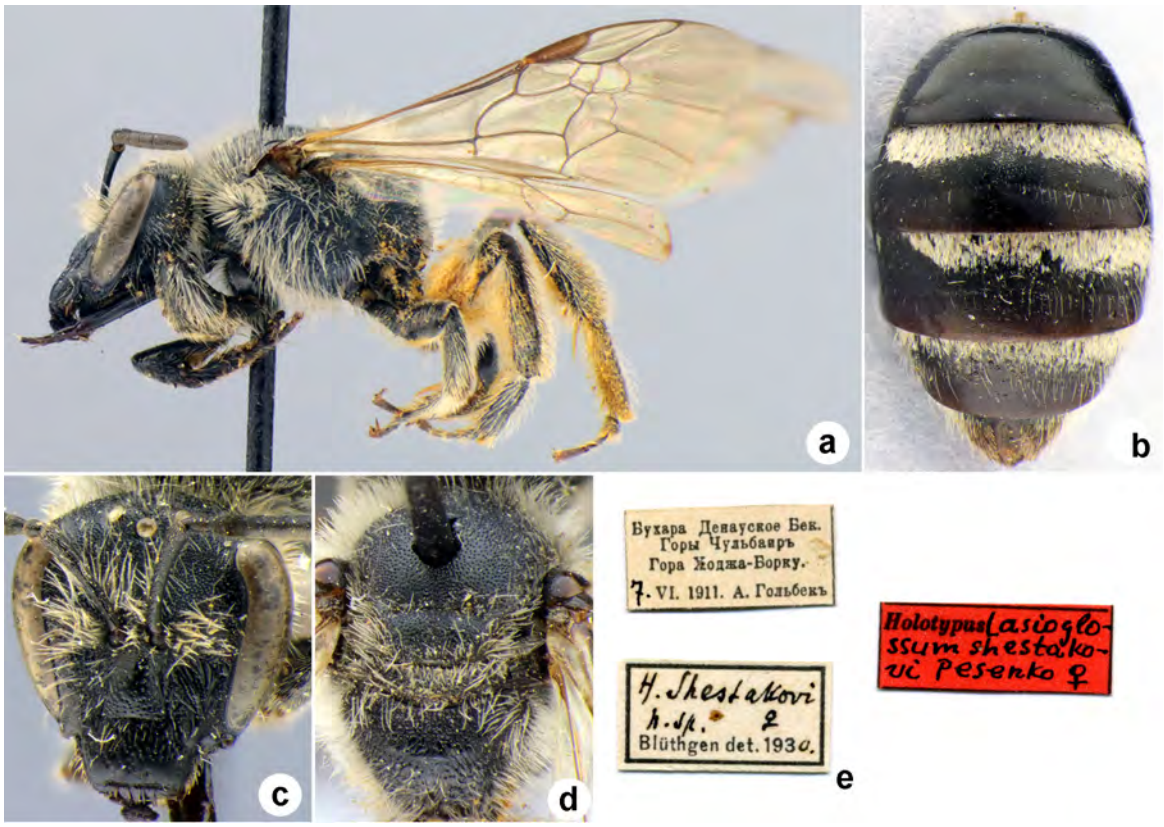
67. *Lasioglossum sutshanicum* Pesenko, 1986

(Figs 67a–e)

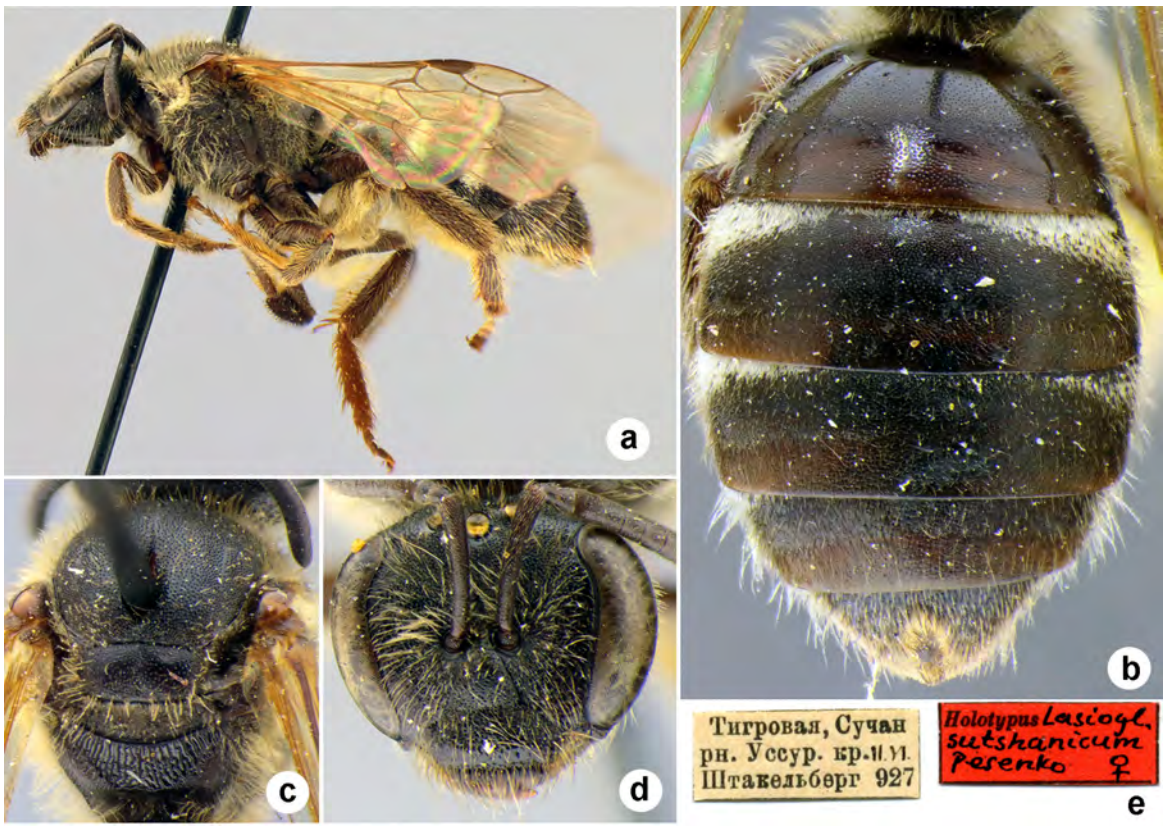
Lasioglossum (*Lasioglossum*) *sutshanicum* Pesenko, 1986: 135, Fig. 23, ♀.

Type locality. Primorsky Territory (Russia).

Holotype: ♀, Тигровая, Сучан[ский] рн[район], Уссур.[ийского] кр.[ая] [Russia, Primorsky Territory, Tigrovoi, 43°11N 132°54′E], 11.VI.[1]927, Штакельберг [A. Shtakelberg] // Holotypus *Lasiogl. shestakovi* Pesenko, ♀ <red label>.



FIGURES 66a–e. *Lasioglossum shestakovi* Pesenko, 1986. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—head, frontal view; d—mesosoma, dorsal view; e—labels.



FIGURES 67a–e. *Lasioglossum sutshanicum* Pesenko, 1986. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

Paratypes: 1 ♀, Приморье, окр.[естности] Лазо [Russia, Primorskiy Territory, Lazo], 13.VI.[19]78, Купянская [A. Kupyanskaya]; 1 ♀, Приморье, Зап.[адные] отроги хр.[ебта] Синего, окр.[есности] Евсеевки, [Russia, Primorskiy Terr., Siniy Ridge, Evseevka], 19.VI.[19]78, Купянская [A. Kupyanskaya]; 2 ♀, Приморье, 8 км от Бровничи, р.[ека] Серебрянка, с жимолости [Russia, Primorskiy Territory, 8 km from Brovnichi, Serebryanka River], 9.VI.[19]78, Купянская [A. Kupyanskaya]; 1 ♀, ст.[анция] Анисимовка, Приморский кр.[ай] [Russia, Primorskiy Territory, Anisimovka], 25.V.[1]974, Лелей [A. Lelej]; 1 ♀, idem, 1.VII.[19]74, Березанцев [A. Berezantzev] // Paratypus *Lasiogl. shestakovi* Pesenko, ♀ <red label> [this label for every paratype specimens].

Current status. *Lasioglossum* (*Lasioglossum*) *sutshanicum* Pesenko, 1986.

68. *Lasioglossum verae* Pesenko, 1986

(Figs 68a–e)

Lasioglossum (*Lasioglossum*) *verae* Pesenko, 1986: 132 (key), 148, Figs 7–12, ♀, ♂.

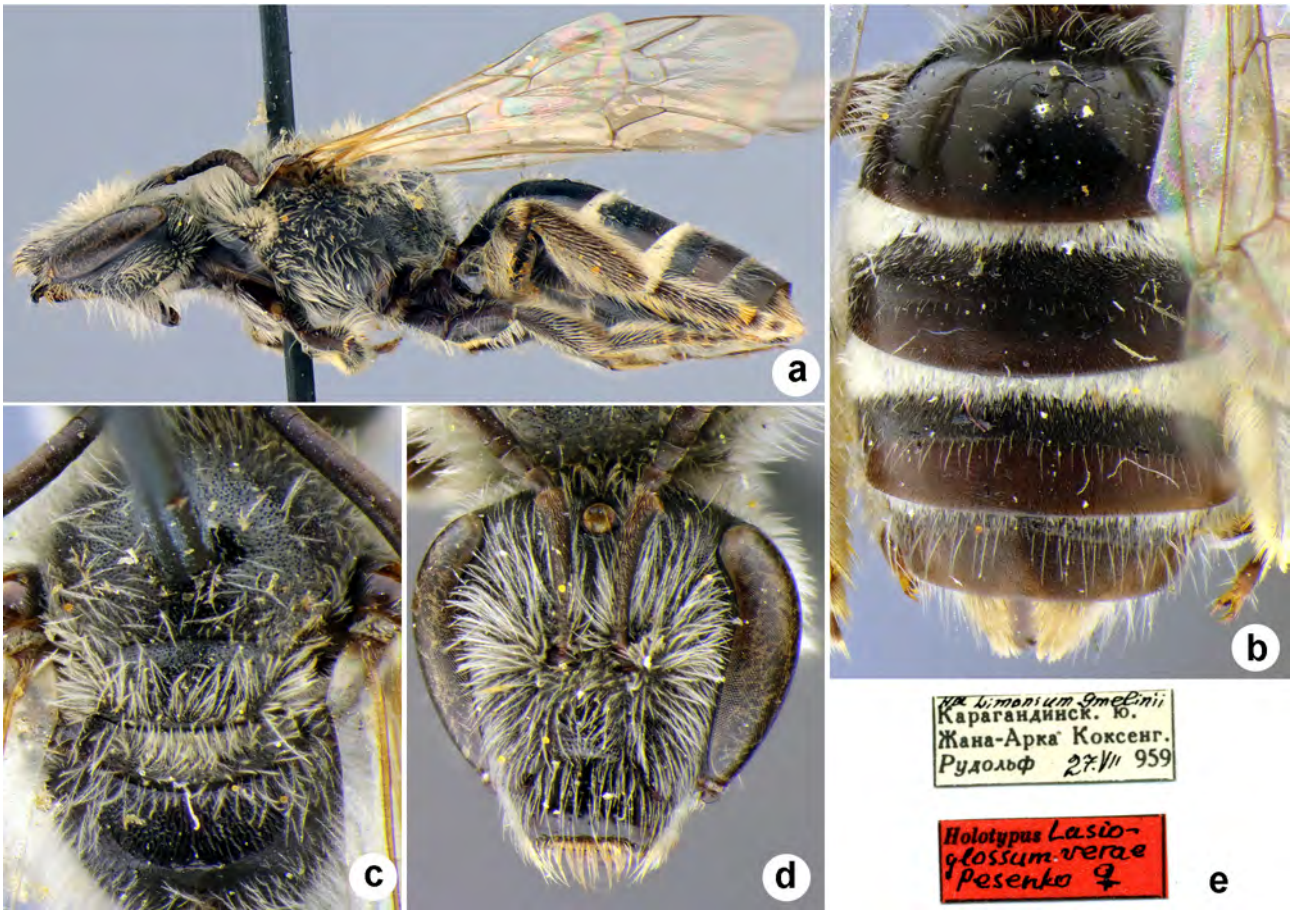
Type locality. Koksengir **(**Kazakhstan).

Holotype: ♀, Карагандинск.[ая] [область], ю.[жнее] Жана-Арка, Коксенг.[ир] [Kazakhstan, Dzhezkazgan Province, Atasu, 48°11′N 71°39′E], 27.VII.[1]959, Рудольф [V. Rudolf] // Holotypus *Lasioglossum verae* Pesenko, ♀ <red label>.

Paratypes: 2 ♂, г.[оры] Кокшетау, бл.[из] р.[еки] Терсаккан W Акмол.[инска] [Kazakhstan, Kokchetau Mts, Tersakkan River], 28.VII.957, Рудольф [V. Rudolf]; 4 ♀, idem, 6.VI.1958, on *Sisymbrium*; 3 ♀, idem, 11.VI.1957, on *Huliemia pefsica* and *Sisymbrium*; 1 ♀, idem, 1.VI.1958, on *Onosma simplecissimum*; 2 ♀, idem, 5.VI.1958, on Erysimum; 1 ♀, idem, 10.VI.1958, on *Spiraea crenata*; 1 ♀, idem, 25.VI.1958, on *Lonicera tatarica*; 1 ♀, idem, 19.VI.1958, on *Serratula*; 1 ♀, idem, 7.VI.1957; 1 ♀, idem, 16.VI.1958, на Salvia stepposa; 3 ♀, 3 км СЗ г.[ор] Кокшетау, бл.[из] р.[еки] Терсаккан W Акмол.[инска] [Kazakhstan, 3 km NW Kokchetau Mts, Tersakkan River], 12.VI.958, Рудольф [V. Rudolf]; 1 ♀, 3 км Ю г. Кокшетау, бл. р. Терсаккан W Акмол. [Kazakhstan, 3 km S Kokchetau Mts.], 13.VI.1958, on *Salvia stepposa*, Рудольф [V. Rudolf]; 2 ♂, Коксенгир, S Жана-Арка, Караг.[андинская] [область] [Kazakhstan, Dzhezkazgan Province, S Atasu]. 27.VII.1958, Пономарева [A. Ponomareva]; 1 ♂, idem, 12.VII.1958; 4 ♂, idem, 20.VII.1958; 1 ♂, idem, 19.VII.1958; 3 ♂, idem, 23.VII.1958; 1 ♂, idem, 8.VII.1958; 3 ♀, idem, 21.V.1959; 3 ♀, idem, 10.VI.1958; 1 ♀, idem, 14.VI.1958; 1 ♀, idem, 29.V.1959; 1 ♀, idem, 17.VI.1959; 1 ♀, idem, 15.VI.1959; 2 ♀, idem, 14.VI.1959; 1 ♀, idem, 25.V.1959; 1 ♀, idem, 30.V.1959; 1 ♀, idem, 11.V.1959; 2 ♀, idem, 13.VII.1958; 1 ♀, idem, 15.VII.1958; 1 ♀, idem, 2.VII.1958; 1 ♀, idem, 12.VI.1958, on Lonicera; 1 ♀, idem, 28.VI.1958, on *Ferula songorica*; 5 ♀, idem, 10.VI.1959, Демьянова [Demyanova]; 5 ♀, idem, 9.V.1959, 23.V.959, Тобиас [V. Tobias]; 1 ♂, idem, 18.VII.1959; 1 ♂, idem, 26.VII.1959; 1 ♂ idem, 16.VII.1959, on *Sonchus* sp.; 1 ♂, idem, 14.VII.1959, on Odontites serotina; 12 ♂, idem, 20.VII.1959, on *Limonium gmelnii*; 1 ♀, 6 ♂, idem, 23.VII.1959, on Althaea sp.; 4 ♂, idem, 24.VII.1959, on *Geranium collinum*; 2 ♂, idem, 24.VII.1959, on Althaea sp.; 6 ♂, idem, 26.VII.1959, on *Junula* sp.; 11 ♂, idem, 26.VII.1959, on *Geranium collinum*; 13 ♂, idem, 27.VII.1959, on *Limonium gmelnii*; 27 ♂, 3.VIII.1959, on Sonchus sp; 3 ♂, idem, 4.VIII.1959, on Althaea sp.; 2 ♀, idem, 4.VIII.1959, on *Lythrum salicaria*; 14 ♀, 19 ♂, idem, 6.VIII.1959, on *Limonium gmelnii*; 1 ♀, idem, 7.VIII.1959, on *Inula* sp.; 3 ♀, 1 ♂, idem, 8.VIII.1959, on *Geranium collinum*; 1 ♂, idem, 9.VIII.1959, on *Geranium collinum*; 4 ♂, idem, 10.VIII.1959, on *Geranium collinum*; 9 ♂, idem, 15.VIII.1959, on *Limonium gmelnii*; 9 ♀, 4 ♂, idem, 19.VIII.1959, on *Geranium collinum*; 1 ♀, idem, 21.VIII.1959, on *Geranium collinum*; 1 ♀, idem, 23.VIII.1959, on Sonchus sp.; 3 ♀, 4.VIII.1959, on *Limonium gmelnii*; 8 ♀, 26.VIII.1959, on *Geranium collinum*; 4 ♀, 27.VIII.1959, on *Limonium gmelnii*; 13 ♀, 30.VIII.1959, on *Geranium collinum*, Рудольф [V. Rudolf]; 1 ♀, 40 км Ю Жана-Арка [Kazakhstan, Dzhezkazgan Province, 40 km S Atasu], 8.V.1958 Тобиас [V. Tobias]; 1 ♀, idem, 9.VIII.1959; 1 ♀, idem, 2.VI.1959, on Linicera, Курчинская [Kurchinskaya]; 1 ♀, Карагандин.[ская]. обл.[асть], г.[ора] Актау, сев.[ерный] склон [Kazakhstan, Karaganda Province, Aktau Mt.], 7.VI.1958, Л. Арнольди [L. Arnoldi]; 2 ♂, idem, 27.VIII.959, on Galatella sp., Рудольф [V. Rudolf]; 2 ♀, дол.[ина] Басаг-узек, Акмолин.[ская] обл.[асть] [Kazakhstan, Akmola Province, Basag-uzek valley], 27.V.1957, Рудольф [V. Rudolf]; 1 ♂, Монголия, Кобдоский аймак, 15 км Ю Булгана [Mongolia, Khovd Aimag, 15 km S Bulgan], 29.VII.970, Козлов [M. Kozlov]; 1 ♂, Монголия, СВ берег оз.[ера] Урэг-Нур, Убснурский аймак [Mongolia, Uvs Aimag, Ureg-Hur Lake],

15.VII.[1]968, Козлов [M. Kozlov] // Paratypus *Lasioglossum verae* Pesenko <red label> [this label for every paratype specimens].

Current status. *Lasioglossum* (*Lasioglossum*) *verae* Pesenko, 1986.



FIGURES 68a–e. *Lasioglossum verae* Pesenko, 1986. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

69. *Lasioglossum zeyanense* Pesenko, 1986

(Figs 69a–e)

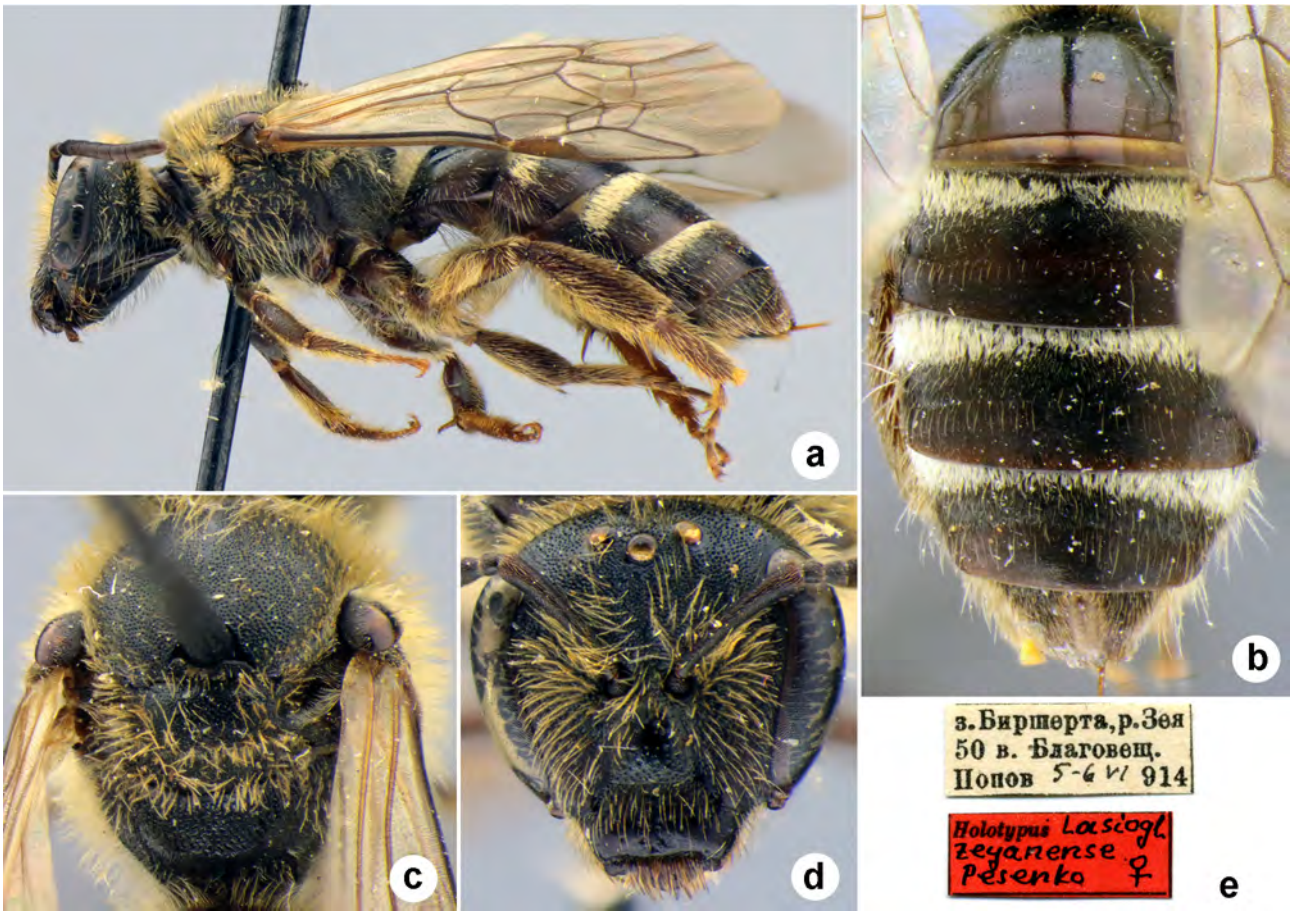
Lasioglossum (*Lasioglossum*) *zeyanense* Pesenko, 1986: 130, Fig. 18, ♀.

Type locality. Khabarovsk Territory, Amurskaya Province, Yukutia, Buryatia Republic (Russia); Inner Mongolia, Gansu (China).

Holotype: ♀, з.[ападнее] Биршерта, р.[ека] Зея, 50 в.[ерст] [от] Благовещ.[енска] [Russia, Amurskaya Province, Bisherta, Zeya River, 40 km N Blagoveshchensk, 50°33′N 127°38′E], 5-6.VI.[1]914, Попов [V. Popov] / / Holotypus *Lasiogl. zeyanense* Pesenko, ♀ <red label>.

Paratypes: 1 ♀, the same label as in holotype, but 11-12.VI.[1]914; 1 ♀, Якутск.[ская] обл.[асть], ст.[анция] Солянка [Russia, Yukutia, Solyanka], 27.VI.[1]902, Оленин [Olenin]; 1 ♀, Джергучевское оз.[еро], близ Кяхты [Russia, Buryatia Republic, Dzherguchevskoe Lake, near Kyakhta], 22.VII.[19]03, Михно [P. Mikhno]; 1 ♀, пр.[авый] бер.[ег] Амура, бл.[из] Софийска [Russia, Khabarovsk Territory, near Sofiysk], 28.VIII.[19]11, Солдатов [Soldatov]; Цзосто, Алашан.[ский] хр.[ебет], Гоби [China, Inner Mongolia, Alashan Ridge, Gobi], 26.V.[19]06, Козлов [P. Kozlov]; 2 ♀, В.[осточный] Нань-Шань, г.[ора] Цин-лань-синь [China, Gansu, Eastern Nan-Shan, Tsin-lan-sin Mt.], 3-4.IV.[19]09, Козлов [P. Kozlov]; 1 ♀, Циньчжоу, Ганьсу, в. [осточный] Нань-шань [China, Gansu, Eastern Nan-Shan, Tsinchzhou], 1.IV.[19]09, Козлов [P. Kozlov] // Paratypus *Lasiogl. zeyanense* Pesenko, ♀ <red label> [this label for every paratype specimens].

Current status. *Lasioglossum* (*Lasioglossum*) *zeyanense* Pesenko, 1986.



FIGURES 69a–e. *Lasioglossum zeyanense* Pesenko, 1986. Holotype, female: a—habitus, lateral view; b—metasoma, dorsal view; c—mesosoma, dorsal view; d—head, frontal view; e—labels.

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https://doi.org/10.1002/mmnd.18740180317
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