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## NEW RECORDS OF RARELY COLLECTED BEES OF THE GENUS *COLLETES* LATREILLE (HYMENOPTERA, COLLETIDAE) FROM ASIA AND THE CAUCASUS

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**Summary.** An annotated list of 28 species of rarely collected and little known bees of the genus *Colletes* from Asia and the Caucasus is given. Three species are firstly recorded from Iran, two species – from China, five – from Turkmenistan, three – from Uzbekistan, and two species – from Azerbaijan. The distribution data of other species are enlarged.

**Key words:** Apoidea, Apiformes, Central Asia, China, Iran, Caucasus.

**М. Ю. Прошчалыкин, М. Кульман. Новые находки редких видов пчёл рода *Colletes* Latreille (Hymenoptera, Colletidae) в Азии и на Кавказе // Дальневосточный энтомолог. 2018. N 355. С. 1-12.**

**Резюме.** Приводится список 28 редких видов пчёл из рода *Colletes*, собранных в различных регионах Азии и Кавказа. Впервые для Ирана приводятся 3 вида, для Китая – 2, для Турмениистана – 5, для Узбекистана – 3 и для Азербайджана – 2 вида. Расширены данные по распространению остальных видов.

## INTRODUCTION

The bee genus *Colletes* Latreille, 1802 currently includes 522 valid species, with an estimated total of about 700 species (Kuhlmann *et al.*, 2009) from all continents except Antarctica, Australia, Madagascar and parts of Southeast Asia (Michener, 2007; Kuhlmann, 2014). The Palaearctic fauna is sufficiently well studied and includes 237 species, of which 70 species have been described in the last 20 years mainly from Central Asia (Kuhlmann, 2002, 2003; Kuhlmann & Proshchalykin, 2013a, 2014, 2015a; Proshchalykin & Kuhlmann, 2015), Mongolia (Kuhlmann & Dorn, 2002; Kuhlmann, 2009; Kuhlmann & Proshchalykin, 2013b), China (Kuhlmann, 2002, 2007; Niu *et al.*, 2013a,b, 2014a,b) and the Caucasus region (Kuhlmann & Proshchalykin, 2015b, 2016).

To further complete the study on Palaearctic *Colletes* we here report additional records of twenty eight rarely collected and little known species with 13 species recorded from some countries for the first time (Table 1). This paper is meant as a further step towards a better documentation of the species of *Colletes* and their distribution patterns in the Palaearctic region and adjacent areas.

Table 1. The list of new records of *Colletes* bees by countries.

<i>Colletes</i> species	New records by countries				
	IR	CN	TU	UZ	AZ
<i>C. annejohnae</i> Kuhlmann, 2003				+	
<i>C. brevigena</i> Noskiewicz, 1936	+				
<i>C. caspicus</i> Morawitz, 1874	+	+			
<i>C. comaticus</i> Kuhlmann, 2015			+		
<i>C. edentulus</i> Noskiewicz, 1936			+		
<i>C. gusi</i> Kuhlmann, 2009		+			
<i>C. kaline</i> Kuhlmann et Proshchalykin, 2013				+	
<i>C. marginatus</i> Smith, 1846			+		
<i>C. pallipes</i> Noskiewicz, 1936			+		
<i>C. rubripes</i> Noskiewicz, 1936	+				
<i>C. sellatus</i> Morawitz, 1893				+	
<i>C. squamulosus</i> Noskiewicz, 1936			+		+
<i>C. wollmanni</i> Noskiewicz, 1936					+
Total number of known species:	34	68	42	36	39

IR – Iran, CN – China, TU – Turkmenistan, UZ – Uzbekistan, AZ – Azerbaijan.

## MATERIAL AND METHODS

Acronyms for collections from which specimens were borrowed or are deposited are as follows (the names of curators are given in parentheses): FCTB – Federal Scientific Center of the East Asia terrestrial biodiversity, Vladivostok, Russia (M. Proshchalykin); MNHW – Museum of Natural History, University of Wrocław, Wrocław, Poland (A. Wanat); NMW – Naturhistorisches Museum, Vienna, Austria (D. Zimmermann); OÖLM – Oberösterreichisches Landesmuseum, Linz, Austria

(F. Gusenleitner); PCMS – Private collection of M. Schwarz, Ansfelden, Austria; SEZK – Systematic and Experimental Zoology of the Polish Academy of Sciences in Krakow, Krakow, Poland (L. Przybyłowicz); ZISP – Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia (S. Belokobylskij, Yu. Astafurova); ZMMU – Zoological Museum of Moscow University, Moscow, Russia (A. Antropov).

The results presented in this paper are based on 128 specimens. Hard brackets are used when information is added to specimen label information (e.g. geographical coordinates) or published data (e.g. current name of an old place name). New distribution records are marked with an asterisk (\*). The definition of species groups in *Colletes* follows Noskiewicz (1936) and Kuhlmann *et al.* (2009). The general distribution of *Colletes* follows Proshchalykin (2017).

## LIST OF SPECIES

### *Colletes nigricans* group

#### *Colletes bidentulus* Noskiewicz, 1936

*Colletes bidentulus* Noskiewicz, 1936: 129–132, ♀, ♂ (syntypes: 2♀, 3♂, Helenendorf [Azerbaijan], Araxes-Tal [Azerbaijan], Chorasán [Iran], Askhabad [Turkmenistan], MNHW).

SPECIMENS EXAMINED. **Tajikistan:** Varsaminor[Aini] [68°32'E 39°23'N], 1892, 2 ♂, leg. Glasunov [ZISP].

DISTRIBUTION. Turkey, Azerbaijan, Iran, Uzbekistan, Turkmenistan, Tajikistan.

REMARKS. Additional record of this rarely collected species.

### *Colletes caspicus* group

#### *Colletes caspicus* Morawitz, 1874

*Colletes caspicus* Morawitz, 1874: 174–175, ♀, ♂ (lectotype: ♀, designated by Proshchalykin & Kuhlmann, 2015: 544, Tajikistan, Fan, ZISP).

*Colletes balticus* Alfken, 1912: 121, ♀, ♂ (type locality: Germany).

SPECIMENS EXAMINED. **Iran:** Hassankiadeh [49°48'E 37°26'N], 1915, 3 ♂, B. Iljin [ZISP]. **China:** Dyn-yuan'-in, N Alashan' [106°20'E 39°40'N], 3-4.VI 1908, 1 ♂, P. Kozlov [ZISP]; idem, 9.VI 1908, 1 ♂, P. Kozlov [ZISP].

DISTRIBUTION. Germany, Czech Republic, Poland, Lithuania, Belarus, Ukraine, Georgia, Azerbaijan, Russia, Kazakhstan, Kyrgyzstan, Uzbekistan, Turkmenistan, Tajikistan, \*Iran, \*China (Inner Mongolia).

REMARKS. This widespread species is here recorded from Iran and China for the first time.

### *Colletes squamosus* group

#### *Colletes annulicornis* Morawitz, 1876

*Colletes annulicornis* Morawitz, 1876: 266–267, ♀ (holotype: ♀, Uzbekistan, Ajkul Lake, 700 m, 5.VIII.1869, A. Fedchenko, ZMMU).

*Colletes brevitectus* Cockerell, 1922: 364, ♂ (type locality: Quetta, Pakistan).

SPECIMENS EXAMINED. **Uzbekistan:** Karshi, Kashkadar'ya River [65°49'E 38°52'N], 6-7.IX 2017, 2 ♂, M. Proshchalykin [FCTB]; Ok-Kuduk [65°45'E 38°25'N], 18-19.IX 2017, 6 ♀, 4 ♂, M. Proshchalykin [FCTB].

DISTRIBUTION. Uzbekistan, Turkmenistan, Tajikistan, Pakistan.

REMARKS. Additional records of this rarely collected species.

#### *Colletes bernadettæ* Kuhlmann, 2000

*Colletes bernadettæ* Kuhlmann, 2000: 164–168, ♀, ♂ (holotype: ♂, Kyrgyzstan, Burgandi, 60 km W Jalabad, 14.VI.1995, leg. J. Halada, PCMS).

SPECIMENS EXAMINED. **Turkmenistan:** Khodzha, 12 km from Gyaurs, Kopetdag [58°35'E 37°45'N], 12.IX 1935, 2 ♂, Vlasov [ZISP]; Kara-Kala [Makh-tumkuli] [56°44'E 38°54'N], 28.V 1953, 1 ♂, D. Shteinberg [ZISP].

DISTRIBUTION. Uzbekistan, Kyrgyzstan, Turkmenistan, Tajikistan.

REMARKS. Additional records of this rarely collected species.

#### *Colletes comaticus* Kuhlmann, 2015

*Colletes comaticus* Kuhlmann, in Kuhlmann & Proshchalykin, 2015a: 82, ♀, ♂ (holotype: ♂, Iran, Kerman prov., 20 km E Ghobira, 1780 m, 5.VI.2010, leg. M. Halada, OÖLM).

SPECIMENS EXAMINED. **Turkmenistan:** Krasnovodsk [Turkmenbashi] [52°58'E 40°01'N], 15.VI 1928, 1 ♂, V. Gussakovskij [ZISP].

DISTRIBUTION. Iran, \*Turkmenistan.

REMARKS. This species has only been known from the type series (four males) collected 2010 in Kerman province, Iran (Kuhlmann & Proshchalykin, 2015a: 82).

#### *Colletes cretaceus* Morawitz, 1876

*Colletes cretaceus* Morawitz, 1876: 267, ♀ (holotype: ♀, Kazakhstan, Kyzyl-Kum, Karak Mt., ZMMU).

*Colletes farinosus* Morawitz, 1877: 96–97, ♂ (type locality: Echmiadzin, Erevan, Armenia).

SPECIMENS EXAMINED. **Kazakhstan:** Iliisk [near Kapshagai] [77°03'E 43°52'N], 8.VI 1953, 1 ♂, L. Zimina [ZMMU]. **Uzbekistan:** Mirishkorskiy distr., Sundukli desert [64°32'E 38°57'N], 16.V 2015, 9 ♂; idem, 21.V 2015, 1 ♀, 6 ♂, M. Proshchalykin [FCTB].

DISTRIBUTION. Turkey, Armenia, Azerbaijan, Russia, Kazakhstan, Uzbekistan, Kyrgyzstan, Turkmenistan, Tajikistan.

REMARKS. Additional records of this rarely collected species.

***Colletes jovel* Kuhlmann et Proshchalykin, 2016**

*Colletes jovel* Kuhlmann & Proshchalykin, 2016: 372–373, ♀ (holotype: ♀, Azerbaijan, 25–35 km E Nakhichevan, 7–17.VII.1982, leg. Yu. Pesenko, ZISP).

SPECIMENS EXAMINED. **Azerbaijan:** Nakhichevan [45°24'E 39°12'N], 19.VI 1933, 1 ♀, Znoiko [ZISP].

DISTRIBUTION. Azerbaijan.

REMARKS. This species has only been known from the holotype.

***Colletes pollinarius* Noskiewicz, 1936**

*Colletes pollinarius* Noskiewicz, 1936: 224–227, ♀, ♂ (lectotype: ♂, designated by Kuhlmann, 2000: 169, Turkmenistan, Uzun-Ada, 21.V.1896, L. Wollmann's coll., MNHW).

SPECIMENS EXAMINED. **Turkmenistan:** Uzun-Ada [53°26'E 39°32'N], 1 ♀, Morawitz's coll. [ZISP]; Kara-Bogaz, 40 km N Kizyl-Arvat[Serder] [56°15'E 39°21'N], 19.V 1953, 1 ♂, Odintsova [ZISP]; idem, 18.VI 1953, 1 ♀, O. Kryzhanovsky [ZISP].

DISTRIBUTION. Turkmenistan.

REMARKS. Additional records of this rarely collected species.

***Colletes rubripes* Noskiewicz, 1936**

*Colletes rubripes* Noskiewicz, 1936: 205–209, ♀, ♂ (lectotype: ♀, designated by Kuhlmann, 2000: 170, Turkmenistan, Repetek, 23.VI.1925, leg. V. Gussakovskij, ZISP).

SPECIMENS EXAMINED. **Turkmenistan:** Repetek[70 km SW Turkmenabad] [63°10'E 38°33'N], 19.VII 1925, 3 ♀, V. Gussakovskij [ZISP]; Uzun-Ada [53°26'E 39°32'N], 4 ♀, Morawitz's coll. [ZISP]. **Iran:** Karasu River, NE Persia [48°00'E 38°30'N], 28.V 1913, 1 ♀, Solovkin [ZISP].

DISTRIBUTION. Turkmenistan, Tajikistan, \*Iran.

REMARKS. This rarely collected species is here recorded for the first time from outside Central Asia.

***Colletes sellatus* Morawitz, 1893**

*Colletes sellatus* Morawitz, 1893: 83–84, ♀ (holotype: ♀, Tajikistan, Pachut [probably lost]).

SPECIMENS EXAMINED. **Turkmenistan:** Repetek[70 km SW Turkmenabad] [63°10'E 38°33'N], 23.VI 1925, 1 ♀, V. Gussakovskij [ZISP]; Farab[Farap], W Bukhara [63°36'E 39°10'N], 4.VIII 1928, 1 ♀, V. Gussakovskij [ZISP]. **Uzbekistan:** Bukhara, Karakul [63°51'E 39°30'N], 11.VIII 1924, 1 ♂, Maslovskiy [ZISP].

DISTRIBUTION. Kazakhstan, Kyrgyzstan, Turkmenistan, Tajikistan, \*Uzbekistan.

REMARKS. First record of this rarely collected species from Uzbekistan.

***Colletes skorikowi* Noskiewicz, 1936**

*Colletes skorikowi* Noskiewicz, 1936: 209–213, ♀, ♂ (lectotype: ♂, designated by Kuhlmann, 2000: 170, Uzun-Ada, Transkaspia [Turkmenistan], L. Wollmann's coll., ZISP).

SPECIMENS EXAMINED. **Turkmenistan:** Uzun-Ada [53°26'E 39°32'N], 1 ♀, Morawitz's coll. [ZISP]; Kara-Bogaz, 40 km N Kizyl-Arvat[Serdar] [56°15'E 39°21'N], 2 ♀, 31.V 1953, D. Shteinberg [ZISP]; idem, 31.V 1953, 1 ♀; idem, 1.VII 1953, 1 ♂, Odintsova [ZISP].

DISTRIBUTION. Kazakhstan, Turkmenistan, Tajikistan.

REMARKS. Additional records of this rarely collected species.

***Colletes squamulosus* Noskiewicz, 1936**

*Colletes squamulosus* Noskiewicz, 1936: 191–195, ♀, ♂ (lectotype: ♂, designated by Kuhlmann, 2000: 170, Geoktapa, Elizavetp., g. Aresh. u. [Azerbaijan], 24.VII.1901, leg. R. Schmidt, ZISP).

SPECIMENS EXAMINED. **Turkmenistan:** 35 km NW Tedzhen [60°11'E 37°29'N], 9.VII 1965, 4 ♂, T. Adtaev [ZMMU].

DISTRIBUTION. Cyprus, Israel, Syria, Iran, Armenia, Azerbaijan, \*Turkmenistan.

REMARKS. First record of this species for Central Asia.

***Colletes wollmanni* Noskiewicz, 1936**

*Colletes wollmanni* Noskiewicz, 1936: 188–191, ♀, ♂ (lectotype: ♂, designated by Proshchalykin & Kuhlmann, 2015: 550, Baigakum bei Djulek, Turkest. [Kazakhstan], 1.VI.1907, leg. L. Wollmann, ZISP).

SPECIMENS EXAMINED. **Azerbaijan:** Gyandzha [46°21'E 40°40'N], 25.VII 1928, 2 ♂, S. Tarbinskiy [ZISP].

DISTRIBUTION. Kazakhstan, Kyrgyzstan, Uzbekistan, Turkmenistan, Tajikistan, Iran, Pakistan, China, \*Azerbaijan.

REMARKS. First record of this species for Caucasus.

***Colletes mixtus* group**

***Colletes annejohnae* Kuhlmann, 2003**

*Colletes annejohnae* Kuhlmann, 2003: 727, ♀, ♂ (holotype: ♂, Kazakhstan, Shelek, 30 km ENE Halbwüste, 550 m, 2.VIII.2002, leg. M. Kuhlmann, OÖLM).

SPECIMENS EXAMINED. **Uzbekistan:** Uchkyzyl, Kattakum [67°17'E 37°21'N], 8-11.IX 2017, 1 ♂, M. Proshchalykin [FCTB].

DISTRIBUTION. Kazakhstan, Kyrgyzstan, \*Uzbekistan, China.

REMARKS. Additional record of this rarely collected species.

***Colletes dubitatus* Noskiewicz, 1936**

*Colletes dubitatus* Noskiewicz, 1936: 241–242, ♂ (syntypes: 2 ♂, Tartugai [Kazakhstan]; Merv [Turkmenistan], MNHW).

SPECIMENS EXAMINED. **Uzbekistan:** Termez [67°16'E 37°13'N], 12.IX 2015, 4 ♂, V. Gromenko [FCTB]; Uchkyzyl, Kattakum [67°17'E 37°21'N], 8-11.IX 2017, 1 ♂, M. Proshchalykin [FCTB]; Ok-Kuduk [65°45'E 38°25'N], 18-19.IX 2017, 1 ♀, M. Proshchalykin [FCTB]; Mubarek [65°08'E 39°18'N], 20-21.IX 2017, 3 ♀, 4 ♂, M. Proshchalykin [FCTB]; Mirishkorskiy distr., Sundukli desert [64°32'E 38°57'N], 21.V 2015, 1 ♂; idem, 21-22.IX 2017, 2 ♀, 7 ♂, M. Proshchalykin [FCTB].

DISTRIBUTION. Kazakhstan, Uzbekistan, Turkmenistan, Tajikistan, Mongolia.

REMARKS. This species has been known in Uzbekistan only from two specimens (male and female) collected in Bukhara and Khatynrabat (Kuhlmann, 2005: 1369; Kuhlmann & Proshchalykin, 2013a: 417).

***Colletes mixtus* Radoszkowski, 1891**

*Colletes mixtus* Radoszkowski, 1891: 257–258, ♀, ♂ (syntypes: ♀♀, ♂♂, without type locality, SEZK).

SPECIMENS EXAMINED. **Uzbekistan:** Mirishkorskiy distr., Sundukli desert [64°32'E 38°57'N], 21-22.IX 2017, 1 ♀, 5 ♂, M. Proshchalykin [FCTB].

DISTRIBUTION. Azerbaijan, Turkey, Kazakhstan, Uzbekistan, Turkmenistan, Tajikistan, Mongolia, China (Xinjiang).

REMARKS. This species has been known in Uzbekistan only from two males collected in Khiva and Kokand (Kuhlmann & Proshchalykin, 2013a: 418). The record from “Uzbekistan: Szybjudu Szyguza” (Kuhlmann, 2005: 1370) belongs to Gansu, China.

***Colletes stachi* Noskiewicz, 1958**

*Colletes stachi* Noskiewicz, 1958: 509–512, ♀, ♂ (holotype: ♂, Tajikistan, Dshilikul, 30.IX.1931, leg. N. Fursov, MNHW).

SPECIMENS EXAMINED. **Uzbekistan:** Uchkyzyl, Kattakum [67°17'E 37°21'N], 8-11.IX 2017, 1 ♀, 5 ♂, M. Proshchalykin [FCTB]; Mirishkorskiy distr., Sundukli desert [64°32'E 38°57'N], 21-22.IX 2017, 1 ♀, 4 ♂, M. Proshchalykin [FCTB].

DISTRIBUTION. Tajikistan, Uzbekistan.

REMARKS. This rarely collected species has been known in Uzbekistan only from two females collected in Pungan, Eastern Kuraminskii Ridge (Kuhlmann & Proshchalykin, 2015a: 97). *Colletes stachi* apparently is a rare example of a species that is only active in late summer / early autumn.

### ***Colletes flavicornis* group**

#### ***Colletes alicularis* Noskiewicz, 1936**

*Colletes alicularis* Noskiewicz, 1936: 260–264, ♀, ♂ (lectotype: ♂, designated by Kuhlmann, 2000: 171, Turkmenistan, Farab, 12–28.V.1929, leg. A. Shestakov, ZISP).

SPECIMENS EXAMINED. **Turkmenistan:** Repetek [70 km SW Turkmenabad] [63°10'E 38°33'N], 7.V 1937, 1 ♂, Vinogradov, Egorov [ZISP]; Orta-Kuyu, Central Kara-Kum [58°33'E 39°27'N], 19.V 1953, 3 ♀, 2 ♂, E. Arens [ZISP]. **Tajikistan:** Petra Velikogo Ridge, Zakh-Bursi Pass [71°20'E 37°40'N], 5.VII 1913, 1 ♂, Golbek [ZISP].

DISTRIBUTION. Kazakhstan, Turkmenistan, Tajikistan, Uzbekistan.

REMARKS. Additional records of this rarely collected species.

#### ***Colletes gusi* Kuhlmann, 2009**

*Colletes gusi* Kuhlmann, 2009: 22–24, ♀, ♂ (holotype: ♂, Mongolia, Dornogov reg., stepp, 28 km SE Chatan-Bulag, 2007, leg. M. Halada, OÖLM).

SPECIMENS EXAMINED. **China:** Dyn-yuan'-in, N Alashan' [106°20'E 39°40'N], 9-21.VII 1908, 1 ♂, P. Kozlov [ZISP].

DISTRIBUTION. Mongolia, \*China (Inner Mongolia).

REMARKS. First record of this recently described species from China.

#### ***Colletes kaline* Kuhlmann et Proshchalykin, 2013**

*Colletes kaline* Kuhlmann & Proshchalykin, 2013a: 421, ♀ (holotype: ♀, Turkmenistan, Repetek, 24.VI.1937, leg. Yu. Kostylev, ZMMU).

SPECIMENS EXAMINED. **Uzbekistan:** Khiva, Ak-Mechet' [60°21'E 41°22'N], 22.V 1927, 1 ♂, V. Gussakovskij [ZISP].

DISTRIBUTION. Turkmenistan, \*Uzbekistan.

REMARKS. First record of this recently described species from Uzbekistan.

#### ***Colletes pallipes* Noskiewicz, 1936**

*Colletes pallipes* Noskiewicz, 1936: 274, ♀ (holotype: ♀, Kazakhstan, Kulgja, NMW).

SPECIMENS EXAMINED. **Turkmenistan:** Uzun-Ada [53°26'E 39°32'N], 1 ♀, Morawitz's coll. [ZISP].

DISTRIBUTION. Kazakhstan, \*Turkmenistan.

REMARKS. This species has only been known from the types.

### ***Colletes nanus* group**

#### ***Colletes schwarzi* Kuhlmann, 2002**

*Colletes schwarzi* Kuhlmann, 2002: 747–749, ♀, ♂ (holotype: ♂, Turkmenistan, Nebit-Dag, 25 km NW Jebel, 28.IV.1993, K. Denes, PCMS).

SPECIMENS EXAMINED. **Turkmenistan:** Adzhi-Dere, 16 km SW Kizyl-Arvat [Serdar] [56°09'E 38°52'N], 5.VII 1953, 1 ♂, Odintsova [ZISP].

DISTRIBUTION. Armenia, Kazakhstan, Uzbekistan, Turkmenistan, Iran.

REMARKS. Additional record of this rarely collected species.

### *Colletes fodiens* group

#### *Colletes edentulus* Noskiewicz, 1936

*Colletes edentulus* Noskiewicz, 1936: 329–330, ♂ (holotype: ♂, Armenia, Araxestal, leg. Reitter, NMW).

SPECIMENS EXAMINED. **Turkmenistan:** Firyuza [Archabil] [58°06'E 37°57'N], 17.V 1928, 1 ♀, V. Gussakovskij [ZISP]. **Azerbaijan:** Lenkoran [48°51'E 38°45'N], 29.VI 1930, 1 ♂, A. Shestakov [ZISP]; Nakhichevan Prov., Bist on Gilyanchai River [45°52'E 39°08'N], 29.VII 1933, 1 ♀, Znoiko [ZISP].

DISTRIBUTION. Georgia, Armenia, Azerbaijan, Turkey, Mongolia, \*Turkmenistan.

REMARKS. First record of this species for Central Asia.

### *Colletes senilis* group

#### *Colletes laevifrons* Morawitz, 1893

*Colletes laevifrons* Morawitz, 1893: 81–82, ♀ (lectotype: ♀, designated by Kuhlmann, 2000: 176, Turks., Yagnob, Kol. [Tajikistan], leg. Glasunov 1892, ZISP).

SPECIMENS EXAMINED. **Tajikistan:** Gunt River, Chartym [72°09'E 37°43'N], 25.VI 1909, 1 ♂, A. Yakobson [ZISP].

DISTRIBUTION. Russia, Kazakhstan, Kyrgyzstan, Tajikistan, Iran.

REMARKS. Additional record of this rarely collected species.

### *Colletes clypearis* group

#### *Colletes impunctatus* Nylander, 1852

*Colletes impunctatus* Nylander, 1852: 249, ♀, ♂ (syntypes: ♀♀, ♂♂, Northern Sweden).

SPECIMENS EXAMINED. **China:** Ikhe-gol, N Burkhan-Budda Ridge [96°50'E 37°20'N], 22.VII 1901, 1 ♂, P. Kozlov [ZISP].

DISTRIBUTION. Norway, Sweden, Finland, Netherlands, France, Denmark, Germany, Switzerland, Austria, Finland, Poland, Czech Republic, Italy, Russia, Kazakhstan, Mongolia, China (Inner Mongolia, \*Qinghai).

REMARKS. This species has been known in China only from two specimens (male and female) collected in Inner Mongolia (Niu *et al.*, 2013b: 106).

### *Colletes marginatus* group

#### *Colletes marginatus* Smith, 1846

*Colletes marginatus* Smith, 1846 (nec Spinola, 1851): 1277–1278, ♀, ♂ (syntypes: ♀♀, ♂♂, England).

*Colletes thomsoni* Alfken, 1899: 146–147, ♀, ♂ (type locality: Sweden).

SPECIMENS EXAMINED. **Turkmenistan**: Chuli [Gokdepe], Kopetdag [58°01'E 37°59'N], 10.VI 1914, 1 ♂, Golbek [ZISP].

DISTRIBUTION. United Kingdom, Spain, Norway, Sweden, Netherlands, Belgium, Luxembourg, France, Denmark, Germany, Switzerland, Austria, Finland, Poland, Czech Republic, Slovakia, Hungary, Italy, Croatia, Serbia, Bulgaria, Romania, Greece, Belorussia, Ukraine, Russia, Turkey, Armenia, Georgia, Azerbaijan, Kazakhstan, \*Turkmenistan.

REMARKS. First record of this widespread species for Turkmenistan.

### *Colletes succinctus* group

#### *Colletes brevigena* Noskiewicz, 1936

*Colletes succinctus brevigena* Noskiewicz, 1936: 480–481, ♀, ♂ (syntypes: ♀♀, ♂♂, Balkanhalbinsel, die Inseln des östlichen Mittelmeeres, Kleinasien, Persien, Kaukasus [probably lost]).

SPECIMENS EXAMINED. **Iran**: Malyi Ashur Is. [Ashur Ada Is.] [53°58'E 36°54'N], NE Persia 6.V 1913, 1 ♂, Solovkin [ZISP]; idem, 9.V 1913, 2 ♂, Solovkin [ZISP]. **Azerbaijan**: Margushevan, near Terter [46°50'E 40°19'N], 3.VI 1935, 1 ♂, Veltishchev [ZISP].

DISTRIBUTION. Portugal, Spain, France, Italy, Austria, Hungary, Serbia, Croatia, Greece, Bulgaria, Turkey, Russia, Azerbaijan, \*Iran.

REMARKS. First record of this widespread species for Iran.

#### *Colletes iranicus* Noskiewicz, 1962

*Colletes iranicus* Noskiewicz, 1962: 51–53, ♀ (holotype: ♀, Iran, Rayne, leg. Schmid, MNHW).

SPECIMENS EXAMINED. **Turkmenistan**: Merv [30 km E Mary] [62°11'E 37°39'N], 1 ♀, Morawitz's coll. [ZISP].

DISTRIBUTION. Turkey, Iran, Turkmenistan.

REMARKS. This species has been known in Turkmenistan only from six specimens (five males and female) collected in Kara-Kala [Makhtumkuli] (Kuhlmann & Proshchalykin, 2014: 594).

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