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NEW DATA ON BEES OF THE GENUS *COLLETES* LATREILLE (HYMENOPTERA: COLLETIDAE) FROM RUSSIA

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Summary. Two species of the genus *Colletes* Latreille, 1804, namely *C. cariniger* Pérez, 1903 and *C. conradti* Noskiewicz, 1936, are recorded from Russia for the first time, both from Astrakhan Province. An updated checklist of the 53 species of *Colletes* so far known from Russia is provided.

Key words: Apoidea, Apiformes, Astrakhan Province, fauna, new record, list of species.

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Резюме. Впервые для фауны России (Астраханская область) указываются *Colletes cariniger* Pérez, 1903 и *C. conradti* Noskiewicz, 1936. Приведен обновленный список пчел рода *Colletes* Larteille, 1804 фауны России, включающий 53 вида.

INTRODUCTION

The genus *Colletes* currently includes more than 500 described species with an estimated total of about 700 species (Kuhlmann & Proshchalykin, 2011) from most continents except Antarctica, Australia, and parts of Southeast Asia and Madagascar (Michener, 2007; Kuhlmann, 2014). In recent years significant progress has been made towards a better knowledge of species of *Colletes* from Russia (Kuhlmann & Proshchalykin, 2011, 2014; Proshchalykin & Kuhlmann, 2012, 2015, 2019; Proshchalykin *et al*., 2017). Herein the new data on the fauna and distribution of *Colletes* in Russia are given and an updated list of the species of the Russian fauna including 53 species is provided (Table 1).

MATERIAL AND METHODS

Examined material is deposited in the collections of the Federal Scientific Center of East Asia Terrestrial Biodiversity, Vladivostok, Russia [FCBV], and the research collection of M. Kuhlmann [MK] at the Zoological Museum of Kiel University, Germany. Data on the distribution of species follow Proshchalykin (2017a). To facilitate the identification of the newly recorded species we here provide photographs of both sexes of *Colletes cariniger* Pérez, 1903. For *C. conradti* Noskiewicz, 1936 a diagnosis and images were already published by Proshchalykin & Kuhlmann (2015).

RESULTS AND DISCUSSION

***Colletes cariniger* Pérez, 1903**
Figs 1–8

Colletes cariniger Pérez, 1903: 228, ♂ (syntypes: ♂♂, Malatia, Syria [Muséum National d'Histoire Naturelle, Paris, France]).
Colletes cariniger graecus Noskiewicz, 1959: 515–518, ♀, ♂ (holotype: ♀, Mt. Penteli, Greece [Museum of Natural History, University of Wrocław, Poland]).

MATERIAL. **Russia**: Astrakhan Province, 8 km SE Promyslovka, 45°40'N, 47°14'E, 21.V 2019, 15♀, leg. M. Proshchalykin, V. Loktionov [FCBV].

DISTRIBUTION. Russia (**new record**): Astrakhan Province. – Bulgaria, Greece, Turkey, Azerbaijan, Israel, Jordan, Lebanon, Syria, Libya, Egypt.

***Colletes conradti* Noskiewicz, 1936**

Colletes conradti Noskiewicz, 1936: 459–462, ♀, ♂ (lectotype: ♂, designated by Proshchalykin & Kuhlmann, 2015: 335, Chin. Turkestan, Chassan-Bugra, Jarkand [Kazakhstan], 1740 m, 9.7.[18]90, leg. S. Conradt [Museum of Natural History, University of Wrocław, Poland]).

MATERIAL. **Russia**: Astrakhan Province, Malyi Aral, 46°40'N 48°28'E, 26.V 2019, 1♂, leg. M. Proshchalykin, V. Loktionov [MK].

DISTRIBUTION. Russia (**new record**): Astrakhan Province. – Uzbekistan, Kyrgyzstan, Tajikistan, Kazakhstan, China (Qinghai, Xinjiang).

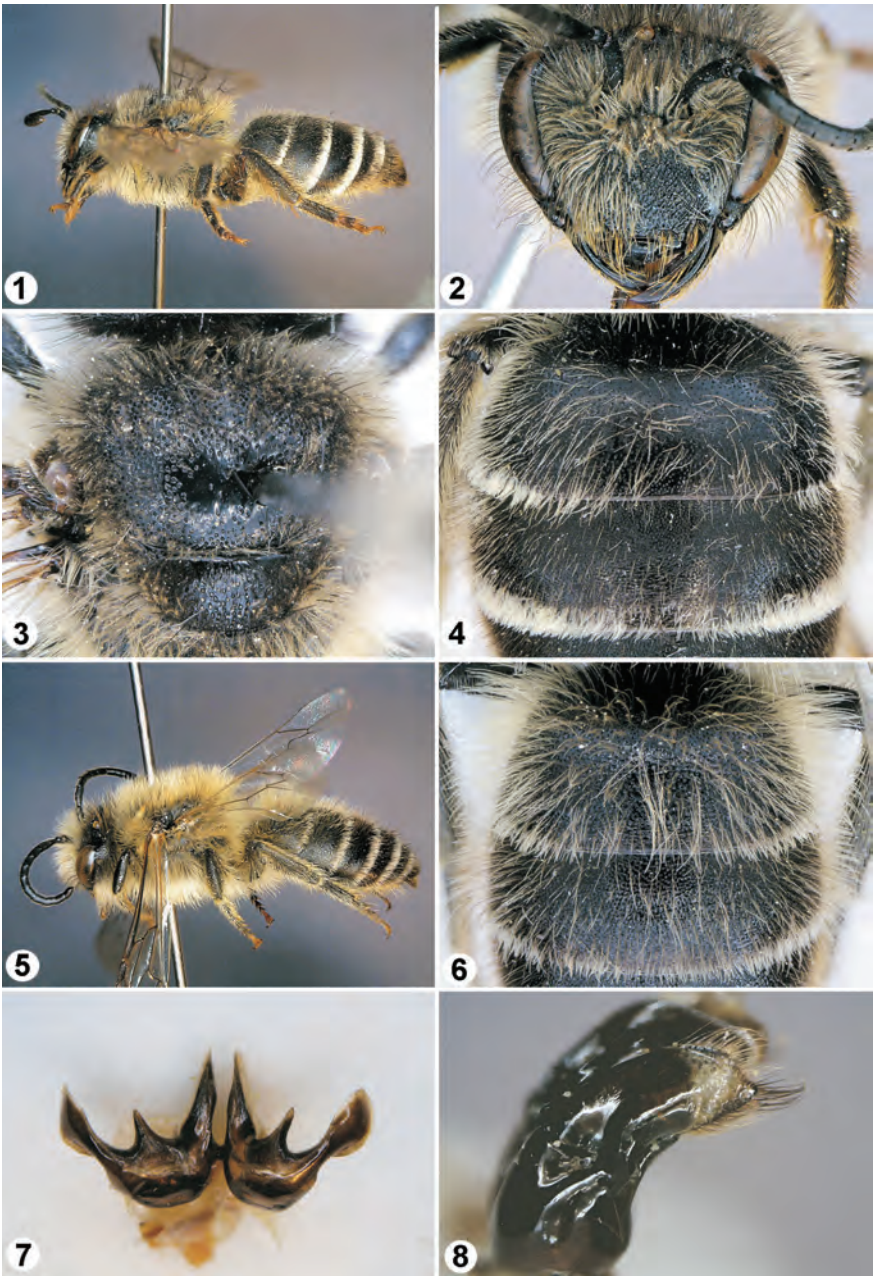
Table 1. List of *Colletes* bees in different regions of Russia

N	Species	Regions of Russia				
		EP	**UR**	**WS**	**ES**	**FE**
1	*C. albomaculatus* (Lucas, 1849)	●				
2	*C. alini* Kuhlmann, 2000				●	●
3	*C. anceps* Radoszkowski, 1891	●				
4	*C. arsenjevi* Kuhlmann, 2006					●
5	*C. asiaticus* Kuhlmann, 1999	●				
6	*C. brevigena* Noskiewicz, 1936	●				
7	*C. carinatus* Radoszkowski, 1891	●				
8	*C. cariniger* Pérez, 1903	●				
9	*C. caspicus* Morawitz, 1874	●	●	●	●	
10	*C. chengtehensis* Yasumatsu, 1935	●	●	●	●	
11	*C. cinerascens* Morawitz, 1893				●	
12	*C. collaris* Dours, 1872	●		●	●	●
13	*C. conradti* Noskiewicz, 1936	●				
14	*C. cunicularius* (Linnaeus, 1761)	●	●	●	●	●
15	*C. daviesanus* Smith, 1846	●	●	●	●	●
16	*C. dorsalis* Morawitz, 1888	●				
17	*C. ebmeri* Kuhlmann, 2002				●	
18	*C. edentulus* Noskiewicz, 1936	●				

Continue of table 1

N	Species	Regions of Russia				
		EP	**UR**	**WS**	**ES**	**FE**
19	*C. eous* Morice, 1904	●				
20	*C. floralis* Eversmann, 1852	●	●	●	●	●
21	*C. fodiens* (Fourcroy, 1785)	●	●	●	●	
22	*C. friesei* Cockerell, 1918				●	
23	*C. fulvicornis* Noskiewicz, 1936			●	●	
24	*C. hakkari* Kuhlmann, 2002	●				
25	*C. hederae* Schmidt & Westrich, 1993	●				
26	*C. hethiticus* Warncke, 1978	●				
27	*C. hylaeiformis* Eversmann, 1852	●				
28	*C. impunctatus* Nylander, 1852	●		●	●	●
29	*C. inexpectatus* Noskiewicz, 1936	●	●			
30	*C. jankowskyi* Radoszkowski, 1891			●	●	●
31	*C. kaszabi* Kuhlmann, 2002				●	
32	*C. kozlovi* Friese, 1913	●			●	
33	*C. laevifrons* Morawitz, 1893			●		
34	*C. maidli* Noskiewicz, 1936	●				
35	*C. marginatus* Smith, 1846	●	●	●	●	
36	*C. mlokossewiczi* Radoszkowski, 1891	●	●			
37	*C. nasutus* Smith, 1853	●				
38	*C. patellatus* Pérez, 1905				●	
39	*C. perforator* Smith, 1869				●	●
40	*C. pseudocinerascens* Noskiewicz, 1936			●	●	
41	*C. ravulus* Noskiewicz, 1936				●	
42	*C. roborovskyi* Friese, 1913	●			●	
43	*C. senilis* (Eversmann, 1852)	●	●			
44	*C. sidemii* Radoszkowski, 1891	●	●	●	●	●
45	*C. similis* Schenck, 1853	●	●	●	●	
46	*C. subnitens* Noskiewicz, 1936	●				
47	*C. succinctus* (Linnaeus, 1758)	●	●			
48	*C. tuberculatus* Morawitz, 1893	●				
49	*C. ulrikae* Kuhlmann, 2002					●
50	*C. uralensis* Noskiewicz, 1936	●				
51	*C. wacki* Kuhlmann, 2002	●			●	
52	*C. warnckei* Kuhlmann, 2002	●				
53	*C. wollmanni* Noskiewicz, 1936	●				
	Total:	39	13	15	25	11

Regions of Russia: **EP** – European part; **UR** – Urals, **WS** – Western Siberia; **ES** – Eastern Siberia; **FE** – Far East.



Figs 1–8. *Colletes cariniger* Pérez, female (1–4), male (5–8): 1, 5 – specimen, lateral view; 2 – head, frontal view; 3 – scutum and scutellum, dorsal view; 4, 6 – T1–T2, dorsal view; 7 – S7, dorsal view; 8 – gonostylus, lateral view.

In total, 53 species of *Colletes* are recorded from Russia (Table 1). This is a comparable number to the total European fauna (58), but distinctly less in comparison with the adjacent understudied faunas of China (68) and Central Asia (86) (Proshchalykin, 2017a; Proshchalykin & Kuhlmann, 2018; Michez *et al*., 2019). The *Colletes* fauna of Russia is a complex of European, Euro-Siberian, Central Asian, and species widespread in the Palaearctic region. Only one species, *Colletes ulrikae* Kuhlmann, is endemic to Russia (Magadan Province). The maximum diversity of *Colletes* in Russia is characteristic of the steppe and semi-desert regions of the southern part of Eastern Siberia (25 species) and North Caucasus (27 species). The northern boundary of the distribution of the genus passes at 65° northern latitude.

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