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The genus *Nomada* (Hymenoptera: Apidae) in Siberia

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A b s t r a c t : Forty-seven species and three subspecies of the bee genus *Nomada* Scopoli are recorded from Siberia. *Nomada irkutskiensis* PROSHCHALYKIN & SCHWARZ, nov.sp. is described from Buryatia Republic and Irkutsk Province, Russia. Eight species: *Nomada alboguttata* HERRICH-SCHÄFFER, 1839, *N. basalis* HERRICH-SCHÄFFER, 1839, *N. fuscicornis* NYLANDER, 1848, *N. guttulata* SCHENCK, 1861, *N. italica* DALLA TORRE & FRIESE, 1894, *N. integra* BRULLÉ, 1832, *N. setteri* PROSHCHALYKIN, 2010, and *N. radoszkowskii* ŁOZIŃSKI, 1922 and two subspecies: *N. mauritanica chrysopyga* MORAWITZ, 1872, and *N. panzeri glabella* THOMSON, 1870 are newly recorded from Siberia. The distribution data of other species is enlarged. The male of *N. setteri* PROSHCHALYKIN, 2010 is here described for the first time.

K e y w o r d s : Hymenoptera, Apidae, *Nomada*, bees, taxonomy, new species, fauna, Russia, Palaearctic region.

Introduction

This paper continues the study of the bees of Siberia (KUHLMANN & PROSHCHALYKIN 2011; PROSHCHALYKIN & DATHE 2012, 2016; PROSHCHALYKIN & KUHLMANN 2015; ASTAFUROVA & PROSHCHALYKIN 2015). The goal of the present paper is to review of the fauna of Siberian bees of the genus *Nomada*.

The genus *Nomada* SCOPOLI 1770 numbers over 800 species and occurs on all continents (except Antarctica), although most are restricted to the northern hemisphere (ALEXANDER & SCHWARZ 1994).

Until the 19th century, Siberia was recognized in Russia as a territory extending from the Ural Mountains in the west to the Pacific Ocean in the east. At that time, entomologists frequently indicated the type locality as "Siberia occidentalis" (Western Siberia) or "Siberia orientalis" (Eastern Siberia, Far East). Even today many entomologists divide Siberia in this way. Currently, Siberia includes 14 administrative regions of the Russian Federation (Fig. 1) with 9.7 millions sq. km (57% of Russian Federation territory) (YURKOVSKAYA et al. 2008).

Ten species and four subspecies of *Nomada* were described from Siberia by RADOSZKOWSKI (1876), MORAWITZ (1888), MOCSÁRY (1901), FRIESE (1921), ŁOZIŃSKI (1922), and COCKERELL (1928), but only six species are valid now (PROSHCHALYKIN & LELEJ 2013). To date, thirty seven species of *Nomada* have been recorded from Siberia (KONUSOVA & YANIUSHKIN 2000; DAVYDOVA & PESENKO 2002; LEVCHENKO 2009, 2013; PROSHCHALYKIN 2009, 2010, 2013; PROSHCHALYKIN & KUPIANSKAYA 2009; PROSHCHALYKIN & LELEJ 2010, 2013). Based on a comprehensive study of specimens in various collections, we list here 47 species and three subspecies, with one species

described as new and eight species and two subspecies recorded from Siberia for the first time (Table 1).

Materials and Methods

Abbreviations for collections from which specimens were borrowed or are deposited are as follows:

- ISEN.....Institute of Animal Systematic and Ecology, Russian Academy of Sciences, Novosibirsk, Russia (Yu. Danilov);
 IZKP.....Institute of Systematic and Experimental Zoology, Polish Academy of Sciences, Krakow, Poland (Ł. Przybyłowicz);
 FCBV.....Federal scientific center of the East Asia terrestrial biodiversity, Russian Academy of Sciences, Far East Branch, Vladivostok, Russia (A. Lelej, M. Proshchalykin);
 MNHU.....Museum für Naturkunde an der Humboldt Universität zu Berlin, Germany (M. Ohl);
 NHML.....Natural History Museum, London, UK (D. Notton);
 PCMS.....private collection of Maximilian Schwarz, Ansfelden, Austria;
 ZISP.....Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia (S. Belokobylskij, Yu. Astafurova).

The results presented in this paper are based on 500 specimens mainly collected in the last few decades by entomologists in Siberia, which are currently housed in the FCBV, ZISP and ISEN. We have used the following abbreviations for collectors: AL – A.S. Lelej, DK – D.R. Kasparyan, MP – M.Yu. Proshchalykin, OK – O.L. Konusova, SB – S.A. Belokobylskij, VL – V.M. Loktionov, VY – V.E. Yakovlev, YD – Y.N. Danilov, YP – Yu.A. Pesenko. Hard brackets are used when information is added to specimen label information (e.g. current name of an old place name). New distribution records are marked with an asterisk (*).

Results

Nomada albidemaculata ŁOZIŃSKI, 1922

Nomada albidemaculata ŁOZIŃSKI, 1922: 104, ♀ (holotype: ♀, «Siberia orientalis» [Eastern Siberia], IZKP).

Material examined: Russia: Irkutsk Prov.: 15 km E Ust'-Ordinsk, 31.VII-1.VIII.1994, AL, 5♀♀, 3♂♂ [FCBV]; idem, 31.VII.2010, MP, 6♀♀, 12♂♂ [FCBV]; Buryatia Rep.: Selenduma 19-20.V.2008, MP, 2♀♀ [FCBV]; Bilyutai, 23.V.2008, MP, ♂ [FCBV]; Selenduma, 24.V.2008, MP, ♂ [FCBV]; Ust'-Kiran, Chikoi River, 27-28.V.2008, MP, ♀ [FCBV]; Kyakhta, 29-30.V.2008, MP, ♀ [FCBV]; Zabaikalskiy Terr.: Nizhnii Tsasuchei, Onon River, 31.VII.1997, V. Dubatolov, ♀ [ISEN].

Published records: PROSHCHALYKIN (2010: 24): Eastern Siberia; PROSHCHALYKIN & LELEJ (2010: 3): Eastern Siberia; (2013: 322): Eastern Siberia.

Distribution in Siberia: Irkutsk Prov., Buryatia Rep., *Zabaikalskiy Terr.

General distribution: Russia (Eastern Siberia).

***Nomada alboguttata* HERRICH-SCHÄFFER, 1839**

Material examined: Russia: Krasnoyarsk Terr.: Minusinsk, 24.V.1925, Serebrennikov, ♀ [ZISP].

Published records: –

Distribution in Siberia: *Krasnoyarsk Terr.

General distribution: Russia (European part, Ural, Eastern Siberia, Far East); Europe, Georgia, Azerbaijan, Japan.

***Nomada amurensis* RADOSZKOWSKI, 1876**

Material examined: Russia: Altai Rep.: 80 km SSE Ust'-Koksa, Zaichikha River, 25-28.VII.2013, MP, VL, ♀ [FCBV]; Khakassia Rep.: Belyi Yar, Abakan River, 11-12.VII.2012, MP, VL, ♀ [FCBV]; 40 km NW Shira, Chernoe Ozero, 3-5.VII.2014, AL, MP, VL, ♀ [FCBV].

Published records: PROSHCHALYKIN (2009: 239): Irkutsk Prov.

Distribution in Siberia: *Altai Rep., *Khakassia Rep., Irkutsk Prov.

General distribution: Russia (Siberia, Far East); Kazakhstan, Japan.

***Nomada basalis* HERRICH-SCHÄFFER, 1839**

Material examined: Russia: Novosibirsk Prov.: 20 km SW Karasuk, 29.VI.2007, YD, ♀ [ISEN].

Published records: –

Distribution in Siberia: *Novosibirsk Prov.

General distribution: Russia (European part, Ural, Western Siberia); Europe, North Africa, Armenia, Turkey, Syria, Palestine, Israel, Iraq, Iran, Turkmenistan, Kazakhstan.

***Nomada castellana* DUSMET, 1913**

Material examined: No additional material examined.

Published records: PROSHCHALYKIN (2009: 239, 241): Irkutsk Prov.; (2010: 24): Eastern Siberia.

Distribution in Siberia: Irkutsk Prov.

General distribution: Russia (European part, Eastern Siberia); Europe, Azerbaijan, Kazakhstan.

***Nomada dybovskij* RADOSZKOWSKI, 1876**

Nomada dybovskij RADOSZKOWSKI, 1876: 93-94, ♀ (syntypes: ♀♀, «Kouttoug (Environ de Baical)» [Irkutsk Prov.: Kultuk], IZKP).

Material examined: No additional material examined.

Published records: PROSHCHALYKIN (2010: 24): Eastern Siberia; PROSHCHALYKIN & LELEJ (2013: 323): Irkutsk Prov.

Distribution in Siberia: Irkutsk Prov.

General distribution: Russia (Eastern Siberia).

***Nomada ecarinata* MORAWITZ, 1888**

Nomada ecarinata MORAWITZ, 1888: 257-259, ♀ (holotype: ♀, «Sibiria, Osnatschennaja» [Krasnoyarsk Terr.: Minusinsk distr.], ZISP).

M a t e r i a l e x a m i n e d : Russia: Tomsk Prov.: Tomsk, Potapovy luzhki, 24.VII.1998, OK, 1♀ [ZISP]; Altaiskiy Terr.: Barnaul, Yuzhnyi, 1.VIII.2007, YD, 2♂♂ [ISEN]; Irkutsk Prov.: 15 km E Ust'-Ordinsk, 31.VII.2010, MP, ♂ [FCBV]; Khakassia Rep.: Zhemchuzhnyi, Shira Lake, 14-15.VII.2012, MP, VL, ♂ [FCBV]; Belyi Yar, Abakan River, 11-12.VII.2012, MP, VL, ♂ [FCBV]; 11 km S Belyi Yar, Izykhskie Kopi, 13.VII.2012, MP, VL, ♂ [FCBV]; Zhemchuzhnyi, Shira Lake, 14-15.VII.2012, MP, VL, ♂ [FCBV]; 40 km NW Shira, Chernoe Ozero, 16-19.VII.2012, MP, VL, ♂ [FCBV]; Klimanovskiy, Krasnoyarskoe water storage basin, 23.VII.2013, M. Shcherbakov, ♂ [FCBV]; Krasnoyarsk Terr.: "Osnatjenn., Hammarstr.", Morawitz coll., ♀ [ZISP] (holotype of *N. ecarinata*); Minussinsk, Morawitz coll., ♀ [ZISP]; Buraytia Rep.: Kyakhta, 27.VII.1977, AL, ♂ [FCBV].

P u b l i s h e d r e c o r d s : SCHWARZ (1980b: 109): Krasnoyarsk Terr.; PROSHCHALYKIN (2010: 24): Eastern Siberia; PROSHCHALYKIN & LELEJ (2013: 323): Krasnoyarsk Terr.

D i s t r i b u t i o n i n S i b e r i a : *Tomsk Prov., *Altaiskiy Terr., *Khakassia Rep., Krasnoyarsk Terr., Irkutsk Prov., *Buraytia Rep., Zabaikalskiy Terr.

G e n e r a l d i s t r i b u t i o n : Russia (Ural, Siberia, Far East), Mongolia, China, Japan.

***Nomada errans* LEPELETIER, 1841**

Nomada errans var. *sibirica* FRIESE, 1921: 255, ♀, ♂ (syntypes: ♀♀, ♂♂, Irkutsk, 1896, leg. Yakowlew, MNHU). Synonymized by ALEXANDER & SCHWARZ 1994: 243.

M a t e r i a l e x a m i n e d : No additional material examined.

P u b l i s h e d r e c o r d s : PROSHCHALYKIN (2010: 24): Eastern Siberia; PROSHCHALYKIN & LELEJ (2013: 323): Irkutsk Prov.

D i s t r i b u t i o n i n S i b e r i a : Irkutsk Prov.

G e n e r a l d i s t r i b u t i o n : Russia (European part, Ural, Eastern Siberia); Europe, Kazakhstan.

***Nomada fabriciana* (LINNÉ, 1767)**

M a t e r i a l e x a m i n e d : Khakassia Rep.: 40 km NW Shira, Chernoe Ozero, 16-19.VII.2012, MP, VL, ♀ [FCBV].

P u b l i s h e d r e c o r d s : PROSHCHALYKIN (2009: 239, 241): Irkutsk Prov.; (2010: 24): Eastern Siberia; LEVCHENKO (2013: 44): Tomsk Prov.

D i s t r i b u t i o n i n S i b e r i a : Tomsk Prov., *Khakassia Rep., Irkutsk Prov.

G e n e r a l d i s t r i b u t i o n : Russia (European part, Ural, Siberia); Europe, Azerbaijan.

***Nomada flavoguttata* (KIRBY, 1802)**

M a t e r i a l e x a m i n e d : Russia: Altaiskiy Terr.: 40 km SSE Zmeinogorsk, Novoaltaiskoe, 6.VIII.2007, SB, ♀ [ZISP]; Katunskii Ridge, Taimen'e Lake, 20-23.VII.2013, MP, VL, 4♀♀ [FCBV]; 14 km SE Aktash, Chuya River, 2-4.VII.2016, MP, VL, ♀ [FCBV]; 15 km SE Kurai, Chuya River, 5-6.VII.2016, MP, VL, 3♀♀ [FCBV]; 2 km SE Chagan-Uzun, Balkhash River, 9.VII.2016, MP, VL, ♀ [FCBV]; Khakassia Rep.: 27 km E Shira, Borets, 29-30.VI.2014, AL, MP, VL, ♀ [FCBV]; Tuva Rep.: Turan, 4-7.VI.1975, DK, 2♀♀ [ZISP]; Irkutsk Prov.: Irkutsk, VY, 5♀♀ [ZISP].

Published records: DAVYDOVA & PESENKO (2002: 583): Yakutia; PROSHCHALYKIN (2009: 239): Irkutsk Prov., Yakutia; (2010: 24): Eastern Siberia; LEVCHENKO (2013: 44): Tomsk Prov.; LEVCHENKO & TOMKOVICH (2014: 91): Tyumen Prov.

Distribution in Siberia: Tyumen Prov., Tomsk Prov., *Altayskiy Terr., *Khakassia Rep., *Tyva Rep., Irkutsk Prov., Yakutia.

General distribution: Russia (European part, Ural, Siberia, Far East); Europe, North Africa, Georgia, Azerbaijan, Turkey, Iran, Turkmenistan, Tajikistan, Kazakhstan, Korea, Japan, China (Taiwan), India.

***Nomada flavopicta* (KIRBY, 1802)**

Nomada jasnitskii COCKERELL, 1928: 348-349, ♀, ♂ (lectotype: ♀, designated by Schwarz, 1988: 384, «Irkutsk: Smolenschina» [Irkutsk Prov.: Smolenschina, 10 km SW Irkutsk], 21.VIII.1927, leg. T. Cockerell, NHML). Synonymized by SCHWARZ 1988: 381.

Material examined: Russia: Altayskiy Terr.: Barnaul, Yuzhnyi, 13.VII.2006, YD, ♀, ♂ [ISEN]; 30 km S Kur'ya, Savvushka, 31.VII-1.VIII.2007, SB, ♀, 3♂♂ [ZISP]; Altayskoe, 11.VII.2010, YD, ♂ [ISEN]; Altai Rep.: Ust'-Koksa, 18.VII.2013, MP, VL, 2♂♂ [FCBV]; Khakassia Rep.: Belyi Yar, Abakan River, 11-12.VII.2012, MP, VL, 3♀♀ [FCBV]; Zhemchuzhnyi, Shira Lake, 14-15.VII.2012, MP, VL, ♀, ♂ [FCBV]; 40 km NW Shira, Chernoe Ozero, 16-19.VII.2012, MP, VL ♀, ♂ [FCBV]; idem, 3-5.VII.2014, AL, MP, VL, ♀ [FCBV]; 20 km NE Chernoe Ozero, Belyi Iyus River, 17.VII.2012, MP, VL, 2♀♀, ♂ [FCBV]; Klimanovskiy, Krasnoyarskoe water storage basin, 23.VII.2013, M. Shcherbakov, 2♀♀ [FCBV]; Tyva Rep.: 18 km E Chadan, 27.VII.1993, S. Tshernyshev, ♀ [ISEN]; 13 km SW Samagaltai, Dyttyg-Khem River, 8-11.VII.2013, MP, VL, ♂ [FCBV]; idem, 17.VII.2014, AL, MP, VL, 3♀♀ [FCBV]; 18 km E Kyzyl, Malyi Enisei River, 14.VII.2013, MP, VL, ♀ [FCBV]; 7 km SW Erzin, Tes-Khem River, 13.VII.2014, AL, MP, VL, ♂ [FCBV]; 31 NEE Erzin, Erzin River, 16.VII.2014, ♀ [FCBV]; 6 km SE Bai-Khaak, Sosnovka, 20-21.VII.2014, AL, MP, VL, 2♀♀ [FCBV]; Krasnoyarsk Terr.: Minusinsk, Nichka River, 6, 10.VII.2012, MP, VL, ♀, 2♂♂ [FCBV]; 12 km E Minusinsk, Malaya Minusa River, 4.VII.2012, MP, VL, 2♀♀, ♂ [FCBV]; Irkutsk Prov.: Irkutsk, VY, ♀ [ZISP]; Padun, V. Tunguska, 8-17.VII.1868, Chekanovskij, 10♀♀ [ZISP]; 15 km E Ust'-Ordinsk, 1.VIII.1994, AL, ♀ [FCBV]; idem, 31.VII.2010, MP, 5♀♀, 3♂♂ [FCBV]; Angarsk, Ketoi River, 8.VIII.1994, AL, ♀ [FCBV]; Buryatia Rep.: Kyakhta, 27.VII.1977, AL, ♂ [FCBV]; Baraty, Gusinoe Lake, 26.VII.2007, AL, MP, VL, ♀, 5♂♂ [FCBV]; Naushki, Selenga River, 30.VII.2007, AL, MP, VL, 2♀♀ [FCBV]; Zabaikalskiy Terr.: 7 km W Priargunsk, 25.VII.1975, DK, ♀ [ZISP]; 50 km SW Borzya, 23.VII.1989, AL, ♂ [FCBV]; Nizhnii Tsasuchei, 21.VIII.1996, V. Dubatolov, 2♀♀ [ISEN]; idem, 16.VII.1997, V. Dubatolov, ♀ [ISEN].

Published records: PROSHCHALYKIN (2009: 239): Irkutsk Prov.; (2010: 24): Eastern Siberia; PROSHCHALYKIN & LELEJ (2013: 323): Irkutsk Prov.; LEVCHENKO (2013: 45): Tomsk Prov.

Distribution in Siberia: Tomsk Prov., *Altayskiy Terr., *Altai Rep., *Khakassia Rep., *Tyva Rep., *Krasnoyarsk Terr., Irkutsk Prov., *Buryatia Rep., *Zabaikalskiy Terr.

General distribution: Russia (European part, Ural, Siberia); Europe, Georgia, Azerbaijan, Uzbekistan, Tadzhikistan, Kazakhstan.

***Nomada fulvicornis* FABRICIUS, 1793**

Nomada lineola var. *sibirica* MOCSÁRY in MOCSÁRY & SZÉPLIGETI 1901: 168, without sex (syntype(s): «Sibiria: Minusinsk» [Krasnoyarsk Terr.: Minusinsk], probably lost). Synonymized by ALEXANDER & SCHWARZ 1994: 248

Nomada lineola var. *brunneofasciata* ŁOZIŃSKI, 1922: 100-101, ♀ (holotype: ♀, «Siberia occidentalis» [Western Siberia], IZKP). Synonymized by ALEXANDER & SCHWARZ 1994: 247

Nomada lineola var. *quadrivittata* ŁOZIŃSKI, 1922: 101, ♀ (holotype: ♀, «Siberia orientalis» [Eastern Siberia], IZKP). Synonymized by ALEXANDER & SCHWARZ 1994: 247

Nomada belikovi Cockerell, 1928: 348, ♀, ♂ (lectotype: ♀, designated by Schwarz, 1988: 382, «Irkutsk: Smolenschina» [Irkutsk Prov.: Smolenschina, 10 km SW Irkutsk], 1927, leg. T. Cockerell, NHML). Synonymized by SCHWARZ 1988: 382.

Material examined: Russia: Altayskiy Terr.: Barnaul, 9.VII.1922, ♀ [ZISP]; idem, 23.IV.2006, YD, ♂ [ISEN]; Kalmanskii distr., Novoromanovka 8.V.2006, A. Byvaltsev, YD, ♀ [ISEN]; Khakassia Rep.: 11 km S Belyi Yar, Izykhskie Kopi, 13.VII.2012, MP, VL, ♀, ♂ [FCBV]; 40 km NW Shira, Chernoe Ozero, 16-19.VII.2012, MP, VL ♀ [FCBV]; Bele Lake, 1-3.VII.2011, M. Shcherbakov, ♀ [FCBV]; Tyva Rep.: 25 km SE Erzin, Tes-Khem River, 5.VII.2013, MP, VL, ♀, 5♂♂; 16 km SSW Erzin, Tes-Khem River, 3.VII.2013, MP, VL, 3♂♂ [FCBV]; 12 km SW Samagaltai, Dyttyg-Khem River, 8-11.VII.2013, MP, VL, 2♀♀, ♂ [FCBV]; idem, 17.VII.2014, AL, MP, VL, 2♀♀, ♂ [FCBV]; 7 km SW Erzin, Tes-Khem River, 13.VII.2014, AL, MP, VL, 6♂♂ [FCBV]; 25 km SE Erzin, Tes-Khem River, 14-15.VII.2014, AL, MP, VL, 2♀♀ [FCBV]; 31 NEE Erzin, Erzin River, 16.VII.2014, AL, MP, VL, ♀ [FCBV]; Krasnoyarsk Terr.: Minussinsk, Morawitz coll., 6♂♂ [ZISP]; idem, 10.VII.2012, MP, VL, ♀, ♂ [FCBV]; Minusinsk, Nichka River, 4-6.VII.2012, MP, VL, 7♀♀, 8♂♂ [FCBV]; 12 km E Minusinsk, Malaya Minusa River, 7.VII.2012, MP, VL, 5♂♂ [FCBV]; Irkutsk Prov.: Irkutsk, VY, 3♀♀, ♂ [ZISP]; Padun, V. Tunguska, 1867, Chekanovskij, 3♀♀ [ZISP]; 15 km E Ust'-Ordinsk, 31.VII.2010, MP, 4♂♂ [FCBV]; Buryatia Rep.: Baraty, Gusinoe Lake, 26.VII.2007, AL, MP, VL, ♀ [FCBV]; Selenduma, 19-20.V.2008, MP, 2♀♀ [FCBV]; Kyakhta, 29-30.V.2008, MP, ♀ [FCBV]; Zabaikalskiy Terr.: Chita, 3.VI.1994, YP, ♀ [ZISP].

Published records: DAVYDOVA & PESENKO (2002: 583): Yakutia; PROSHCHALYKIN & KUPIANSKAYA (2009: 60): Buryatia Rep.; PROSHCHALYKIN (2009: 239): Irkutsk Prov.; Buryatia Rep., Yakutia; (2010: 24): Eastern Siberia; PROSHCHALYKIN & LELEJ (2013: 323): Yakutia, Buryatia, Irkutsk Prov.; LEVCHENKO (2013: 46): Tomsk Prov.

Distribution in Siberia: Tomsk Prov., *Altayskiy Terr., *Khakassia Rep., *Tyva Rep., Krasnoyarsk Terr., Irkutsk Prov., Buryatia Rep., Yakutia, *Zabaikalskiy Terr.

General distribution: Russia (European part, Ural, Siberia, Far East); Europe, North Africa, Armenia, Georgia, Azerbaijan, Turkey, UAE, Pakistan, Turkmenistan, Uzbekistan, Japan.

Nomada furva PANZER, 1798

Material examined: No additional material examined.

Published records: LEVCHENKO (2013: 46): Tomsk Prov.

Distribution in Siberia: Tomsk Prov.

General distribution: Russia (European part, Ural, Western Siberia, Far East); Europe, North Africa, Georgia, Turkey, Turkmenistan, Uzbekistan, Kazakhstan.

Nomada fusca SCHWARZ, 1986

Material examined: Russia: Altai Rep.: 14 km SE Aktash, Chuya River, 2-4.VII.2016, MP, VL, ♀ [FCBV]; Khakassia Rep.: 40 km NW Shira, Chernoe Ozero, 3-5.VII.2014, AL, MP, VL, 3♀♀ [FCBV]; 50 km NWW Shira, Chernyi Iyus River, 4.VII.2014, AL, MP, VL, ♀ [FCBV]; Irkutsk Prov.: Padun, V. Tunguska, 1867, Chekanovskij, ♀ [ZISP].

Published records: DAVYDOVA & PESENKO (2002: 583): Yakutia; PROSHCHALYKIN (2009: 239): Irkutsk Prov., Yakutia; (2010: 24): Eastern Siberia;

Distribution in Siberia: *Altai Rep., *Khakassia Rep., Irkutsk Prov., Yakutia.

General distribution: Russia (European part, Siberia, Far East); Europe, Japan.

***Nomada fuscicornis* NYLANDER, 1848**

Material examined: Russia: Tomsk Prov.: Chernyshovka, 21.VII.1997, OK, 3 ♀ ♀ [ZISP]; Tomsk, Potapovy luzhki, 24.VII.1998, OK, ♀ [ZISP]; ♂: 8 km S Biisk, Uat'-Katun', 7.VII.2007, SB, 2 ♂ ♂ [ZISP].

Published records: -

Distribution in Siberia: *Tomsk Prov., *Altaiskiy Terr.

General distribution: Russia (European part, Ural, Western Siberia); Europe.

***Nomada goodeniana* (KIRBY, 1802)**

Nomada scheviakovi Cockerell, 1928: 349, ♀ (holotype: ♀, «Smolenschina» [Irkutsk Prov.: Smolenshchina, 10 km SW Irkutsk], 17.VIII.1927, leg. W.P. Cockerell, NHML). Synonymized by SCHWARZ 1988: 385.

Material examined: Russia: Altaiskiy Terr.: Barnaul, 4 km NE Bel'mesovo, 15.V.2006, YD, ♂ [ISEN]; idem, 8.VI.2008, YD, ♂ [ISEN]; Irkutsk Prov.: Irkutsk, VY, 3 ♂ ♂ [ZISP]; 15 km E Ust'-Ordinsk, 2-6.VIII.1994, AL, 3 ♀ ♀, ♂ [FCBV]; idem, 31.VII.2010, MP, ♂ [FCBV].

Published records: PROSHCHALYKIN (2009: 239): Irkutsk Prov.; (2010: 24): Eastern Siberia; PROSHCHALYKIN & LELEJ (2013: 324): Irkutsk Prov.; LEVCHENKO (2013: 46): Tomsk Prov.

Distribution in Siberia: Tomsk Prov., *Altaiskiy Terr., Irkutsk Prov.

General distribution: Russia (European part, Ural, Siberia); Europe, Azerbaijan, Turkey, Kyrgyzstan, Kazakhstan.

***Nomada guttulata* SCHENCK, 1861**

Material examined: Russia: Khakassia Rep.: 40 km NW Shira, Chernoe Ozero, 3-5.VII.2014, AL, MP, VL, ♀ [FCBV]; 50 km NWW Shira, Chernyi Iyus River, 4.VII.2014, AL, MP, VL, ♀ [FCBV].

Published records: -

Distribution in Siberia: *Khakassia Rep.

General distribution: Russia (European part, Ural, Siberia, Far East); Europe, Kazakhstan, Japan.

***Nomada hammarstroemi* MORAWITZ, 1888**

Nomada hammarstroemi MORAWITZ, 1888: 254-257, ♀, ♂ (lectotype: ♀, designated by SCHWARZ, 1980a: 17, «Sibiria, Osnatschennaja» [Krasnoyarsk Terr.: Minusinsk distr., ZISP]).

Material examined: Russia: Altai Rep.: Ongudai, 18.VII.1909, W. Steinfeld, ♂ [ZISP]; Krasnoyarsk Terr.: "Osnatjenn.", K. Ehnberg, Morawitz coll., ♀ [ZISP] (lectotype of *N. hammarstroemi*); "Osnatjenn.", Hammarstr., Morawitz coll., ♂ [ZISP] (allolectotype of *N. hammarstroemi*); Irkutsk Prov.: Baikal Lake, Olkhon Is., 11.VII.1970, E. Sugonyayev, ♀ [ZISP]; Buryatia Rep.: Baraty, Gusinoe Lake 26.VII.2007, AL, MP, VL, 2 ♂ ♂ [FCBV]; Naushki, Selenga River, 30.VII.2007, AL, MP, VL, ♂ [FCBV].

Published records: PROSHCHALYKIN (2010: 24): Eastern Siberia; PROSHCHALYKIN & LELEJ (2013: 323): Krasnoyarsk Terr.

Distribution in Siberia: *Altai Rep., Krasnoyarsk Terr., *Irkutsk Prov., *Buryatia Rep.

General distribution: Russia (Siberia).

***Nomada integra* BRULLÉ, 1832**

Material examined: Russia: Krasnoyarsk Terr.: Minusinsk distr., Mazharka, 19.VI.1925, Serebrennikov, ♂ [ZISP].

Published records: –

Distribution in Siberia: *Krasnoyarsk Terr.

General distribution: Russia (European part, Ural, Eastern Siberia); Europe, North Africa, Caucasus, Turkey, Cyprus, Israel, Kazakhstan.

***Nomada irkutskiensis* PROSHCHALYKIN & SCHWARZ nov.sp. (habitus Fig. 1)**

♀: Belongs to the the *Nomada roberjeotiana* group, but can be easily recognized by the broad flattened front keel (Fig. 3, 4) and the pronounced pronotum (as in *Nomada rufipes*) (Fig. 2).

The frons keel is flattened (Fig. 3, 4). Labrum apical with small teeth (Fig. 5). 3. Antennal segment only slightly longer than the fourth segment (Fig. 2). The Pronotum is shown in Fig. 6. The characteristic sculpture of the Propodeum is shown in Fig. 7. The end of Tibia 3 is shown in Fig. 8.

L. 8mm.

Holotypus ♀: Russia: Buryatia Rep., Baraty, Gusinoe Lake, 26.VII.2007. leg. A. Lelej, M. Proshchalykin, V. Loktionov [ZISP].

Paratypus: ♀: Russia: Irkutsk Prov., 15 km E Ust'-Ordinsk, 31.VII.1994. leg. A. Lelej [ZISP].

***Nomada italica* DALLA TORRE & FRIESE, 1894**

Material examined: Russia: Altaiskiy Terr.: Barnaul, Yuzhnyi, 1.VIII.2007, YD, ♂ [ISEN]; Khakassia Rep.: Shiro[=Shira] Lake, 24.VII.1897, Yu. Vagner, ♀ [ZISP]; Belyi Yar, Abakan River, 11-12.VII.2012, MP, VL, ♀ [FCBV]; Krasnoyarsk Terr.: 12 km E Minusinsk, Malaya Minusa River, 7.VII.2012, MP, VL, ♂ [FCBV]; Buryatia Rep.: Kyakhta, 29-30.V.2008, MP, 2♀ ♀ [FCBV].

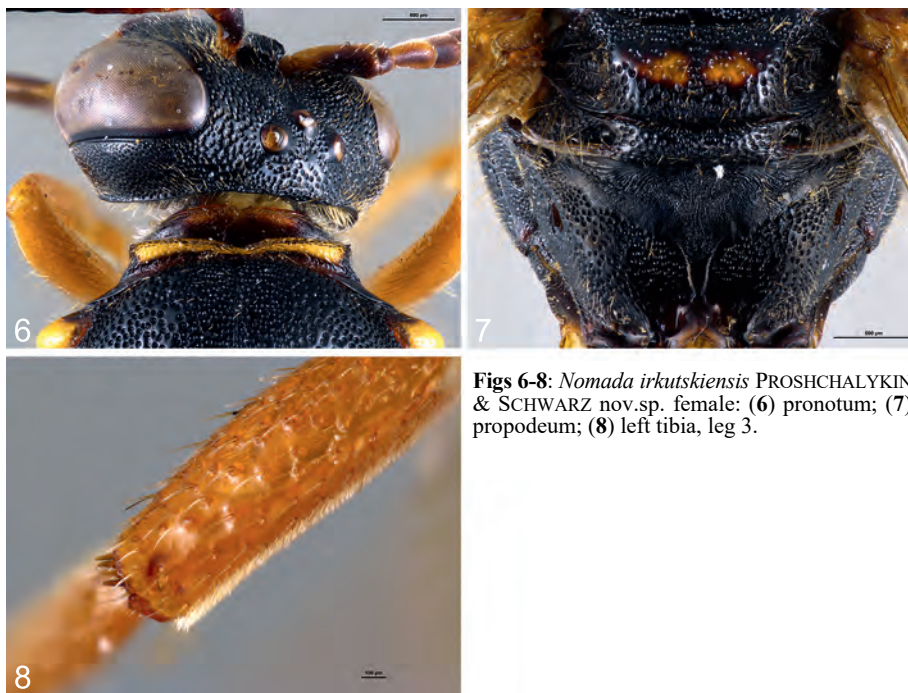
Published records: –

Distribution in Siberia: *Altaiskiy Terr., *Khakassia Rep., *Krasnoyarsk Terr., *Buryatia Rep.

General distribution: Russia (European part, Siberia); Europe, Turkey.



Figs 1-5: *Nomada irkutskiensis* PROSHCHALYKIN & SCHWARZ nov.sp. female: (1) habitus; (2) left flagellum; (3-4) head; (5) labrum.



Figs 6-8: *Nomada irkutskiensis* PROSHCHALYKIN & SCHWARZ nov.sp. female: (6) pronotum; (7) propodeum; (8) left tibia, leg 3.

***Nomada lathburiana* (KIRBY, 1802)**

Material examined: Russia: Tumen Prov.: 10 km NW Kamenka, 2.X.1976, ♀ [ZISP]; Altayskiy Terr.: Barnaul, 4 km NE Bel'mesovo, 23.IV.2006, YD, ♀, ♂ [ISEN]; idem, 15.V.2006, YD, ♂ [ISEN]; Barnaul, 5 km SE Yuzhnyi, 12.V.2006, YD, 2♂♂ [ISEN]; Khakassia Rep.: 50 km NWW Shira, Chernyi Iyus River, 4.VII.2014, AL, MP, VL, 2♀♀ [FCBV]; Tyva Rep.: 13 km SW Samagaltai, Dyttyg-Khem River, 8-11.VII.2013, MP, VL, ♀, ♂ [FCBV]; idem, 17.VII.2014, AL, MP, VL, 2♀♀ [FCBV]; 15 km N Boyarovka, 15.VII.2013, MP, VL, ♀ [FCBV]; 25 km SE Erzin, Tes-Khem River, 14-15.VII.2014, AL, MP, VL, ♀ [FCBV]; 6 km SE Bai-Khaak, Sosnovka, 20-21.VII.2014, AL, MP, VL, 4♀♀ [FCBV]; Krasnoyarsk Terr.: Eniseisk, J. Sahlb., Morawitz coll., ♂ [ZISP]; Tashtyp, Minusin. o., gran. Kuzn., 25-26.V.1912, Sushkin, Redik. 2♀♀ [ZISP]; Irkutsk Prov.: 15 km E Ust'-Ordinsk, 31.VII.2010, MP, ♀ [FCBV]; Buryatia Rep.: 7 km N Ulan-Ude, Novaya Komushka, 13.VI.1996, S. Rudykh, ♀ [FCBV]; Ust'-Kiran, Chikoi River, 27-28.V.2008, MP, 2♀♀ [FCBV]; Kyakhta, 29-30.V.2008, MP, ♀ [FCBV]; Naushki 31.V-1.VI.2008, MP, ♀ [FCBV]; Yakutia: Yugtyukan Ridge, N. Tunguska River, 25.VI.1873, Chekanovsky, ♂ [ZISP]; Zabaikalskiy Terr.: Tontoi, 1.VIII.1911, Tonkikh, ♂ [ZISP]; Zabaikal'e, 30.VII.1975, DK, ♂ [ZISP]; 20 km SSE Krasnokamensk, 4.VIII.2007, AL, MP, VL, 2♀♀ [FCBV]; Gazimuro-Zavodskii distr., 4 km N Undino-Posel'e, 10.VII.2010, S. Rudykh, ♀ [FCBV].

Published records: KONUSOVA & YANIUSHKIN (2000: 285): Tomsk Prov.; PROSHCHALYKIN (2009: 239, 241): Buryatia Rep.; (2010: 24): Eastern Siberia.

Distribution in Siberia: *Tumen Prov., Tomsk Prov., *Altayskiy Terr., *Khakassia Rep., *Tyva Rep., *Krasnoyarsk Terr., *Irkutsk Prov., Buryatia Rep., *Yakutia, *Zabaikalskiy Terr.

General distribution: Russia (European part, Ural, Eastern Siberia); Europe, Caucasus, Kazakhstan.

***Nomada leucophthalma* (KIRBY, 1802)**

Material examined: No additional material examined.

Published records: DAVYDOVA & PESENKO (2002: 583): Yakutia; PROSHCHALYKIN (2009: 239): Yakutia; (2010: 24): Eastern Siberia; LEVCHENKO (2013: 49): Tomsk Prov.

Distribution in Siberia: Tomsk Prov., Yakutia.

General distribution: Russia (European part, Siberia, Far East); Europe, Kazakhstan, Mongolia, Japan.

***Nomada margelanica* SCHWARZ, 1987**

Material examined: Russia: Khakassia Rep.: Zhemchuzhnyi, Shira Lake, 1.VII.2014, AL, MP, VL, 4♀♀ [FCBV]; 38 km SE Shira, Gal'dzha, 30.VI.2014, AL, MP, VL, ♀ [FCBV]; Buryatia Rep.: Romanovka, 5.VII.1983, D. Shcherbakov, 2♀♀ [ZISP]; Ulan-Burgasy Ridge, Khara-Shibir', 9.VI.2011, R. Abashev, ♀ [FCBV].

Published records: DAVYDOVA & PESENKO (2002: 583): Yakutia; PROSHCHALYKIN (2009: 239): Yakutia; (2010: 24): Eastern Siberia.

Distribution in Siberia: *Khakassia Rep., *Buryatia Rep., Yakutia.

General distribution: Russia (Eastern Siberia); Uzbekistan, Kazakhstan.

***Nomada mauritanica chrysopyga* MORAWITZ, 1872**

Material examined: Russia: Tyva Rep.: 25 km SE Erzin, Tes-Khem River, 14-15.VII.2014, AL, MP, VL, ♀ [FCBV]; Buryatia Rep.: Baraty, Gusinoe Lake, 26.VII.2007, AL, MP, VL, ♀ [FCBV]; 7 km N Ulan-Ude, Novaya Komushka, 17.V.2008, MP, ♀ [FCBV]; Selenduma, 19-24.V.2008, MP, 4♀♀ [FCBV]; Bilyutai, 23.V.2008, MP, 2♀♀ [FCBV].

Published records: –

Distribution in Siberia: *Tyva Rep., *Buryatia Rep.

General distribution: Russia (European part, Eastern Siberia); Europe.

***Nomada mitaii* PROSHCHALYKIN, 2010**

Material examined: Russia: Khakassia Rep.: 40 km NW Shira, Chernoe Ozero, 16-19.VII.2012, MP, VL, 3♀♀ [IBSS/ZISP]; 20 km NE Chernoe Ozero, Belyi Iyus River, 17.VII.2012, MP, VL, 3♀♀ [IBSS]; Belyi Yar, Abakan River, 11-12.VII.2012, MP, VL, ♀ [IBSS]; Irkutsk Prov.: Irkutsk, VY, ♀ [ZISP]; Sarma, 2♀♀, ♂ [PCMS]; 15 km E Ust'-Ordinsk, 31.VII.2010, MP, ♂ [IBSS].

Published records: PROSHCHALYKIN (2010: 24): Eastern Siberia; (2013: 143): Khakassia Rep.; PROSHCHALYKIN & LELEJ (2013: 323): Zabaikalskiy Terr., Khakassia Rep.

Distribution in Siberia: Khakassia Rep., Zabaikalskiy Terr., *Irkutsk Prov.

General distribution: Russia (Eastern Siberia); Mongolia.

***Nomada moeschleri* ALFKEN, 1913**

Material examined: Russia: Krasnoyarsk Terr.: Eniseisk, J. Sahlb., Morawitz coll., ♂ [ZISP].

Published records: PROSHCHALYKIN (2009: 239, 241): Irkutsk Prov., Zabaikalskiy Terr.; (2010: 24): Eastern Siberia.

Distribution in Siberia: *Krasnoyarsk Terr., Irkutsk Prov., Zabaikalskiy Terr.

General distribution: Russia (European part, Eastern Siberia); Europe, Azerbaijan, Uzbekistan, Kazakhstan.

***Nomada mutabilis* MORAWITZ, 1871**

Material examined: Russia: Khakassia Rep.: 40 km NW Shira, Chernoe Ozero, 3-5.VII.2014, AL, MP, VL, 6♀♀ [FCBV]; 50 km NWW Shira, Chernyi Iyus River, 4.VII.2014, AL, MP, VL, 2♀♀ [FCBV].

Published records: PROSHCHALYKIN (2009: 239, 241): Irkutsk Prov.; (2010: 24): Eastern Siberia.

Distribution in Siberia: *Khakassia Rep., Irkutsk Prov.

General distribution: Russia (European part, Ural, Eastern Siberia); Europe, North Africa, Georgia, Azerbaijan, Turkey, Iran, Turkmenistan, Kyrgyzstan, Kazakhstan, Nepal, India.

***Nomada obscura* ZETTERSTEDT, 1838**

Material examined: Russia: Buryatia Rep.: Ust'-Kiran, Chikoi River, 27-28.V.2008, MP, ♀ [FCBV]; Zabaikal'skiy Terr.: 55 km SW Chita, Yablonovyi Ridge, 4.VI.1994, YP, ♀ [ZISP].

Published records: PROSHCHALYKIN (2009: 239, 241): Irkutsk Prov.; LEVCHENKO (2013: 50): Tomsk Prov.

Distribution in Siberia: Tomsk Prov., Irkutsk Prov., *Buryatia Rep., *Zabaikal'skiy Terr.

General distribution: Russia (European part, Ural, Siberia, Far East); Europe.

***Nomada obtusifrons* NYLANDER, 1848**

Material examined: Russia: Altai Rep.: 80 km SSE Ust'-Koksa, Zaichikha River, 25-28.VII.2013, MP, VL, ♂ [FCBV]; Irkutsk Prov.: Irkutsk, VY, ♀, ♂ [ZISP].

Published records: PROSHCHALYKIN (2010: 25): Eastern Siberia; PROSHCHALYKIN & LELEJ (2010: 8): Irkutsk Prov.

Distribution in Siberia: *Altai Rep., Irkutsk Prov.

General distribution: Russia (European part, Ural, Siberia); Europe, Kazakhstan.

***Nomada opaca* ALFKEN, 1913**

Material examined: No additional material examined.

Published records: PROSHCHALYKIN (2009: 240-241): Irkutsk Prov.; (2010: 25): Eastern Siberia.

Distribution in Siberia: Irkutsk Prov.

General distribution: Russia (European part, Siberia, Far East); Europe.

***Nomada palmeni* MORAWITZ, 1888**

Nomada palmeni MORAWITZ, 1888: 253-254, ♀ (lectotype: ♀, designated by Proshchalykin & Lelej, 2010: 8, «Amur, Nikolajevsk» [Nikolaevsk-on-Amur, Khabarovsk Terr.], coll. F. Morawitz, ZISP).

M a t e r i a l e x a m i n e d : No additional material examined.

P u b l i s h e d r e c o r d s : MORAWITZ (1888: 253): Krasnoyarsk Terr.; SCHWARZ (1980a: 16): Krasnoyarsk Terr., Irkutsk Prov.; PROSHCHALYKIN (2009: 240-241): Irkutsk Prov.; (2010: 25): Eastern Siberia; PROSHCHALYKIN & LELEJ (2013: 323): Irkutsk Prov., Krasnoyarsk Terr.

D i s t r i b u t i o n i n S i b e r i a : Krasnoyarsk Terr., Irkutsk Prov.

G e n e r a l d i s t r i b u t i o n : Russia (Eastern Siberia, Far East).

***Nomada panzeri glabella* THOMSON, 1870**

M a t e r i a l e x a m i n e d : Russia: Altayskiy Terr.: Barnaul, 11.VI.2006, YD, 2 ♀ ♀ [ISEN].

P u b l i s h e d r e c o r d s : –

D i s t r i b u t i o n i n S i b e r i a : *Altayskiy Terr.

G e n e r a l d i s t r i b u t i o n : Russia (European part, Western Siberia); Europe.

***Nomada panzeri panzeri* LEPELETIER, 1841**

M a t e r i a l e x a m i n e d : Russia: Altayskiy Terr.: Barnaul, 5 km SE Yuzhnyi, 17.VI.2006, YD, ♀ [ISEN]; Tyva Rep.: Turan, 4-7.VI.1975, DK, 2 ♀ ♀ [ZISP]; Shuurnak, 11-12.VII.2013, MP, VL, 2 ♀ ♀ [FCBV]; Irkutsk Prov.: Kachug Prov., 6.IV.1915, Lukashik, Chiglintsev, 3 ♂ ♂ [ZISP]; Rassokha, 16 km S Shelekhov, 14.VI.1975, DK, ♀ [ZISP]; Yakutia: Zhigansk, 7.VII.1875, Chekanovskij, 2 ♀ ♀ [ZISP]; Zabaikalskiy Terr.: 40 km NW Chita, Tasei Lake, 2.VI.1994, YP, ♀ [ZISP].

P u b l i s h e d r e c o r d s : DAVYDOVA & PESENKO (2002: 583): Yakutia; PROSHCHALYKIN (2009: 241): Buryatia Rep., Zabaikalskiy Terr.; (2010: 25): Eastern Siberia; LEVCHENKO (2013: 50): Tomsk Prov.; LEVCHENKO & TOMKOVICH (2014: 91): Tyumen Prov.

D i s t r i b u t i o n i n S i b e r i a : Tyumen Prov., Tomsk Prov., *Altayskiy Terr., *Tyva Rep., *Irkutsk Prov., Buryatia Rep., Yakutia, Zabaikalskiy Terr.

G e n e r a l d i s t r i b u t i o n : Russia (European part, Ural, Siberia, Far East); Europe, North Africa, Japan, Korea.

***Nomada planifrons* ŁOZIŃSKI, 1922**

Nomada planifrons ŁOZIŃSKI, 1922: 101, ♀, ♂ (syntypes: «Siberia orientalis» [Eastern Siberia], IZKP [?]).

M a t e r i a l e x a m i n e d : No material examined.

P u b l i s h e d r e c o r d s : ŁOZIŃSKI (1922: 101): Eastern Siberia.

D i s t r i b u t i o n i n S i b e r i a : Russia: Eastern Siberia (ŁOZIŃSKI 1922).

R e m a r k . In the world catalogue of *Nomada* species (ALEXANDER & SCHWARZ 1994: 258) this species regards as incertae sedis.

***Nomada posthuma* BLÜTHGEN, 1949**

M a t e r i a l e x a m i n e d : No additional material examined.

P u b l i s h e d r e c o r d s : Proshchalykin (2009: 240-241): Irkutsk Prov.

Distribution in Siberia: Irkutsk Prov.

General distribution: Russia (European part, Eastern Siberia, Far East); Europe, Nepal.

***Nomada pulchra* ARNOLD, 1888**

Nomada olhae COCKERELL, 1928: 350, ♀ (holotype: ♀, «Smolenschina» [Irkutsk Prov.: Smolenshchina, 10 km SW Irkutsk], 17.VIII.1927, leg. T. Cockerell, NHML). Synonymized by SCHWARZ 1988: 385.

Material examined: Russia: Altayskiy Terr.: Barnaul, 5 km SE Yuzhnyi, 15.V.2006, YD, ♂ [ISEN]; Tyva Rep.: 6 km SE Bai-Khaak, Sosnovka, 20-21.VII.2014, AL, MP, VL, 2 ♀ ♀, ♂ [FCBV]; Zabaikal'skiy Terr.: 20 km SSE Krasnokamensk, 4.VIII.2007, AL, MP, VL, ♂ [ZISP].

Published records: PROSHCHALYKIN (2009: 240): Irkutsk Prov.; (2010: 25): Eastern Siberia; PROSHCHALYKIN & LELEJ (2013: 323): Irkutsk Prov.

Distribution in Siberia: *Altayskiy Terr., *Tyva Rep., Irkutsk Prov., *Zabaikal'skiy Terr.

General distribution: Russia (European part, Ural, Siberia); Europe, Kazakhstan.

***Nomada radoszkowskii* ŁOZIŃSKI, 1922**

Material examined: Russia: Buryatia Rep.: Ust'-Kiran, Chikoi River, 27-28.V.2008, MP, 2 ♀ ♀ [FCBV].

Published records: -

Distribution in Siberia: *Buryatia Rep.

General distribution: Russia (European part, Eastern Siberia); Greece, Turkey, Armenia, Azerbaijan.

***Nomada roberjeotiana* PANZER, 1799**

Material examined: Russia: Altayskiy Terr.: 30 km S Kur'ya, Savvushka, 31.VII-1.VIII.2007, SB, ♀ [ZISP]; Altai Rep.: Chermal, 19-21.VII.2007, SB, ♂ [ZISP]; 15 km SE Kurai, Chuya River, 5-6.VII.2016, MP, VL, 2 ♀ ♀ [FCBV]; 2 km SE Chagan-Uzun, Balkhash River, 9.VII.2016, MP, VL, ♂ [FCBV]; Khakassia Rep.: Belyi Yar, Abakan River, 11-12.VII.2012, MP, VL, ♀, ♂ [FCBV]; 11 km S Belyi Yar, Izykhskie Kopi, 13.VII.2012, MP, VL, 2 ♀ ♀, ♂ [FCBV]; 40 km NW Shira, Chernoe Ozero, 16-19.VII.2012, MP, VL, 2 ♀ ♀, ♂ [FCBV]; idem, 3-5.VII.2014, AL, MP, VL, 2 ♀ ♀, 2 ♂ ♂ [FCBV]; Oshkol' Lake, 7.VII.2013, M. Shcherbakov, ♂ [FCBV]; Klimanovskiy, Krasnoyarskoe water storage basin 23.VII.2013, M. Shcherbakov, ♀, ♂ [FCBV]; 27 km E Shira, Borets, 29-30.VI.2014, AL, MP, VL, ♂ [FCBV]; Zhemchuzhnyi, Shira Lake, 1.VII.2014, AL, MP, VL, ♀ [FCBV]; Tyva Rep.: 31 NEE Erzin, Erzin River, 16.VII.2014, AL, MP, VL, ♂ [FCBV]; 12 km SW Samagaltai, Dytytg-Khem River, 17.VII.2014, AL, MP, VL, ♀, ♂ [FCBV]; 6 km SE Bai-Khaak, Sosnovka, 20-21.VII.2014, AL, MP, VL, 3 ♀ ♀ [FCBV]; Krasnoyarsk Terr.: Krasnoyarsk, Turbaza 3.VII.2012, MP, VL, ♂ [FCBV]; 32 km W Kuragino, Tes' River, 7.VII.2012, ♀ [FCBV]; Minusinsk, Nichka River, 6.VII.2012, MP, VL, 3 ♂ ♂ [FCBV]; idem, 10.VII.2012, MP, VL, ♀, 3 ♂ ♂ [FCBV]; 12 km E Minusinsk, Malaya Minusa River 7.VII.2012, MP, VL, ♀ [FCBV]; Irkutsk Prov.: 15 km E Ust'-Ordinsk, 1.VIII.1994, AL, ♀, ♂ [FCBV]; idem, 31.VII.2010, MP, ♀ [FCBV]; Buryatia Rep.: Vitim River, low of Baisa River, 12.VII.1983, D. Shcherbakov, ♀ [ZISP]; Baisa, 27.VII-4.VIII.1983, V. Zherikhin, 7 ♀ ♀, ♂ [ZISP]; Naushki, Selenga River, 30.VII.2007, AL, MP, VL, ♀ [FCBV]; Zabaikalskiy Terr.: Kalga 12-13.VII.1975, DK, 2 ♂ ♂ [ZISP]; Nerchinskii Zavod, 20.VII.1975, DK, ♀ [ZISP]; 20 km SSE Krasnokamensk, 4.VIII.2007, AL, MP, VL, 2 ♀ ♀ [FCBV].

Published records: COCKERELL (1928: 347): Irkutsk Prov.; DAVYDOVA & PESENKO (2002: 583): Yakutia; PROSHCHALYKIN & KUPIANSKAYA (2009: 60): Zabaikalskiy Terr., Buryatia Rep., Irkutsk Prov., Yakutia; PROSHCHALYKIN (2009: 240): Irkutsk Prov., Buryatia Rep., Yakutia, Zabaikalskiy Terr.; (2010: 25): Eastern Siberia; PROSHCHALYKIN & LELEJ (2010: 10): Tomsk Prov., Buryatia Rep., Irkutsk Prov., Yakutia, Zabaikalskiy Terr.

Distribution in Siberia: Tomsk Prov., *Altai Terr., *Altai Rep., *Khakassia Rep., *Tyva Rep., *Krasnoyarsk Terr., Irkutsk Prov., Buryatia Rep., Yakutia, Zabaikalskiy Terr.

General distribution: Russia (European part, Ural, Siberia, Far East); Europe, Azerbaijan, Kyrgyzstan, Mongolia, Japan.

***Nomada ruficornis* (LINNAEUS, 1758)**

Material examined: Russia: Altai Rep.: 10-13 km from Turchak down to Lebed' River, 6.VI.1999, A. Kireichuk, ♀ [ZISP]; 80 km SSE Ust'-Koksa, Zaichikha River, 25-28.VII.2013, MP, VL, ♀ [FCBV]; 14 km SE Aktash, Chuya River, 2-4.VII.2016, MP, VL, 2♀, ♂ [FCBV]; Krasnoyarsk Terr.: Tashtyp, Minusin. o., gran. Kuzn., 22.V.1912, Sushkin, Redik., ♂ [ZISP]; Buryatia Rep.: 20 km N Shara-Azarga, 16.VI.2007, S. Rudykh, ♀ [FCBV]; 7 km N Ulan-Ude, Novaya Komushka, 17.V.2008, MP, ♂ [FCBV].

Published records: DAVYDOVA & PESENKO (2002: 583): Yakutia; PROSHCHALYKIN (2009: 240-241): Irkutsk Prov., Yakutia; (2010: 25): Eastern Siberia; LEVCHENKO (2013: 51): Tomsk Prov.

Distribution in Siberia: Tomsk Prov., *Altai Rep., *Krasnoyarsk Terr., Irkutsk Prov., *Buryatia Rep., Yakutia.

General distribution: Russia (European part, Ural, Siberia, Far East); Europe, Azerbaijan, Turkey, Uzbekistan, Kazakhstan.

***Nomada rufipes* FABRICIUS, 1793**

Material examined: Russia: Altai Terr.: 30 km S Kur'ya, Savvushka, 31.VII-1.VIII.2007, SB, ♂ [ZISP]; Barnaul, Yuzhnyi, 1.VIII.2007, YD, ♀ [ISEN]; Khakassia Rep.: 11 km S Belyi Yar, Izykhskie Kopi, 13.VII.2012, ♂ [FCBV]; Irkutsk Prov.: Angarsk, Ketoi River, 8.VIII.1994, AL, ♀ [FCBV].

Published records: DAVYDOVA & PESENKO (2002: 583): Yakutia; PROSHCHALYKIN (2009: 240): Yakutia; (2010: 25): Eastern Siberia; PROSHCHALYKIN & LELEJ (2010: 10): Yakutia.

Distribution in Siberia: *Altai Terr., *Khakassia Rep., Yakutia.

General distribution: Russia (European part, Ural, Siberia, Far East); Europe, North Africa, Kazakhstan.

***Nomada setteri* PROSHCHALYKIN 2010**

♂: nov.

Of this species we have 15♀ and 8♂

Nomada setteri (Fig. 9, head 12, 13) is very similar to *Nomada flavopicta*, but slightly on the flattened frons-keel and on the form of the hindtibia, it is not rounded, and a few subtle spines are recognizable. The form of the antennal segments, shown in (Fig. 10). The labrum is flat (Fig. 11), apically with a few indistinct teeth. The form of the pronotum is shown in (Fig. 14). And the characteristic form of Tergite 7 is shown in (Fig. 15).

L. 7-8mm.

Material examined: Russia: Irkutsk Prov.: 15 km E Ust'-Ordinsk, 31.VII.2010, MP, 15♀, 8♂ [IBSS/ZISP].

Published records: -

Distribution in Siberia: *Irkutsk Prov.

General distribution: Russia (Eastern Siberia, Far East).



Figs 9-13: *Nomada setteri* PROSHCHALYKIN 2010 male: (9) habitus; (10) left flagellum; (11) labrum; (12-13) head.



Figs 14-15: *Nomada setteri* PROSHCHALYKIN 2010 male: (14) pronotum; (15) tergite 7.

***Nomada sexfasciata* PANZER, 1799**

Material examined: Russia: Altai Rep.: 8 km SW Kurai, 11.VII.2007, SB, ♀ [ZISP]; 14 km SE Aktash, Chuya River, 2-4.VII.2016, MP, VL, ♀ [FCBV]; Khakassia Rep.: Zhemchuzhnyi, Shira Lake, 1.VII.2014, AL, MP, VL, ♀ [FCBV]; Buryatia Rep.: 7 km N Ulan-Ude, Novaya Komushka, 17.V.2008, MP, ♀ [FCBV]; Irkutsk Prov.: Irkutsk, VY, 2♀♀, ♂ [ZISP].

Published records: PROSHCHALYKIN & KUPIANSKAYA (2009: 60): Buryatia Rep.; PROSHCHALYKIN (2009: 240): Irkutsk Prov., Buryatia Rep.; (2010: 25): Eastern Siberia; LEVCHENKO (2013: 51): Tomsk Prov.

Distribution in Siberia: Tomsk Prov., *Altai Rep., *Khakassia Rep., Irkutsk Prov., Buryatia Rep., Zabaikalskiy Terr.

General distribution: Russia (European part, Ural, Siberia, Far East); Europe, North Africa, Azerbaijan, Israel, Iran, Turkmenistan, Kazakhstan, Korea.

***Nomada stigma* FABRICIUS, 1804**

Material examined: Russia: Tomsk Prov.: Tomsk, 26.VI.1997, Maletina, Fedorova, Samokhvalova, ♀ [ZISP]; Altai Rep.: 14 km SE Aktash, Chuya River, 2-4.VII.2016, MP, VL, ♀ [FCBV]; Krasnoyarsk Terr.: Minusinsk, Nichka River, 6.VII.2012, MP, VL, ♂ [FCBV]; 10 km NW Minusinsk, Bystraya River, 9.VII.2012, MP, VL, ♀ [FCBV]; Irkutsk Prov.: 15 km E Ust'-Ordinsk, 31.VII.2010, MP, ♀ [FCBV]

Published records: DAVYDOVA & PESENKO (2002: 583): Yakutia; PROSHCHALYKIN (2009: 240): Yakutia; (2010: 24): Eastern Siberia.

Distribution in Siberia: *Tomsk Prov., *Altai Rep., *Krasnoyarsk Terr., *Irkutsk Prov., Yakutia.

General distribution: Russia (European part, Ural, Siberia); Europe, North Africa, Armenia, Azerbaijan, Turkey, Cyprus, Uzbekistan, Kazakhstan.

***Nomada striata* FABRICIUS, 1793**

Material examined: Russia: Altai Rep.: 24 km NWW Aktash, Chuya River, 30.VI.2016, MP, VL, 2♀♀ [FCBV]; 14 km SE Aktash, Chuya River, 2-4.VII.2016, MP, VL, 2♀♀ [FCBV]; 15 km SE Kurai, Chuya River, 5-6.VII.2016, MP, VL, ♀ [FCBV]; Buryatia Rep.: 7 km N Ulan-Ude, Novaya Komushka, 13.VI.1996, S. Rudykh, ♀ [FCBV]; Kyakhta, 29-30.V.2008, MP, 7♀♀ [FCBV]; Zabaikalskiy Terr.: 40 km NW Chita, Tasei Lake, 2.VI.1994, YP, ♀ [ZISP]; Chita, 3.VI.1994, YP, ♀ [ZISP]; Nizhnii Tsasuchei, 21.VIII.1996, V. Dubatolov, ♀ [ISEN].

Published records: DAVYDOVA & PESENKO (2002: 583): Yakutia; PROSHCHALYKIN (2010: 24): Eastern Siberia; LEVCHEKNO (2013: 44): Tomsk Prov.

Distribution in Siberia: Tomsk Prov., *Altai Rep., *Buryatia Rep., Yakutia, *Zabaikalskiy Terr.

General distribution: Russia (European part, Ural, Siberia, Far East); Europe, Cyprus, Kazakhstan.

***Nomada tenella* MOCSÁRY, 1883**

Material examined: No additional material examined.

Published records: DAVYDOVA & PESENKO (2002: 583): Yakutia; PROSHCHALYKIN (2009: 240): Buryatia Rep., Yakutia; (2010: 24): Eastern Siberia.

Distribution in Siberia: Buryatia Rep., Yakutia.

General distribution: Russia (European part, Ural, Eastern Siberia); Azerbaijan, Iran, Turkmenistan, Kazakhstan.

***Nomada trapeziformis* SCHMIEDEKNECHT, 1882**

Material examined: Russia: Tomsk Prov.: Kireevsk, Bol'shoi Kanaevskii Island, 8.VIII.1995, OK, ♀ [ZISP]; Tomsk, 3.V.1999, OK, ♀ [ZISP]; Khakassia Rep.: Belyi Yar, Abakan River, 11-12.VII.2012, MP, VL, ♀ [FCBV]; Krasnoyarsk Terr.: Eniseisk, J. Sahlb., Morawitz coll. ♀ [ZISP]; Buryatia Rep.: Selenduma, 24.V.2008, MP, ♂ [FCBV].

Published records: LEVCHEKNO (2009: 19): Tomsk Prov., Krasnoyarsk Terr., Irkutsk Prov.; (2013: 51): Tomsk Prov., Krasnoyarsk Terr.

Distribution in Siberia: Tomsk Prov., *Khakassia Rep., Krasnoyarsk Terr., Irkutsk Prov., *Buryatia Rep.

General distribution: Russia (European part, Siberia); Europe.

***Nomada zonata* PANZER, 1798**

Material examined: Russia: Khakassia Rep.: 27 km NE Shira, Bele Lake, 6.VII.2014, AL, MP, VL, ♀ [FCBV].

Published records: PROSHCHALYKIN (2009: 240-241): Irkutsk Prov.; (2010: 24): Eastern Siberia.

Distribution in Siberia: *Khakassia Rep., Irkutsk Prov.

General distribution: Russia (European part, Ural, Eastern Siberia); Europe, Armenia, Azerbaijan, Turkey, Iran, Turkmenistan, Uzbekistan, Kazakhstan.

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Zusammenfassung

47 Arten und 3 Unterarten der Gattung *Nomada* (Hymenoptera, Apidae) wurden aus Sibirien nachgewiesen. *Nomada irkutskiensis* PROSHCHALYKIN & SCHWARZ, nov.sp. konnte aus der Republik Burjatien sowie der russischen Provinz Irkutsk beschrieben werden. Die 8 Arten *Nomada alboguttata* HERRICH-SCHÄFFER, 1839, *N. basalis* HERRICH-SCHÄFFER, 1839, *N. fuscicornis* NYLANDER, 1848, *N. guttulata* SCHENCK, 1861, *N. italica* DALLA TORRE & FRIESE, 1894, *N. integra* BRULLÉ, 1832, *N. setteri* PROSHCHALYKIN, 2010 und *N. radoszkowskii* ŁOZIŃSKI, 1922 sowie die 2 Unterarten *N. mauritanica chrysopyga* MORAWITZ, 1872, und *N. panzeri glabella* THOMSON, 1870 stellen Erstnacheweise für Sibirien dar. Das Männchen von *N. setteri* PROSHCHALYKIN, 2010 wurde neu für die Wissenschaft beschrieben, Verbreitungsdaten der übrigen Arten wurden erweitert.

References

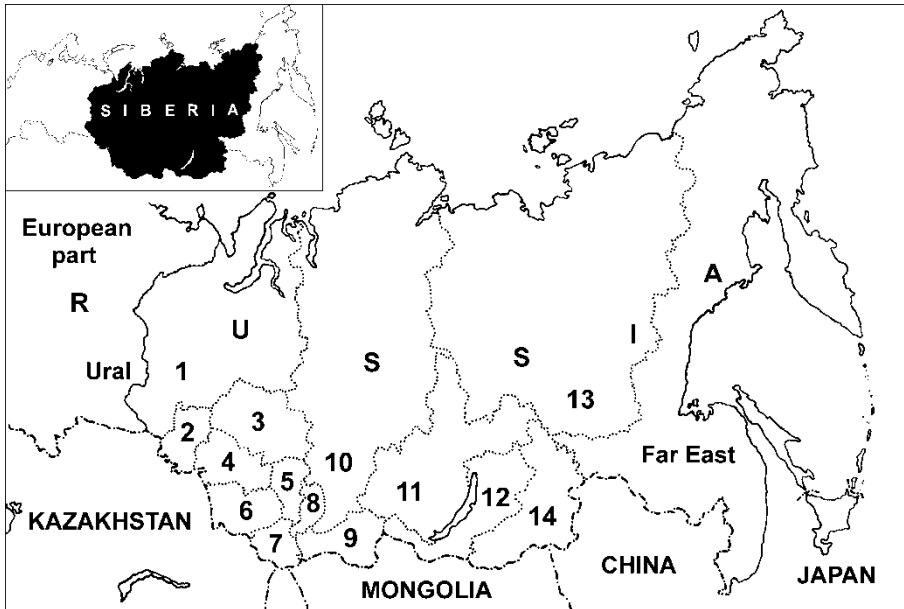
- ALEXANDER B.A. & M. SCHWARZ (1994): A catalog of the species of *Nomada* (Hymenoptera: Apoidea) of the world. — The University of Kansas Science Bulletin **55**: 239-270.
- ASTAFUROVA Yu.V. & M.Yu. PROSHCHALYKIN (2015): Bees of the genus *Sphecodes* LATREILLE 1804 of Siberia, with a key to species (Hymenoptera: Apoidea: Halictidae). — Zootaxa **4052** (1): 65-95.
- COCKERELL T.D.A. (1928): Bees collected in Siberia in 1927. — Annals and Magazine of Natural History **10** (1): 345-361.
- DAVYDOVA N.G. & Yu.A. PESENKO (2002): The fauna of bees (Hymenoptera, Apoidea) of Yakutia. 1. — Entomologicheskoe Obozrenie **81** (3): 582-599. (In Russian).
- FRIESE H. (1921): Neue Arten der Schmarotzerbienen. — Deutsche Entomologische Zeitschrift **1920**: 251-266.
- KONUSOVA O.L. & V.V. YANIUSHKIN (2000): Ecological characteristics of bees (Hymenoptera, Apoidea) of the southern taiga in the Tomsk part of the Ob River basin. — Siberian Ecological Journal **7** (3): 283-286. (In Russian).
- KUHLMANN M. & M.Yu. PROSHCHALYKIN (2011): Bees of the genus *Colletes* LATREILLE 1802 of the Asian part of Russia, with keys to species (Hymenoptera: Apoidea: Colletidae). — Zootaxa **3068**: 1-48.
- LEVCHENKO T.V. (2009): Zoogeographical characteristic of the bees fauna (Hymenoptera, Apoidea) of the Moscow Region. — Bulletin of the Moscow Society of Naturalists, Section of Biology **114** (1): 14-21. (In Russian).
- LEVCHENKO T.V. (2013): Contributions to the fauna of bees (Hymenoptera: Apoidea) of Moscow Province. 4. Family Apidae. Subfamilies Apinae (conclusive part) and Nomadinae. — Eversmannia **34**: 40-56. (In Russian).
- LEVCHENKO T.V. & K.P. TOMKOVICH (2014): Contribution to the bee fauna (Hymenoptera: Apiformes) of the Khanty-Mansi Autonomous Region, Western Siberia, Russia. — Entomofauna **35** (5): 85-100.
- ŁOZIŃSKI P. (1922): Eine kritische Bearbeitung der *Nomada*-Arten aus der Sammlung von O. Radoszkowski. — Bulletin de l'Académie Polonaise des Sciences et des Lettres, Ser. B: Sciences Naturelles **1921**: 87-120.
- MOCSÁRY A. & V. SZÉPLIGETI (1901): Hymenopteren. — In: HORVÁTH G. (ed.), Dritte asiatische Forschungsreise des Grafen Eugen Zichy. Bd. 2. — J. Martens, Budapest, Leipzig, 121-169.

- MORAWITZ F. (1888): Hymenoptera aculeata nova. — Horae Societatis Entomologicae Rossicae **22**: 224-302.
- PROSHCHALYKIN M.Yu. (2009): Cleptoparasitic bees of the family Apidae (Hymenoptera, Apoidea) of the Eastern Siberia and the Russian Far East. — Euroasian Entomological Journal **8** (2): 237-244. (In Russian).
- PROSHCHALYKIN M.Yu. (2010): The bees of subfamily Nomadinae (Hymenoptera: Apidae) of the Eastern Palaearctic Region. — Proceedings of the Russian Entomological Society **81** (2): 21-28. (In Russian).
- PROSHCHALYKIN M.Yu. (2013): New records of bees (Hymenoptera, Apoidea, Apiformes) from Siberia. — A.I. Kurentsov's Annual Memorial Meetings **24**: 135-148. (In Russian).
- PROSHCHALYKIN M.Y. & H.H. DATHE (2012): The bees of the genus *Hylaeus* FABRICIUS 1793 of the Asian part of Russia, with a key to species (Hymenoptera: Apoidea: Colletidae). — Zootaxa **3401**: 1-36.
- PROSHCHALYKIN M.Y. & H.H. DATHE (2016): Additional records of the genus *Hylaeus* FABRICIUS, 1793 (Hymenoptera: Apoidea: Colletidae) from Siberia, with description of a new species. — Zootaxa **4105** (4): 301-320.
- PROSHCHALYKIN M.Yu. & M. KUHLMANN (2015): Additional records of the genus *Colletes* LATREILLE (Hymenoptera: Apoidea: Colletidae) from Siberia, with a checklist of Russian species. — Zootaxa **3949** (3): 323-344.
- PROSHCHALYKIN M.Yu. & A.N. KUPIANSKAYA (2009): The bees of family Apidae (Hymenoptera, Apoidea) of Transbaikalia. — Euroasian Entomological Journal **8** (1): 59-68. (In Russian).
- PROSHCHALYKIN M.Yu. & A.S. LELEJ (2010): Review of the *Nomada roberjeotiana* species-group (Hymenoptera: Apidae) of Russia, with description of new species. — Zootaxa **2335**: 1-15.
- PROSHCHALYKIN M.Yu. & A.S. LELEJ (2013): The species-group names of bees (Hymenoptera: Apoidea, Apiformes) described from Siberia. — Euroasian Entomological Journal **12** (4): 315-327.
- RADOSZKOWSKI O. (1876): Matériaux pour servir à une faune hyménoptérologique de la Russie. (Suite). — Horae Societatis Entomologicae Rossicae **12** (1): 82-100.
- SCHWARZ M. (1980a): Zur Kenntnis einiger von F. Morawitz beschriebener *Nomada*-Arten (Hymenoptera, Apoidea). — Entomofauna **1** (1): 1-27.
- SCHWARZ M. (1980b): Beitrag zur Kenntnis weiterer von F. Morawitz beschriebener *Nomada*-Arten (Hymenoptera, Apoidea). — Entomofauna **1** (9): 103-118.
- SCHWARZ M. (1988): Revision einiger von T.D.A. Cockerell beschriebenen *Nomada*-Arten der Paläarktis (Hymenoptera, Apoidea). — Entomofauna **9** (19): 381-387.
- YURKOVSKAYA T.K., ILJINA I.S. & I.N. SAFRONOVA (2008): The National Atlas of Russia. Vol. 1. — AST, Astrel, Roskartografiya. Ministerstvo Transporta RF, 496 pp. (In Russian).

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Map. 1: Administrative map of Siberia (I-II, 1-14): I – Western Siberia. (1) Tyumen Prov.; (2) Omsk Prov.; (3) Tomsk Prov.; (4) Novosibirsk Prov.; (5) Kemerovo Prov.; (6) Altaiiski Terr.; (7) Altai Republic; II – Eastern Siberia. (8) Khakassia Republic; (9) Tyva Republic; (10) Krasnoyarsk Terr., (11) Irkutsk Prov.; (12) Burytia Republic; (13) Sakha Republic (Yakutia); (14) Zabaikalskiy Terr.

Table 1. Records of Siberian *Nomada* species and subspecies by province and region (numbers refer to the regions in Fig. 1). + published records; ⊕ current data.

<i>Nomada</i> species/subspecies	Western Siberia							Eastern Siberia						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<i>N. albidemaculata</i>											+	+		⊕
<i>N. alboguttata</i>										⊕				
<i>N. amurensis</i>							⊕	⊕			+			
<i>N. basalis</i>				⊕										
<i>N. castellana</i>											+			
<i>N. dybovskij</i>											+			
<i>N. ecarinata</i>			⊕			⊕		⊕		+	+	⊕		⊕
<i>N. errans</i>											+			
<i>N. fabriciana</i>			+					⊕			+			
<i>N. flavoguttata</i>	+		+			⊕		⊕	⊕		+		+	
<i>N. flavopicta</i>			+			⊕	⊕	⊕	⊕	⊕	+	⊕		⊕
<i>N. fulvicornis</i>			+			⊕		⊕	⊕	+	+	+	+	⊕
<i>N. furva</i>			+											
<i>N. fusca</i>							⊕	⊕			+		+	

<i>Nomada</i> species/subspecies	Western Siberia							Eastern Siberia						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<i>N. fuscicornis</i>			⊕			⊕								
<i>N. goodeniana</i>			+			⊕					+			
<i>N. guttulata</i>								⊕						
<i>N. hammarstroemi</i>							⊕			+	⊕	⊕		
<i>N. integra</i>										⊕				
<i>N. irkutskiensis</i>											⊕			
<i>N. italica</i>						⊕		⊕		⊕		⊕		
<i>N. lathburiana</i>	⊕		+			⊕		⊕	⊕	⊕	⊕	+	⊕	⊕
<i>N. leucophthalma</i>			+										+	
<i>N. margelanica</i>								⊕				⊕	+	
<i>N. mauritanica</i>									⊕			⊕		
<i>N. chrysopyga</i>														
<i>N. mitaii</i>								+			⊕			+
<i>N. moeschleri</i>										⊕	+			⊕
<i>N. mutabilis</i>								⊕			+			
<i>N. obscura</i>			+								+	⊕		⊕
<i>N. obtusifrons</i>							⊕				+			
<i>N. opaca</i>											+			
<i>N. palmeni</i>										+	+			
<i>N. panzeri glabella</i>						⊕								
<i>N. panzeri panzeri</i>	+		+			⊕			⊕		⊕	+	+	+
<i>N. planifrons</i>											+			
<i>N. posthuma</i>											+			
<i>N. pulchra</i>						⊕			⊕		+			⊕
<i>N. radoszkowskii</i>												⊕		
<i>N. roberjeotiana</i>			+			⊕	⊕	⊕	⊕	⊕	+	+	+	+
<i>N. ruficornis</i>			+				⊕			⊕	+	⊕	+	
<i>N. rufipes</i>						⊕		⊕					+	
<i>N. setteri</i>											⊕			
<i>N. sexfasciata</i>			+				⊕	⊕			+	+		+
<i>N. stigma</i>			⊕			⊕				⊕	⊕		+	
<i>N. striata</i>			+				⊕					⊕	+	⊕
<i>N. tenella</i>												+	+	
<i>N. trapeziformis</i>			+					⊕		+	+	⊕		
<i>N. zonata</i>								⊕			+			
Total (province)	3	0	18	1	0	13	9	19	8	14	33	17	13	14
Total (region)	26							44						

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