

## New faunistic records of Ichneumonidae (Hymenoptera) from the European North of Russia

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## Новые фаунистические находки Ichneumonidae (Hymenoptera) на севере европейской России

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**Abstract.** The article provides an annotated list of 147 ichneumonid species from 20 subfamilies resulted from the faunistic studies in the North of the European part of Russia, mainly on the territories of the Republic of Karelia and the Murmansk Province. Of these, 20 species are reported for the fauna of Russia for the first time, 22 species are new in the fauna of the European part of Russia; the rest species, with the exception of those specifically mentioned, are new findings previously unknown for the regions.

**Key words.** Hymenoptera, ichneumonid wasps, European North, Russia, fauna, new records, species list.

**Резюме.** В статье приводится аннотированный список 147 видов наездников-ихневмонид из 20 подсемейств по результатам фаунистических исследований на севере европейской части России, в основном на территории Республики Карелия и Мурманской области. Из них 20 видов впервые приводятся для фауны России, 22 вида – новые для фауны европейской части России; остальные виды, за исключением указанных особо, являются новыми находками, ранее неизвестными для регионов.

**Ключевые слова.** Hymenoptera, наездники-ихневмониды, европейский Север, Россия, фауна, новые находки, список видов.

### Introduction

The hymenopterous family Ichneumonidae is the largest insect family in North Europe, e.g. the number of recorded in Finland ichneumonid species is more than 2700 (Várkonyi et al., 2019). However, the fauna of territories of the Republic Karelia and Murmansk Province included in East Fennoscandia, has been studied insufficiently. The territory of Karelia is known better, as the Ichneumonidae fauna is intensively studied there for 30 years. Many species occurring there were reported in a set of papers already, however some of them are presented in a local publications and according to the World Catalogue (Yu et al., 2016) are almost unknown, especially abroad (Humala, 1991, 1995, 1997, 2004; Yakovlev et al., 1994, 1998, 2000, 2001; Humala, Polevoi, 1999, 2006, 2008; Polevoi, Humala, 2005, 2007, 2009, 2013; Polevoi et al., 2006; Krutov et al., 2014, etc.). Some of these data from Karelia and other regions of the

Russian North were briefly reported without any details. In the Material examined section, all specimens on which those records based are included. Another data on the regional Ichneumonidae fauna obtained by the author can be found in some periodicals available now via the Internet (Humala, 2006, 2008; Humala, Polevoi, 2009, 2011, 2015; Polevoi, Humala, 2011; Jakovlev et al., 2014; Polevoi et al., 2017, etc.), including also reviews of the subfamilies Ichneumoninae (Riedel, Humala, 2009, 2018) and Mesochorinae (Riedel, Humala, 2016, 2017). The materials on subfamily Tersilochinae s. str. were treated by A.I. Khalaim and will be included in the Catalogue of Russian Hymenoptera by him. The results of the treatment the subfamilies Cyloceeriinae, Microleptinae, Orthocentrinae and Oxytorinae, with new records from Russia are presented here in a separate article in this volume (Humala, 2019).

The present paper is aimed to publish new or poorly known faunistic data on ichneumonid parasitoids from the Russian European North.

## Materials and methods

The materials for the present study were obtained during long-term entomological researches conducted by the Forest Research Institute KarRC RAS in Karelia and also on the territories of “Pasvik” Nature Reserve and Laplandskiy Biosphere Nature Reserve (Murmansk Province). Some additional materials from Arkhangelsk, Vologda and Novosibirsk Provinces were studied as well. All mentioned regions (except Novosibirsk) belong to the North of the European part of Russia – EP(N) (see: Belokobylskij, Lelej, 2017). All materials for the present study were collected by sweep netting and using of Malaise and yellow pan traps and are stored predominantly in the collections of Forest Research Institute KarRC RAS with a few exceptions. Notes of abbreviated biogeographical provinces of East Fennoscandia are given according to Heikinheimo and Raatikainen (1971) with additions by Kravchenko and Kuznetsov (2001). The Latin names are given in alphabetic order according to the recent version of World Catalogue (Yu et al., 2016) as well as distribution data. Following abbreviations are used in the text: MT – Malaise trap, WT – window trap, YPT – yellow pan trap. New species records for Russia are marked with an asterisk (\*); new species records for the European part of Russia are marked with a plus (+).

## Results

### Subfamily Acaenitinae

#### ***Coleocentrus caligatus* Gravenhorst, 1829**

*Material examined.* RUSSIA. Republic of Karelia: Kon, Kizhskiy Reserve, Eglov I. 16.VI.2004, 1 male; Kon, Kizhskiy Reserve, Sychevets I., 3.VII.2017, 1 female (all A. Humala leg.).

#### **\**Coleocentrus heteropus* Thomson, 1894**

*Material examined.* RUSSIA. Republic of Karelia: Kon, Kondopoga District, Nigozero 2.VII.2012, 1 female (Kainelainen leg.); Kton, Pudozh District, Besov Nos, Kladovets Cape, 30.VI.2018, 1 female (A. Humala leg.).

#### **\**Coleocentrus soldanskii* Bischoff, 1915**

*Material examined.* RUSSIA. Vologda Province: Kirillovskiy District, Topornya, 30.IX.2010, 1 female (N. Kolesova leg.).

*Remarks.* The only studied specimen differs in the absence of a pair of small yellow spots on the lower face and partially reddish-brown hind coxae.

#### ***Phaenolobus fulvicornis* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. Vologda Province: Veliky Ustyug District, Opoki, 60°35.725' N, 045°29.123' E, herb-rich meadow, 26.VII.2017, 1 female, 1 male (N. Kolesova leg.).

#### ***Phaenolobus terebrator* (Scopoli, 1763)**

*Material examined.* RUSSIA. Republic of Karelia: Kon, “Kivach” Nature Reserve, 6.VIII.1990, 1 male (A. Humala leg.).

*Remarks.* Earlier it was reported erroneously as *Ph. fraudator* (Humala, 1997).

### Subfamily Agriotypinae

#### *Agriotypus armatus* Curtis, 1832

*Material examined.* RUSSIA. *Vologda Province:* Kirillovskiy District, National park “Russian North”, Chisty Dor, Pid’ma River, on near-water vegetation, 18.VI.2008, 1 female (Yu. Belova leg.).

*Remarks.* This finding is the second verified record of the species from Russia. Previously it was reported from Moscow Province (Kasparyan, Khalaim, 2007).

### Subfamily Anomaloninae

#### *Barylypa uniguttata* (Gravenhorst, 1829)

*Material examined.* RUSSIA. *Republic of Karelia:* Kol, Olonets District, 2 km SE of Vidlitsa, 4.IX.2018, 1 male (A. Humala leg.).

#### \**Habronyx (Camposcopus) perspicuus* (Wesmael, 1849)

*Material examined.* RUSSIA. *Republic of Karelia:* Kon, Kizhskiy Reserve, Bukol’nikov I., 30.VII.2018, 1 female (A. Humala leg.).

### Subfamily Ateleutinae

#### *Ateleute linearis* Foerster, 1871

*Material examined.* RUSSIA. *Murmansk Province:* *Lps*, “Pasvik” Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 6.VI–10.VII.2007; 10.VII–3.VII.2007; 3.VIII–10.X.2007, 5 males; *Lim*, Laplandskiy Nature Reserve, 5 km W of Chunozero, MT, 28.V–20.IX.2014, 1 male; Laplandskiy Nature Reserve, 2 km N of Chunozero, MT, 26.VIII–22.IX.2014, 1 female (all A. Humala leg.).

*Remarks.* Reported earlier in EP (N) from Karelia in “Kivach” Nature Reserve (Humala, 2006).

### Subfamily Banchinae

#### *Apophua bipunctoria* (Thunberg, 1822)

*Material examined.* RUSSIA. *Republic of Karelia:* Kol, Kaskesruchi, 20.VII.2004, 1 female (A. Humala leg.); 5 km N of Kaskesruchi, 19.VII.2004, 2 females (A. Humala leg.); Kol, Kakkorovo, 25.VIII.2004, 1 female (A. Polevoi leg.).

#### *Apophua evanescens* (Ratzeburg, 1848)

*Material examined.* RUSSIA. *Republic of Karelia:* Kon, Shaidomskiy Reserve, 62°78'N, 34°18' E, meadow, 10.VIII.2018, 1 female (A. Humala leg.).

#### *Cryptopimpla quadrilineata* (Gravenhorst, 1829)

*Material examined.* RUSSIA. *Republic of Karelia:* Kon, 2 km N of Vendyury, mixed forest, MT, 22–24.VI.2018, 1 female (A. Humala leg.).

#### *Exetastes adpressorius* (Thunberg, 1822)

*Material examined.* RUSSIA. *Republic of Karelia:* Kol, Matveeva Sel’ga, meadow, 26.VIII.2004, 1 female (A. Polevoi leg.).

#### *Glypta consimilis* Holmgren, 1860

*Material examined.* RUSSIA. *Republic of Karelia:* *Kpoc*, Nesterov Mt., 23.VI.2000, 1 female (A. Humala leg.); Kon, 2 km N of Vendyury, mixed forest, 22.VI.2018, 1 male (A. Humala leg.).

#### \**Glypta dentifera* Thomson, 1889

*Material examined.* RUSSIA. *Republic of Karelia:* Kol, Sheltozero, along stream, 13.VII.2004, 1 female; Kol, 2 km S of Kaskesruchi, 19.VII.2004, 1 female (all A. Humala leg.).

### + *Glypta lapponica* Holmgren, 1860

*Material examined.* RUSSIA. *Republic of Karelia:* *Kon*, Kizhskiy Reserve, Orozh-Yama I., 25.VI.2003, 1 female, 1 male. *Murmansk Province:* *Lps*, “Pasvik” Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 3.VIII–10.X.2007, 1 female (all A. Humala leg.).

### *Glypta teres* Gravenhorst, 1829

*Material examined.* RUSSIA. *Republic of Karelia:* *Kol*, Kakkorovo, 25.VIII.2004, 1 female (A. Polevoi leg.). *Murmansk Province:* *Lps*, “Pasvik” Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 6.VI–10.VII, 10.VII–3.VII & 3.VIII–10.X.2007, 5 males; *Lim*, Laplandskiy Nature Reserve, 5 km W of Chunozero, MT, 28.V–20.IX.2014, 1 male (all A. Humala leg.).

### \**Lissonota (L.) biguttata* Holmgren, 1860

*Material examined.* RUSSIA. *Republic of Karelia:* *Kon*, “Kivach” Nature Reserve, WT on dead birch, 22.VII–27.VIII.2015, 3 females (A. Polevoi leg.).

### *Lissonota (L.) nigridens* Thomson, 1889

*Material examined.* RUSSIA. *Republic of Karelia:* *Kp*: Pudozh District, 3 km SE of Prirechny, MT, 24.VI–13.VIII.2009, 1 female (A. Humala leg.).

## Subfamily Campopleginae

### + *Leptocampoplex cremastoides* (Holmgren, 1860)

*Material examined.* RUSSIA. *Republic of Karelia:* *Kol*, Olonets District, 4 km W of Vidlitsa, 3.IX.2018, 1 female; *Kon*, “Kivach” Nature Reserve, MT, 12–16.VII.1991, 1 female; MT, 2–6.VIII.1991, 1 female; *Kb*, Tolvayarvi, MT, 8–15.VII.1999, 1 female; *Kpoc*, Kalevala District, env. of Pistayarvi Lake, MT, 8–15.VII.1999, 1 female; *Kk*, 2 km SW of Gridino, MT, 4.VII–9.VIII.2007, 1 female. *Murmansk Province:* *Lps*, “Pasvik” Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 3.VIII–10.X.2007, 1 female; *Lim*, Laplandskiy Nature Reserve, 2 km N of Chunozero, El’yavr Lake, MT, 23.VII–26.VIII.2014, 1 female (all A. Humala leg.).

### \**Meloboris gracilis* Holmgren, 1859

*Material examined.* RUSSIA. *Republic of Karelia:* *Kl*, Ohvonsaari I., 17.VII.2018, 1 female; *Kk*, Sonostrov I., 6.VIII.2006, 1 female; *Kk*, Kishkin I., 8.VIII.2006, 1 female (all A. Humala leg.).

### *Rhimphoctona grandis* (Fonscolombe, 1852)

*Material examined.* RUSSIA. *Republic of Karelia:* *Kon*, Kizhskiy Reserve, B. Klimenty I., Gryznavolok Cape, 2.VII.2019, 1 female, 1 male (A. Humala leg.).

### \**Rhimphoctona (Xylophylax) longicauda* (Horstmann, 1980)

*Material examined.* RUSSIA. *Murmansk Province:* *Lim*, Laplandskiy Nature Reserve, Chunozero, YPT, 24.VII–2.VIII.2013, 1 female (A. Humala leg.).

### *Rhimphoctona (Xylophylax) melanura* (Holmgren, 1860)

*Material examined.* RUSSIA. *Republic of Karelia:* *Kpoc*, Kalevala National Park, WT, VII.1997, 1 female. *Murmansk Province:* *Lim*, Laplandskiy Nature Reserve, 4 km SE of Chunozero, MT, 23.VI–28.VII.2014, 2 females; *Lps*, “Pasvik” Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 6.VI–10.VII.2007 & 10.VII–3.VIII.2007, 2 females (all A. Humala leg.).

### *Rhimphoctona (Xylophylax) obscuripes* (Holmgren, 1860)

*Material examined.* RUSSIA. *Republic of Karelia:* *Kol*, Vedlozero, 13.VI.2014, 1 female (A. Polevoi leg.). *Murmansk Province:* *Lim*, Laplandskiy Nature Reserve, 4 km SE of Chunozero, MT, 28.VII–26.VIII.2014, 1 female (A. Humala leg.).

### *Rhimphoctona (Xylophylax) rufocoxalis* (Clément, 1924)

*Material examined.* RUSSIA. *Republic of Karelia:* *Kon*, “Kivach” Nature Reserve, 21.VI.2002, 1 female; *Kp*: 3 km SW of Prirechny, mixed forest, MT, 24.VI–13.VIII.2009, 1 female. *Murmansk Province:* *Lim*, Laplandskiy Nature Reserve, 4 km SE of Chunozero, MT, 23.VI–28.VII.2014, 2 females (all A. Humala leg.).

### *Rhimphoctona (Xylophylax) xoridiformis* (Holmgren, 1860)

*Material examined.* RUSSIA. *Republic of Karelia:* *Kon*, “Kivach” Nature Reserve, 21.VI.2002, 1 female (A. Humala leg.).

## Subfamily Cryptinae

### ***Aritranis director* (Thunberg, 1822)**

*Material examined.* RUSSIA. *Republic of Karelia: Kon*, Medvezh'egorsk District, Padun, pine forest, 11.VI.2000, 1 male (A. Humala leg.).

### ***Gelis bicolor* (Villers, 1789)**

*Material examined.* RUSSIA. *Republic of Karelia: Kpor*, Ladozero, MT, 27.VI–13.VIII.2010, 1 female (A. Humala leg.).

### ***Gelis fuscicornis* (Retzius, 1783)**

*Material examined.* RUSSIA. *Murmansk Province: Lps*, "Pasvik" Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 10.VII–3.VII.2007, 2 females (A. Humala leg.).

### **\**Gelis spurius* (Foerster, 1850)**

*Material examined.* RUSSIA. *Murmansk Province: Lps*, "Pasvik" Nature Reserve, Kalkupya Mt., birch forest, MT, 30.VIII–11.IX.2007, 2 males (A. Humala leg.).

### ***Gelis viduus* (Foerster, 1850)**

*Material examined.* RUSSIA. *Republic of Karelia: Kl*, Valaam I., MT, 27.VII–2.VII.2009, 5 females (A. Polevoi leg.); *Kpor*, Ladozero, MT, 27.VI–13.VIII.2010, 3 females (A. Humala leg.). *Murmansk Province: Lps*, "Pasvik" Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 6.VI–10.VII.2007, 9 females (A. Humala leg.); Kalkupya Mt., birch forest, MT, 30.VIII–11.IX.2007, 2 females and 2 males (A. Humala leg.).

### **\**Idiolispa obfuscator* (Villers, 1789)**

*Material examined.* RUSSIA. *Republic of Karelia: Kol*, 4 km SE of Kindasovo, mixed forest, WT, 28.V–9.VII.1996, 1 female (A. Humala leg.).

### **\**Idiolispa subalpina* (Schmiedeknecht, 1904)**

*Material examined.* RUSSIA. *Republic of Karelia: Kol*, Petrozavodsk, Lososinnoe, YPT, 9–12.VII.2012, 1 female; *Kon*, Konchezero, Chupa, YPT, 4–6.VII.2012, 1 female. *Murmansk Province: Lim*, Laplandskiy Nature Reserve, 2 km N of Chunozero, MT, 23.VI–28.VII.2014, 1 female (all A. Humala leg.).

### ***Lysibia nana* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. *Republic of Karelia: Kpor*, Kostomuksha Nature Reserve, pine forest, MT, 25.VIII.1995, 1 male (A. Humala leg.).

### **\**Polyaulon paradoxus* Zetterstedt, 1838**

*Material examined.* RUSSIA. *Republic of Karelia: Kon*, 8 km SW of Peninga, YPT, 19–21.VII.2008, 1 male (A. Polevoi leg.); *Kon*, "Kivach" Nature Reserve, WT on dead birch, 23.VI–27.VIII.2015, 3 males (A. Polevoi leg.); *Kon*, Muarlampi Lake, YPT, 9.VII.2009, 3 males (A. Polevoi leg.); *Kon*, Veshkelitsa, Ar'koila, MT, 18–21.VI.2018, 1 male (A. Humala leg.); *Kon*, 2 km N of Vendyury, YPT, 22–24.VI.2018, 1 male (A. Humala leg.). *Murmansk Province: Lps*, "Pasvik" Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 10.VII–3.VII.2007, 3 males (A. Humala leg.); *Lim*, Laplandskiy Nature Reserve, 5 km W of Chunozero, MT, 28.V–20.IX.2014, 7 males (A. Humala leg.).

### ***Xylophrurus augustus* (Dalman, 1823)**

*Material examined.* RUSSIA. *Republic of Karelia: Kton*, Vodlozerskiy National Park, source of Sukhaya Vodla River, 8.VI.2002, 1 female (A. Humala leg.).

### **\**Xylophrurus dentatus* (Taschenberg, 1865)**

*Material examined.* RUSSIA. *Murmansk Province: Lim*, Laplandskiy Nature Reserve, 2 km N of Chunozero, El'yavr Lake, MT, spruce forest, 23.VI–28.VII.2014, 1 female (A. Humala leg.).

## Subfamily Ctenopelmatinae

### **+ *Asthenara socia* (Holmgren, 1857)**

*Material examined.* RUSSIA. *Republic of Karelia: Kon*, "Kivach" Nature Reserve, birch forest, MT, 4–10.VI.1991, 1 female (A. Humala leg.).

### ***Campodorus vicinus* (Holmgren, 1857)**

*Material examined.* RUSSIA. *Murmansk Province: Lps*, “Pasvik” Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 3.VIII–10.IX.2007, 1 female (A. Humala leg.).

### **+*Ctenopelma boreale* Holmgren, 1857**

*Material examined.* RUSSIA. *Republic of Karelia: Ks*, Paanayarvi National Park, Vartolambina, 22.VI.1998, 1 male; *Ks*, Paanayarvi National Park, Valk’yarvi Lake, pine forest, MT, 21–30.VI.1998, 1 male (all A. Humala leg.).

### ***Ctenopelma luciferum* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. *Republic of Karelia: Kon*, “Kivach” Nature Reserve, aspen forest, MT, 22–25.VI.1989, 1 female (A. Humala leg.).

### ***Ctenopelma ruficoxator* Aubert, 1987**

*Material examined.* RUSSIA. *Republic of Karelia: Kk*, Loukhi District, Kartesh Cape, Biol. station surr., pine forest, 21.VII.1996. *Murmansk Province: Lps*, “Pasvik” Nature Reserve, Kalkupya Mt., birch forest, MT, 30.VII–11.IX.2007, 1 female (all A. Humala leg.).

*Remarks.* Previously this species was reported in **EP (N)** from Murmansk Province (Kasparyan, 2004).

### ***Hadrodactylus gracilipes* Thomson, 1883**

*Material examined.* RUSSIA. *Republic of Karelia: Kon*, “Kivach” Nature Reserve, aspen forest, MT, 30.VI–3.VII.1989, 1 female (A. Humala leg.); *Kpoc*, Palos’yarvi Lake, pine forest, 20–24.VI.2000, 1 male (A. Humala leg.).

*Remarks.* Previously was reported in **EP (N)** from Murmansk Province (Kasparyan, 2011).

### ***Hadrodactylus indefessus* (Gravenhorst, 1820)**

*Material examined.* RUSSIA. *Republic of Karelia: Kon*, “Kivach” Nature Reserve, pine forest, MT, 5–8.VI.1989, 1 female (A. Humala leg.).

*Remarks.* Previously was reported in **EP (N)** from Murmansk Province and Komi Republic (Kasparyan, 2011).

### ***Homaspis rufina* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. *Republic of Karelia: Kon*, “Kivach” Nature Reserve, aspen forest, MT, 25.VI–2.VII.1991, 1 female. *Murmansk Province: Lim*, Laplandskiy Nature Reserve, 2 km N of Chunozero, El’yavr Lake, MT, 23.VI–28.VII.2014, 1 female (all A. Humala leg.).

### ***Hypsantyx lituratoria* (Linnaeus, 1761)**

*Material examined.* RUSSIA. *Republic of Karelia: Kpoc*, Palos’yarvi, pine forest, MT, 20–24.VI.2000, 2 females (A. Humala leg.).

*Remarks.* Previously was reported in **EP (N)** from Vologda Province (Meyer, 1936).

### ***Mesoleius armillatorius* (Gravenhorst, 1807)**

*Material examined.* RUSSIA. *Republic of Karelia: Kb*, Tolvayarvi, MT, 22–30.VI.1999, 1 female; *Kpoc*, Kamennoe Lake, meadow, 8.VII.1996, 1 male (A. Humala leg.).

### ***Mesoleius geniculatus* Holmgren, 1857**

*Material examined.* RUSSIA. *Murmansk Province: Lps*, “Pasvik” Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 10.VII–3.VIII.2007 & 3.VIII–10.IX.2007, 4 females, 3 males (A. Humala leg.).

### **+*Mesoleius roepkei* Teunissen, 1945**

*Material examined.* RUSSIA. *Murmansk Province: Lps*, “Pasvik” Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 3.VIII–10.IX.2007, 1 female (A. Humala leg.).

### ***Otlophorus vepretorum* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. *Republic of Karelia: Kon*, “Kivach” Nature Reserve, aspen forest, MT, 21–27.VI.1990, 1 female (A. Humala leg.).

***Protarchus testatorius* (Thunberg, 1822)**

*Material examined.* RUSSIA. *Murmansk Province: Lps*, “Pasvik” Nature Reserve, Kalkupya Mt., birch forest, MT, 30.VII–11.IX.2007, 1 female (A. Humala leg.).

***Scopesis gesticulator* (Thunberg, 1822)**

*Material examined.* RUSSIA. *Republic of Karelia: Kb*, Tolvayarvi, MT, 26.VIII–4.IX.1999, 1 male (A. Humala leg.).

**+*Xenoschesis mordax* (Thomson, 1883)**

*Material examined.* RUSSIA. *Republic of Karelia: Kon*, “Kivach” Nature Reserve, pine forest, MT, 15–18.VI.1989, 1 female (A. Humala leg.).

**+*Xenoschesis nigricoxa* (Strobl, 1903)**

*Material examined.* RUSSIA. *Republic of Karelia: Kon*, 2 km N of Vendyury, Rapsudozero Lake, pine forest, YPT, 22–24.VI.2018, 1 female (A. Humala leg.).

***Xenoschesis ustulata* (Desvignes, 1856)**

*Material examined.* RUSSIA. *Republic of Karelia: 1 female; Kon*, Kizhskiy Reserve, Pod’elniki, 22.VII.2011, 1 female; *Kon*, “Kivach” Nature Reserve, aspen forest, MT, 25–27.VI.1989, 1 female; *Kb*, Tolvayarvi, MT, 1–8.VII.1999, 15–22.VII.1999, 2 females (all A. Humala leg.).

***Zaplethocornia procurator* (Gravenhorst, 1820)**

*Material examined.* RUSSIA. *Republic of Karelia: Kpoc*, Nesterov Mt., spruce forest, 21.VI.2000, 1 female (A. Humala leg.).

***Zemiophora scutulata* (Hartig, 1838)**

*Material examined.* RUSSIA. *Republic of Karelia: Kon*, “Kivach” Nature Reserve, pine forest, MT, 7–11.VII.1989, 1 female (A. Humala leg.).

**Subfamily Diplazontinae**

**+*Diplazon varicoxa* (Thomson, 1890)**

*Material examined.* RUSSIA. *Murmansk Province: Lim*, Laplandskiy Nature Reserve, 4 km SE of Chunozero, pine forest, MT, 23.VI–28.VII.2014, 1 female (A. Humala leg.).

***Homotropus elegans* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. *Republic of Karelia: Kol*, 2 km E of Vidlitsa, 4.IX.2018, 1 female; *Kk*, Purnavolok, supralittoral meadow, 7.VIII.2007, 1 female (A. Humala leg.).

***Homotropus incisus* (Thomson, 1890)**

*Material examined.* RUSSIA. *Murmansk Province: Lps*, “Pasvik” Nature Reserve, Varlam I., 1 km SE, MT, 3.VIII–10.IX.2007, 1 female; *Lim*, Laplandskiy Nature Reserve, 4 km SE of Chunozero, pine forest, MT, 23.VI–28.VII.2014, 1 female (all A. Humala leg.).

**+*Homotropus pallipes* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. *Republic of Karelia: Kol*, 2 km E of Vidlitsa, 4.IX.2018, 1 female (A. Humala leg.).

***Homotropus signatus* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. *Republic of Karelia: Kol*, 3–5 km W of Vidlitsa, 3.IX.2018, 1 female; *Kol*, mouth of Tuloksa River, 5.IX.2018, 1 female (all A. Humala leg.).

**+*Promethes bridgmani* Fitton, 1976**

*Material examined.* RUSSIA. *Republic of Karelia: Kk*, Cheremshikha I., supralittoral meadow, 7.VIII.2006, 1 female (A. Humala leg.).

**+*Promethes melanaspis* (Thomson, 1890)**

*Material examined.* RUSSIA. *Murmansk Province: Lps*, “Pasvik” Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 10.VII–3.VIII.2007 & 3.VIII–10.IX.2007, 2 females (A. Humala leg.).

***Sussaba aciculata* (Ruthe, 1859)**

*Material examined.* RUSSIA. *Murmansk Province: Lim*, Laplandskiy Nature Reserve, 2 km N of Chunozero, spruce forest, MT, 28.VII–26.VIII.2014, 1 female (A. Humala leg.).

***Sussaba dorsalis* (Holmgren, 1858)**

*Material examined.* RUSSIA. *Republic of Karelia: Kol*, 3–5 km W of Vidlitsa, 3.IX.2018, 1 female; 2 km E of Vidlitsa, 4.IX.2018, 1 female; *Kol*, mouth of Tuloksa River, 5.IX.2018, 1 female. *Murmansk Province: Lim*, Laplandskiy Nature Reserve, 4 km SE of Chunozero, pine forest, MT, 28.VII–26.VIII.2014, 1 female (all A. Humala leg.).

***Sussaba flavipes* (Lucas, 1849)**

*Material examined.* RUSSIA. *Republic of Karelia: Kk*, Kishkin I., 8.VIII.2006, 1 female. *Murmansk Province: Lps*, “Pasvik” Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 6.VI–10.VII.2007, 10.VII–3.VIII.2007, 3.VIII–10.IX.2007, 6 females; *Lim*, Laplandskiy Nature Reserve, 2 km N of Chunozero, spruce forest, MT, 23.VI–28.VII.2014, 1 female (all A. Humala leg.).

*Remarks.* Previously was reported in **EP** (N) from Murmansk Province and Komi Republic (Manukyan, 1988).

***Sussaba hinzi* Diller, 1982**

*Material examined.* RUSSIA. *Murmansk Province: Lim*, Laplandskiy Nature Reserve, 4 km SE of Chunozero, pine forest, MT, 23.VI–28.VII.2014, 3 females (A. Humala leg.).

**\**Syrphoctonus idari* Diller, 1985**

*Material examined.* RUSSIA. *Murmansk Province: Lim*, Laplandskiy Nature Reserve, 1 km W of Chunozero, spruce forest, MT, 23.VII–2.VIII.2013, 1 female; 2 km N of Chunozero, spruce forest, MT, 28.VI–28.VII.2014, 1 female (all A. Humala leg.).

***Syrphoctonus tarsatorius* (Panzer, 1809)**

*Material examined.* RUSSIA. *Republic of Karelia: Kol*, 3–5 km W of Vidlitsa, 3.IX.2018, 1 female; *Kol*, 2 km E of Vidlitsa, 4.IX.2018, 1 female; *Kol*, Tuloksa, 5.IX.2018, 1 female; *Kon*, Kizhskiy Reserve, Karel’sky I., 31.VII.2018, 1 female. *Murmansk Province: Lps*, “Pasvik” Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 6.VI–10.VII.2007, 1 female (all A. Humala leg.).

***Syrphilus tricinctorius* (Thunberg, 1822)**

*Material examined.* RUSSIA. *Murmansk Province: Lim*, Laplandskiy Nature Reserve, 2 km N of Chunozero, spruce forest, MT, 28.VII–26.VIII.2014, 1 female (A. Humala leg.).

**+*Tymmophorus suspiciosus* (Brischke, 1871)**

*Material examined.* RUSSIA. *Republic of Karelia: Kon*, Kizhskiy Reserve, Ermitsky I., 29.VII.2018, 1 female (A. Humala leg.).

**\**Woldstedtius bauri* Klopffstein, 2014**

*Material examined.* RUSSIA. *Murmansk Province: Lim*, Laplandskiy Nature Reserve, 5 km W of Chunozero, MT, 28.V–20.IX.2014, 1 female (A. Humala leg.).

**+*Woldstedtius citropeoralis* (Schmiedeknecht, 1926)**

*Material examined.* RUSSIA. *Republic of Karelia: Kon*, Kizhskiy Reserve, Karel’sky I., 31.VII.2018, 1 female (A. Humala leg.).

**+*Woldstedtius holarcticus* Diller, 1969**

*Material examined.* RUSSIA. *Republic of Karelia: Kk*, 2 km SW of Gridino, MT, 4.VII–9.VIII.2007, 1 female (A. Humala leg.).

**Subfamily Ichneumoninae**

***Amblyjoppa fuscipennis* (Wesmael, 1845)**

*Material examined.* RUSSIA. *Republic of Karelia: Kon*, Kizhskiy Reserve, B. Klimentevskiy I., Gryznavolok Cape, 2.VII.2019, 1 male (A. Humala leg.).

***Diadromus varicolor* Wesmael, 1845**

*Material examined.* RUSSIA. *Republic of Karelia: Kl, Puikkola, WT, VIII.1991, 1 female (A. Humala leg.).*

**\**Ichneumon xanthorius* Forster, 1771**

*Material examined.* RUSSIA. *Vologda Province: Vozhegodskiy District, Nikitinskaya Village, 21.VII.2016, 1 male (N. Kolesova leg.).*

***Phaeogenes semivulpinus* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. *Republic of Karelia: Kon, Kizhskiy Reserve, Karel'skiy I., mixed forest, 31.VII.2018, 1 female (A. Humala leg.).*

***Tycherus cephalotes* (Wesmael, 1845)**

*Material examined.* RUSSIA. *Republic of Karelia: Kon, "Kivach" Nature Reserve, birch forest, MT, 11–17.VI.1991, 1 female (A. Humala leg.).*

**Subfamily Mesochorinae**

***Astiphromma (Astiphromma) dorsale* (Holmgren, 1860)**

*Material examined.* RUSSIA. *Novosibirsk Province: 50 km E of Iskitim, Yurmanka, 54.59° N, 84.09° E, 6.VIII.2017, 1 male (A. Humala leg.).*

**Subfamily Metopiinae**

**+*Chorinaeus flavipes* Bridgman, 1881**

*Material examined.* RUSSIA. *Republic of Karelia: Kl, Soanlahti, 26.V.1993, 1 male (A. Humala leg.).*

***Chorinaeus funebris* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. *Republic of Karelia: Kk, Kishkin I., supralittoral meadow, 8.VIII.2006, 1 female (A. Humala leg.).*

*Remarks.* Previously was reported in EP (N) from Murmansk Province (Tolkanitz, 1987).

***Chorinaeus hastianae* Aeschlimann, 1975**

*Material examined.* RUSSIA. *Republic of Karelia: Kk, Loukhi District, Kartesh Cape, pine forest, MT, 23–26.VII.1996, 1 female (A. Humala leg.).*

***Exochus citripes* Thomson, 1887**

*Material examined.* RUSSIA. *Republic of Karelia: Kon, "Kivach" Nature Reserve, spruce forest, 2 km SW of Central settlement, 7–10.VII.1990, 1 female; "Kivach" Nature reserve, birch forest, 4.VII.2001, 1 female (all A. Humala leg.).*

***Exochus consimilis* Holmgren, 1858**

*Material examined.* RUSSIA. *Republic of Karelia: Kpor, Palos'yarvi, pine forest, MT, 20–25.VI.2000, 1 female; Kpor, Myagostrov I., supralittoral meadow, 14.VIII.2002, 1 female. Murmansk Province: Lim, Laplandskiy Nature Reserve, 1 km W of Chunozero, spruce forest, MT, 23.VII–2.VIII.2013, 1 female (all A. Humala leg.).*

***Exochus lentipes* Gravenhorst, 1829**

*Material examined.* RUSSIA. *Republic of Karelia: Kol, 1 km SE of Vidlitsa, 4.IX.2018, 1 female (A. Humala leg.).*

**+*Exochus pictus* Holmgren, 1858**

*Material examined.* RUSSIA. *Murmansk Province: Lim, Laplandskiy Nature Reserve, 4 km SE of Chunozero, pine forest, MT, 23.VI–28.VII.2014, 1 female (A. Humala leg.).*

***Hypsicera curator* (Fabricius, 1793)**

*Material examined.* RUSSIA. *Republic of Karelia: Kol, Petrozavodsk, 28.VII.2007, 1 female; 24.VIII.2018, 1 female (A. Humala leg.).*

*Remarks.* Previously was reported in **EP (N)** from Arkhangelsk and Vologda Provinces (Tolkanitz, 1987).

***Metopius (Peltastes) leiopygus* Foerster, 1850**

*Material examined.* RUSSIA. Republic of Karelia: *Kon*, Gomsel'ga env., 15.VII.1999, 1 female (A. Humala leg.).

***Spudaeus scaber* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. Republic of Karelia: *Kon*, "Kivach" Nature Reserve, 2 km SW of Central settlement, spruce forest, MT, 15–18.VI.1989, 1 female; *Kpor*, B. Palos'yarvi Lake, pine forest, MT, 20–24.VI.2000, 1 female (all A. Humala leg.).

**\**Triclistus lativentris* Thomson, 1887**

*Material examined.* RUSSIA. Republic of Karelia: *Kol*, Kaskesruche, meadow, 20.VII.2004, 1 female (A. Humala leg.).

**Subfamily Ophioninae**

***Enicospilus ramidulus* (Linnaeus, 1758)**

*Material examined.* RUSSIA. Republic of Karelia: *Kpor*, Myagostrov I., supralittoral meadow, 14.VIII.2002, 1 female (A. Humala leg.).

**Subfamily Pimplinae**

***Clistopyga incitator* (Fabricius, 1793)**

*Material examined.* RUSSIA. Republic of Karelia: *Kpor*, Ladozero, MT, 27.VI–13.VIII.2010, 1 female (A. Humala leg.); *Kon*, Malaya Gomsel'ga, 1.VIII.2016, 1 female (A. Polevoi leg.); *Kon*, 2 km N of Shaidoma, light trap, 10.VIII.2018, 1 female (A. Humala leg.); *Kl*, Myakisalo I., meadow, 15.VI.2016, 1 female (A. Humala leg.).

***Megaetaira madida* (Haliday, 1838)**

*Material examined.* RUSSIA. Republic of Karelia: *Kol*, Sheltozero surr., 13.VII.2004, 1 female (A. Humala leg.).

***Perithous scurra* (Panzer, 1804)**

*Material examined.* RUSSIA. Republic of Karelia: *Kl*, Iso-Iiyarvi, spruce forest, 5.VII.2005, 1 male; *Kol*, Kaskesruche, 20.VII.2004, 1 female (A. Humala leg.); *Kol*, Petrozavodsk, Sainavolok, 13.VIII.1955, 1 female (B. Yakovlev leg.); *Kol*, Petrozavodsk, 1.IX.2015, 1 female (A. Humala leg.); *Kon*, Gomsel'ga, 15.VI.2014, 1 female (A. Humala leg.); *Kon*, Nizhniy Myarat Lake, 7.VII.2008, 1 female (A. Polevoi leg.); *Kon*, Nigozero, 21.VI.2011, 1 female (Kainelainen leg.). *Murmansk Province*: *Lps*, "Pavvik" Nature Reserve, Kalkupya Mt., birch forest, MT, 30.VII–11.X.2007, 1 female; *Lim*, Laplandskiy Nature reserve, 4 km SE of Chunozero, MT, 23.VI–28.VII.2014, 1 male (all A. Humala leg.).

***Pimpla flavicoxis* Thomson, 1877**

*Material examined.* RUSSIA. Republic of Karelia: *Kon*, 2 km N of Vendyury, 29.VIII.2017, 1 female; 22.VI.2018, 1 female; *Kon*, Veshkelitsa, Ar'koila 18–21.VI.2018, 1 female; *Kon*, Malaya Gomsel'ga, 9.VIII.2018, 1 female; *Kon*, Kizhskiy Reserve, Ernitskiy I., 29.VII.2018, 1 female; *Kol*, 2 km SE of Vidlitsa, 4.IX.2018, 1 female (all A. Humala leg.).

*Remarks.* Previously was reported in **EP (N)** from Arkhangelsk Province and Komi Republic (Kasparyan, 1974).

***Pimpla sodalis* Ruthe, 1859**

*Material examined.* RUSSIA. Republic of Karelia: *Kpor*, Ladozero, MT, 27.VI–13.VIII.2010, 1 male (A. Humala leg.). *Murmansk Province*: *Lim*, Laplandskiy Nature Reserve, 5 km W of Chunozero, MT, 28.V–20.IX.2014, 1 female (A. Humala leg.).

***Polysphincta tuberosa* Gravenhorst, 1829**

*Material examined.* RUSSIA. Republic of Karelia: *Kon*, 2 km N of Vendyury, 22.VI.2018, 1 female; *Kb*, Tolvayarvi, MT, 2–22.VI.1999, 3 females; *Kon*, Vottovaara Mt., spruce forest, MT, 17.VI–17.VII.2008, 1 female (all A. Humala leg.).

*Remarks.* Previously was reported in **EP (N)** from Murmansk Province (Kasparyan, 1976).

**+*Schizopyga* (= *Dreisbachia*) *pictifrons* (Thomson, 1877)**

*Material examined.* RUSSIA. *Republic of Karelia*: *Kk*, 2 km SW of Gridino, MT, 4.VII–9.VIII.2007, spruce forest, 1 female; *Ks*, Paanayarvi National Park, Leppyalya, 1.VII.2000, 1 female and 1 male. *Murmansk Province*: *Lps*, “Pasvik” Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 10.VII–3.VIII.2007, 3.VIII–10.IX.2007, 3 females. *Leningradskaya Province*: *Kol*, Nizhnesviskiy Nature Reserve, Kovkenitsy, 9.VII.1992, 1 female (all A. Humala leg.).

**Subfamily Poemeniinae**

***Neoxorides varipes* (Holmgren, 1860)**

*Material examined.* RUSSIA. *Republic of Karelia*: *Kol*, 4 km SE of Kindasovo, WT, 9.VII–5.IX.1996, 1 male (A. Humala leg.).

**Subfamily Rhyssinae**

***Megarhyssa perlata* (Christ, 1791)**

*Material examined.* RUSSIA. \**Novosibirsk Province*: 50 km E of Iskitim, Yurmanka, 54.59° N, 84.09° E, 6.VIII.2017, 1 female, 1 male (A. Humala leg.).

***Megarhyssa rixator* (Shellenberg, 1802)**

*Material examined.* RUSSIA. *Arkhangelsk Province*: Vodlozerskiy National Park, Vyzhiga River mouth, burnt spruce forest, 8–9.VII.2014, 5 females (A. Humala leg.).

*Remarks.* Previously was reported in EP (N) from Karelia (Humala, 2006; Jakovlev et al., 2014).

**Subfamily Stilbopinae**

**+*Stilbops limneriaeformis* (Schmiedeknecht, 1888)**

*Material examined.* RUSSIA. *Republic of Karelia*: *Kb*, Tolvayarvi, MT, 22–30.VI.1999, 1 female; *Kon*, Vottovaara Mt., spruce forest, MT, 17.VI–17.VII.2008, 1 female; *Kp*: 3 km SW of Prirechny, mixed forest, MT, 24.VI–13.VIII.2009, 1 female (all A. Humala leg.).

***Stilbops ruficornis* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. *Vologda Province*: Vozhegodskiy District, 1.4 km SE of Nikitinskaya Village, 15.VII.2005 & 17.VII.2005, 1 female, 1 male (N. Kolesova leg.).

**Subfamily Tersilochinae**

**\**Astrenis nigrifacies* Vikberg, 2000**

*Material examined.* RUSSIA. *Republic of Karelia*: *Kon*, Kondopoga District, Sampo Mt., pine forest, 15.VII.2002, 1 female (A. Humala leg.).

**\**Astrenis sinuata* (Roman, 1909)**

*Material examined.* RUSSIA. *Murmansk Province*: *Lps*, “Pasvik” Nature reserve, Varlam I., 1 km SE, pine forest, MT, 10.VII–3.VIII.2007 & 3.VIII–10.IX.2007, 2 females (A. Humala leg.).

**\**Phrudus compressus* Vikberg, 2000**

*Material examined.* RUSSIA. *Murmansk Province*: *Lps*, “Pasvik” Nature reserve, Varlam I., 1 km SE, pine forest, MT, 3.VIII–10.X.2007, 1 female (A. Humala leg.).

***Phrudus defectus* Stelfox, 1966**

*Material examined.* RUSSIA. *Republic of Karelia*: *Kl*, Puikkola surr., W shore of Yanis’yarvi Lake, window traps B5, J5, 17.VI–26.VII.1991, 2 females (A. Humala leg.).

***Phrudus monilicornis* Bridgman, 1886**

*Material examined.* RUSSIA. *Murmansk Province*: *Lps*, “Pasvik” Nature reserve, Varlam I., 1 km SE, pine forest, MT, 1 female (A. Humala leg.).

*Remarks.* Previously was reported in **EP (N)** from Karelia (Humala, 2006).

### Subfamily Tryphoninae

#### ***Acrotomus lucidulus* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. Republic of Karelia: Kon, 2 km N of Vendyury, Rapsudozero Lake, pine forest, YPT, 22–24.VI.2018, 1 female (A. Humala leg.).

#### ***Ctenochira arcuata* (Holmgren, 1857)**

*Material examined.* RUSSIA. Republic of Karelia: Kk, Gridino, meadow, 9.VIII.2006, 1 female (A. Humala leg.).

*Remarks.* Previously was reported in **EP (N)** from Murmansk and Arkhangelsk Provinces and Komi Republic (Kasparyan, 1973, 2013).

#### **\**Ctenochira helveticator* Aubert, 1965**

*Material examined.* RUSSIA. Republic of Karelia: Kon, “Kivach” Nature Reserve, spruce forest, MT, 19–26.VI.1990, 2 male (A. Humala leg.).

#### ***Ctenochira infesta* (Holmgren, 1857)**

*Material examined.* RUSSIA. Republic of Karelia: Kk, 2 km SW of Gridino, spruce forest, MT, 4.VII–9.VIII.2007, 1 female (A. Humala leg.).

*Remarks.* Previously was reported in **EP (N)** from Murmansk Province (Kasparyan, 1973, 2013).

#### ***Ctenochira pastoralis* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. Republic of Karelia: Kpoc, Palos’yarvi, pine forest, MT, 20–25.VI.2000, 1 female; Kol, Kaskesruche, meadow, 20.VII.2004, 1 male (all A. Humala leg.).

*Remarks.* Previously was reported in **EP (N)** from Murmansk and Vologda Provinces (Meyer, 1936; Kasparyan, 2013).

#### ***Ctenochira rufipes* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. Republic of Karelia: Kk, Loukhi District, Kartesh Cape, Biological Station, pine forest, MT, 27–30.VII.1996, 1 female (A. Humala leg.).

*Remarks.* Previously was reported in **EP (N)** from Murmansk and Arkhangelsk Provinces (Kasparyan, 1973, 2013).

#### ***Ctenochira taiga* Kasparyan, 1972**

*Material examined.* RUSSIA. Republic of Karelia: Kpoc, Murdoyoki, spruce forest, MT, 25.VI–8.VII.2009, 1 female (A. Polevoi leg.).

*Remarks.* Previously was reported in **EP (N)** from Komi Republic (Kasparyan, 1973).

#### ***Eclytus (Anoplectes) multicolor* (Kriechbaumer, 1896)**

*Material examined.* RUSSIA. Republic of Karelia: Kon, Kizhskiy Reserve, Sychevets I., 1.VIII.2018, 1 female (A. Humala leg.).

#### ***Eclytus (Eclytus) gelidus* Kasparyan, 1976**

*Material examined.* RUSSIA. Republic of Karelia: Kk, 2 km SW of Gridino, MT, 4.VII–9.VIII.2007, 1 female (A. Humala leg.).

*Remarks.* Previously was reported in **EP (N)** from Murmansk and Arkhangelsk Provinces and Komi Republic (Kasparyan, 1977; Kasparyan, Tolkanits, 1999).

#### ***Eridolius bimaculatus* (Holmgren, 1856)**

*Material examined.* RUSSIA. Republic of Karelia: Kon, “Kivach” Nature Reserve, pine forest, MT, 4–8.VIII.1991, 1 female (A. Humala leg.).

*Remarks.* Previously was reported in **EP (N)** from Murmansk and Arkhangelsk Provinces and Komi Republic (Kasparyan, 1985, 1990).

***Eridolius flavicoxator* Kasparyan, 1990**

*Material examined.* RUSSIA. Republic of Karelia: Kon, “Kivach” Nature Reserve, spruce forest, MT, 14–19.VI.1990, 1 male (A. Humala leg.).

*Remarks.* Previously was reported in EP (N) from Murmansk Province (Kasparyan, 1990).

***Eridolius gnathoxanthus* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. Republic of Karelia: Kon, Kizhskiy Reserve, Karel’skiy I., 31.VII.2018, 1 female; Kb, Tolvayarvi, MT, 25–30.VI.1999, 1 male (all A. Humala leg.).

*Remarks.* Previously was reported in EP (N) from Murmansk and Arkhangelsk Provinces (Kasparyan, 1990).

***Eridolius taigensis* Kasparyan, 1985**

*Material examined.* RUSSIA. Republic of Karelia: Kpor, Nesterov Mt., spruce forest, 23.VI.2000, 1 female (A. Humala leg.).

***Eridolius unguularis* Kasparyan, 1984**

*Material examined.* RUSSIA. Republic of Karelia: Kk, Gridino surr., Samylino Lake, 4.VIII.2007, 1 female (A. Humala leg.).

*Remarks.* Previously was reported in EP (N) from Murmansk Province (Kasparyan, 1984, 1990).

***Erromenus nitens* Strobl, 1903**

*Material examined.* RUSSIA. Republic of Karelia: Kon, “Kivach” Nature Reserve, pine forest, 25.VI.1989, 1 female (A. Humala leg.).

***Erromenus punctulatus* Holmgren, 1857**

*Material examined.* RUSSIA. Republic of Karelia: Kon, “Kivach” Nature Reserve, pine forest, 18.VI.1989, 1 female (A. Humala leg.).

*Remarks.* Previously was reported in EP (N) from Murmansk Province (Kasparyan, Tolkanits, 1999).

***Exenterus ictericus* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. Republic of Karelia: Kon, Belaya Gora, pine forest, 16.VII.2002, 2 females (A. Humala leg.).

*Remarks.* Previously was reported in EP (N) from Komi Republic (Kasparyan, 1990).

***Exyston pratorum* (Woldstedt, 1874)**

*Material examined.* RUSSIA. Republic of Karelia: Kon, Belaya Gora, pine forest, 16.VII.2002, 1 female (A. Humala leg.).

*Remarks.* Previously was reported in EP (N) from Arkhangelsk Province (Kasparyan, 1990).

***Idiogramma euryops* Foerster, 1888**

*Material examined.* RUSSIA. Murmansk Province: Lim, Laplandskiy Nature Reserve, 4 km SE of Chunozero, pine forest, MT, 23.VI–28.VII.2014, 1 female (A. Humala leg.).

*Remarks.* Previously was reported in EP (N) from Karelia (Jakovlev et al., 2014).

***Oedemopsis scabricula* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. Republic of Karelia: Kon, Medvezhegorsk, pine forest, 7.VI.2000, 1 female; Kk, 2 km SW of Gridino, MT, 4.VII–9.VIII.2007, 1 female; Kpor, Myagostrov I., supralittoral, 14.VIII.2002, 1 female; Kk, Cheremshikha I., mixed forest, 7.VIII.2006, 1 female; Kl, Iso-Iiyarvi Lake, pine forest, 5.VII.2005, 1 male. Murmansk Province: Lps, “Pasvik” Nature Reserve, Menikkayoki, birch forest, MT, 16.VII–14.VIII.2007, 1 female (all A. Humala leg.).

*Remarks.* Previously was reported in EP (N) from Karelia (Woldstedt, 1874; Kerrich, 1939; Kasparyan, Tolkanits, 1999; Humala, Polevoi, 2008).

***Phytodietus albipes* (Holmgren, 1856)**

*Material examined.* RUSSIA. Republic of Karelia: Kl, Lahdenpohja District, Lumivaara, 1.VIII.2006, 1 female (A. Reschikov leg.).

***Thymaris niger* (Tashenberg, 1865)**

*Material examined.* RUSSIA. Republic of Karelia: Ks, Paanayarvi National Park, Leppyala, spruce forest, 1.VII.2000, 1 female (A. Humala leg.).

***Tryphon relator* (Thunberg, 1822)**

*Material examined.* RUSSIA. Republic of Karelia: Kol, Kaskesrucheï, meadow, 20.VII.2004, 1 female (A. Humala leg.).

**Subfamily Xoridinae**

***Ischnoceros caligatus* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. Republic of Karelia: Kb, Tolvayarvi, MT, 2–11.VI.1999, 1 male; Kpor, Kondostrov I., 20.VIII.2002, 1 female (all A. Humala leg.).

*Remarks.* Previously was reported in EP (N) from Vologda Province (Meyer, 1934).

***Ischnoceros rusticus* (Geoffroy, 1785)**

*Material examined.* RUSSIA. Republic of Karelia: Kol, 4 km SE of Kindasovo, WT, 9.VII–5.IX.1996, 1 male; Kon, Kizhskiy Reserve, B. Kliment'skiy I., WT, 18.VI–27.VII.1994, 1 female; Kon, Kizhskiy Reserve, Pod'elniki, 22.VII.2011, 1 female; Kon, "Kivach" Nature Reserve, 27.VI.2001, 1 female & 31.VII.2003, 1 female; Kpor, Ladozero surr., MT, 27.VI–13.VIII.2010, 1 female. Arkhangelsk Province: Vodlozerskiy National Park, Vyzhiga River mouth, MT, 8.VII–2.VIII.2014, 1 male (all A. Humala leg.).

***Odontocolon dentipes* (Gmelin, 1790)**

*Material examined.* RUSSIA. Murmansk Province: Lps, "Pasvik" Nature Reserve, Varlam I., 1 km SE, MT, 10.VII–3.VIII.2007, 5 males; Lim, Laplandskiy Nature reserve, 4 km SE of Chunozero, MT, 23.VI–28.VII.2014, 2 females. Arkhangelsk Province: Vodlozerskiy National Park, Vyzhiga River mouth, spruce forest, MT, 8.VII–2.VIII.2014, 1 female (all A. Humala leg.).

*Remarks.* Previously was reported in EP (N) from Karelia (Kerrich, 1939; Humala, 1991, 1997; Humala, Polevoi, 2009; Jakovlev et al., 2014).

***Odontocolon punctulatum* (Thomson, 1877)**

*Material examined.* RUSSIA. Republic of Karelia: Kon, "Kivach" Nature Reserve, MT, 25.VI–2.VII.1991, 1 male, MT, 5–8.VII.1991, 1 male; WT, 19.VII–10.IX.1996, 1 male (A. Humala leg.); Kpor, Murdoyoki, spruce forest, MT, 25.VI–8.VII.2009, 1 male (A. Polevoi leg.); Kpor, Ladozero surr., MT, 27.VI–13.VIII.2010, 1 female (A. Humala leg.). Murmansk Province: Lps, "Pasvik" Nature Reserve, Varlam I., 1 km SE, pine forest, MT, 10.VII–3.VIII.2007, 1 male; 6.VI–10.VII.2007, 1 female, 1 male (A. Humala leg.); Lim, Laplandskiy Nature reserve, 2 km N of Chunozero, spruce forest, MT, 24.VII–1.VIII.2013, 1 female; 23.VI–28.VII.2014, 1 female (A. Humala leg.).

***Odontocolon spinipes* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. Arkhangelsk Province: Vodlozerskiy National Park, Vyzhiga River mouth, YPT, 8–10.VII.2014, 2 females (A. Humala leg.).

*Remarks.* Previously reported in EP (N) from Karelia (Woldstedt, 1874; Humala, 1997; Humala, Polevoi, 2009).

**+*Xorides alpestris* (Habermehl, 1903)**

*Material examined.* RUSSIA. Republic of Karelia: Kol, 4 km SE of Kindasovo, WT, 9.VII–5.IX.1996, 1 female (A. Humala leg.); Kol, Petrozavodsk, Lososinnoe, 11.VII.2012, 1 female (all A. Humala leg.).

***Xorides ater* (Gravenhorst, 1829)**

*Material examined.* RUSSIA. Republic of Karelia: Kon, Pin'guba, 20.VIII.1995, 1 male (A. Polevoi leg.); Kton, Vodlozerskiy National Park, 5 km N of Kalakunda, Ileksa River, 7.VIII.2013, 1 female (A. Humala leg.). Arkhangelsk Province: Vodlozerskiy National Park, Vyzhiga River mouth, 31.VII.2014, 1 female (A. Humala leg.).

*Remarks.* Previously reported in EP (N) from Karelia (Humala, Polevoi, 2015).

**+*Xorides brachylabis* (Kriechbaumer, 1889)**

*Material examined.* RUSSIA. Republic of Karelia: Ks, Paanayarvi National Park, Nuorunen Mt., 12.VII.1990, 1 female (E. Yakovlev leg.); Kk, Loukhi District, Kartesh, Biological station surr., WT, 22.VII–1.VIII.1996, 1 female (A. Humala leg.);

*Kon*, “Kivach” Nature Reserve, 5.VII.2001, 1 female, WT, 25.VI–22.VII.1997, 1 female (A. Humala leg.); *Kton*, Pudozh District, Besov Nos, Kladovets Cape, 6.VII.2018, 1 male (A. Humala leg.); *Kol*, Olonets District, Mayachino, 25.VI.2012, 1 female (A. Humala leg.); *Kol*, Petrozavodsk, Sainavolok, 5.VI.1961, 1 female (B. Yakovlev leg.). *Arkhangelsk Province*: Vodlozerskiy National Park, Vyzhiga River mouth, 30.VII.2014, 1 female (A. Humala leg.). *Leningradskaya Province*: Nizhnesvirskiy Nature Reserve, 10.VII.1992, 1 female (A. Humala leg.).

***Xorides depressus* (Holmgren, 1860)**

*Material examined*. RUSSIA. *Republic of Karelia*: *Kon*, Pin’guba, 8.VI.1997, 1 male (A. Polevoi leg.).

***Xorides indicatorius* (Latreille, 1806)**

*Material examined*. RUSSIA. *Republic of Karelia*: *Kon*, Malaya Gomsel’ga, 5.VII.2012, 1 female (A. Humala).

***Xorides irrigator* (Fabricius, 1793)**

*Material examined*. RUSSIA. *Republic of Karelia*: *Kton*, Vodlozerskiy National Park, 5 km NW of Okhtoma, WT, 9.VI–10.VII.2002, 1 male (A. Humala leg.); Vodlozerskiy National Park, 5 km N of Kalakunda, Ileksa River, 7.VIII.2013, 1 female (A. Humala leg.); *Kol*, Petrozavodsk, Sainavolok, 7.V.1951, 1 female, 27.VII.1952, 1 female (B. Yakovlev leg.). *Arkhangelsk Province*: Vodlozerskiy National Park, Vyzhiga River mouth, 31.VII.2014, 1 female, MT, 8.VII–2.VIII.2014, 1 male (A. Humala leg.).

*Remarks*. Previously reported in EP (N) from Karelia (Humala, Polevoi, 2015).

***Xorides praecatorius* (Fabricius, 1793)**

*Material examined*. RUSSIA. *Vologda Province*: Cherepovets District, Nova, 15.VII.2014, 1 female (N. Kolesova leg.).

**+ *Xorides sepulchralis* (Holmgren, 1860)**

*Material examined*. RUSSIA. *Republic of Karelia*: *Kol*, Petrozavodsk, Sainavolok, 7.VI.1950, 1 female (B. Yakovlev leg.).

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## References

- Belokobylskij S.A., Lelej A.S. (Eds). 2017. *Annotated catalogue of the Hymenoptera of Russia. Volume I. Symphyta and Apocrita: Aculeata*. Proceedings of the Zoological Institute Russian Academy of Sciences. *Supplement* 6. 475 pp.
- Heikinheimo O., Raatikainen M. 1971. The recording of locations of biological finds in Finland. *Annales Entomologici Fennici*, **37**(1a): 1–27.
- Humala A.E. 1991. Species composition, abundance and some phenological peculiarities of hymenopterous insects of “Kivach” Nature Reserve. *Entomological research in “Kivach” Nature Reserve*. Petrozavodsk: 31–44. (In Russian).
- Humala A.E. 1995. Flying dynamics of pine sawfly and complex of its parasites during the outbreak in “Kivach” Nature Reserve. *Biosystems: state control and regulation of functions. Population monitoring*. Petrozavodsk, **2**: 76–86. (In Russian).
- Humala A.E. 1997. On the fauna of Hymenoptera Apocrita of “Kivach” Nature Reserve. *Flora and fauna of protected territories of Karelian Republic*. Petrozavodsk: 50–72. (In Russian).
- Humala A.E. 2004. Studies of the insect fauna of insular ecosystems in the Onega Bay, White Sea. *Natural, historical and cultural heritage of Northern Fennoscandia*. Petrozavodsk: 83–89. (In Russian).
- Humala A.E. 2006. On the insect fauna of “Kivach” Nature Reserve. *The nature of “Kivach” Nature Reserve. Transactions of Karelian Research Centre RAS*, **10**: 153–159. (In Russian).
- Humala A.E. 2008. New species of Orthocentrinae (Hymenoptera: Ichneumonidae) from Finland. *Entomologica Fennica*, **19**(1): 94–104.
- Humala A.E. 2019. New records of Cylloceriinae, Microleptinae, Orthocentrinae and Oxytorinae species (Hymenoptera: Ichneumonidae) in the fauna of Russia. *Proceedings of the Russian Entomological Society*, **90**: 108–117.

- Humala A.E., Polevoi A.V. 1999. On the insect fauna of Karelian shore and islands of the White Sea. *Biodiversity inventories and studies in the areas of Karelian White Sea shore*. Petrozavodsk: 106–113. (In Russian).
- Humala A.E., Polevoi A.V. 2006. Composition and structure of insect communities in the forests formed on various soil-forming bedding rocks. *Soil diversity and biodiversity in the middle-taiga ecosystems*. Moscow, 67–92. (In Russian).
- Humala A., Polevoi A. 2008. 3.7. Insects. *Rupestrian landscapes of the White Sea Karelian Coast: natural characteristics, economic utilization, conservation*. Petrozavodsk: 125–136.
- Humala A.E., Polevoi A.V. 2009. On the insects fauna of south-east Karelia. *Biogeography of Karelia. Transactions of Karelian Research Centre RAS*, 4: 53–75. (In Russian).
- Humala A.E., Polevoi A.V. 2011. Records of new and remarkable insect species (Insecta) in Northern Ladoga area. *Transactions of Karelian Research Centre RAS, Series of Biogeography*, 12: 142–144.
- Humala A.E., Polevoi A.V. 2015. Records of rare and noteworthy insect species (Insecta) in the Republic of Karelia. *Transactions of Karelian Research Centre RAS*, 6: 19–46. (In Russian).
- Jakovlev J., Polevoi A., Humala A. 2014. 3.6. Insect fauna of Zaonezhye Peninsula and adjacent islands. *Biogeography, landscape, ecosystems and species of Zaonezhye Peninsula, in Onega Lake, Russian Karelia. Reports of the Finnish Environment Institute*, 40: 257–338.
- Kasparyan D.R. 1973. *Hymenoptera. Ichneumonidae. Subfamily Tryphoninae. Tribe Tryphonini*. Fauna of the USSR. Vol. 3, N 1. Leningrad: Nauka. 414 pp. (In Russian).
- Kasparyan D.R. 1974. Review of the Palearctic species of the tribe Pimplini (Hymenoptera, Ichneumonidae). The genus *Pimpla* Fabricius. *Entomological Review*, 53: 102–117. [Translated from *Entomologicheskoe Obozrenie*, 53(2): 382–403].
- Kasparyan D.R. 1976. Review of the ichneumonids of the tribe Polysphinctini and Poemeniini (Hymenoptera, Ichneumonidae) of the Far East. *Proceedings of the Zoological Institute*, 67: 68–89. (In Russian).
- Kasparyan D.R. 1977. A revision of the genus *Eclytus* Holmgren (Hymenoptera, Ichneumonidae). *Entomological Review*, 56: 116–129. [Translated from *Entomologicheskoe Obozrenie*, 56(1): 156–170].
- Kasparyan D.R. 1984. New ichneumonids of the genus *Eridolius* Förster (Hymenoptera, Ichneumonidae) from the USSR and the Mongolian People's Republic and taxonomic notes on the genus *Smicroplectrus* Thomson. *Nasekomye Mongolii*, 9: 423–433. (In Russian).
- Kasparyan D.R. 1985. Revision of the genus *Eridolius* Förster (Hymenoptera, Ichneumonidae). *Entomological Review*, 64: 119–127. [Translated from *Entomologicheskoe Obozrenie*, 64(3): 601–609].
- Kasparyan D.R. 1990. *Ichneumonidae. Subfamily Tryphoninae: Tribe Exenterini. Subfamily Adelognathinae*. Fauna of USSR. Vol. 3, N 2. Leningrad: Nauka. 342 pp. (In Russian).
- Kasparyan D.R. 2004. A review of Palearctic species of the tribe Ctenopelmatini (Hymenoptera, Ichneumonidae). The genera *Ctenopelma* Holmgren and *Homaspis* Foerster *Entomological Review*, 84(3): 332–357. [Translated from *Entomologicheskoe Obozrenie*, 83(2): 437–467].
- Kasparyan D.R. 2011. Review of the Palearctic species of the genus *Hadrodactylus* Förster (Hymenoptera, Ichneumonidae, Ctenopelmatinae) with description of 5 new species. *Entomological Review*, 91(7): 866–888. [Translated from *Entomologicheskoe Obozrenie*, 90(2): 388–415].
- Kasparyan D.R. 2013. Description of new species of the genus *Ctenochira* Förster, 1855 (Hymenoptera, Ichneumonidae: Tryphoninae) from Eurasian subarctic subzone and Siberia, with remarks on the ichneumonid fauna of the Chukchi Peninsula. *Entomological Review*, 93(9): 1155–1178. [Translated from *Entomologicheskoe Obozrenie*, 92(3): 574–602].
- Kasparyan D.R., Khalaim A.I. 2007. Subam. Agriotypinae. In: Lelej A.S. (Ed.). *Key to insects of the Russian Far East. Hymenoptera. Vol. IV, N. 5*. Vladivostok: Dal'nauka: 421–423. (In Russian).
- Kasparyan D.R., Tolkanits, V.I. 1999. *Ichneumonidae. Subfamily Tryphoninae: Tribes Sphinctini, Phytodietini, Oedemopsini, Tryphoninae (addition), Idiogrammatini. Subfamilies Eucerotinae, Adelognathinae (Supplement), Townesioninae*. Fauna of Russia and Adjacent Countries. Vol. 3, N 3. St. Petersburg: Nauka. 404 pp. (In Russian).
- Kerrich G.J. 1939. Contribution to our knowledge of the hymenopterous fauna of South-East Finland. *Notulae Entomologica*, 19: 99–109.
- Kravchenko A.V., Kuznetsov O.L. 2001. Peculiarities of biogeographical provinces of the Republic of Karelia on the basis of analysis of vascular plants flora. *Biogeography of Karelia. Transactions of Karelian Research Centre RAS*, 2: 59–64 (In Russian).
- Krutov V.I., Shubin V.I., Predtechenskaya O.O., Ruokolainen A.V., Kotkova V.M., Polevoi A.V., Humala A.E., Yakovlev E.B. 2014. *Fungi and insects – consorts of forest forming tree species in Karelia*. Petrozavodsk: Karelian Research Centre RAS. 216 pp. (In Russian).
- Manukyan A.R. 1988. Review of the genera *Sussaba* Cameron and *Xestopelta* Dasch (Hymenoptera, Ichneumonidae) of the USSR fauna. *Proceedings of the Zoological Institute*, 175: 44–54. (In Russian).

- Meyer N.F. 1934. Parasitic Hymenoptera of the family Ichneumonidae in the USSR and adjacent countries. Part 3. Pimplinae. *Key to the insects of the fauna of the USSR*, **15**(3): 1–271. (In Russian).
- Meyer N.F. 1936. Parasitic Hymenoptera of the family Ichneumonidae in the USSR and adjacent countries. Part 5. Tryphoninae. *Key to the insects of the fauna of the USSR*, **21**(5): 1–340. (In Russian).
- Polevoi A.V., Humala A.E. 2005. Insects. *Natural Complexes of the Vepsian Volost: Present-Day Status, Conservation and Management*. Petrozavodsk: 172–186. (In Russian).
- Polevoi A.V., Humala A.E. 2009. 4.7. Insects. *Nature of Mount Vottovaara: characteristics, condition, conservation*. Petrozavodsk: 106–118. (In Russian).
- Polevoi A.V., Humala A.E. (2008) 2011. Insects. *Chronicle of the nature of the reserve "Pasvik"*, **15**: 153–156. (In Russian).
- Polevoi A.V., Humala A.E. 2013. 4.8 Insects. *Selka landscapes of the Zaonezhskiy Peninsula: natural characteristics, land use, conservation*. Petrozavodsk: 134–138. (In Russian).
- Polevoi A.V., Humala A.E., Yakovlev E.B. 2006. Composition and structure of Diptera and Hymenoptera communities in forest ecosystems. *Soil diversity and biodiversity in the middle-taiga ecosystems*. Moscow, 246–269. (In Russian).
- Polevoi A.V., Nikitsky B.N., Mandelshtam M.Yu., Humala A.E. 2017. On the insect fauna of dead wood at the early stage of decay. *Izvestiya Sankt-Peterburgskoy Lesotekhnicheskoy Akademii [News of the St Petersburg Forestry Academy]*, **220**: 33–45. (In Russian).
- Riedel M., Humala A.E. 2009. Faunistic notes on the Ichneumoninae (Hymenoptera, Ichneumonidae) (excl. Phaeogenini) from the European part of Russia. *Russian Entomological Journal*, **18**(3): 207–215.
- Riedel M., Humala A.E. 2016. Faunistic notes on the Mesochorinae (Hymenoptera, Ichneumonidae) of North-western Russia, with descriptions of the males of *Astiphromma flavoventrale* Riedel and *A. flagellator* Riedel. *Russian Entomological Journal*, **25**(1): 65–69.
- Riedel M., Humala A.E. 2017. Faunistic notes on the Mesochorinae (Hymenoptera, Ichneumonidae) from Russian Fennoscandia, with description of a new *Mesochorus* species from Karelia. *Russian Entomological Journal*, **26**(4): 333–337.
- Riedel M., Humala A.E. 2018. On the fauna of Ichneumoninae (Hymenoptera, Ichneumonidae) of Russian Fennoscandia. *Transactions of Karelian Research Centre RAS*, **8**: 112–125. <https://doi.org/10.17076/bg688>
- Tolkanitz V.I. 1987. *Parasitic Hymenoptera. Ichneumonidae – Metopiinae*. Fauna of Ukraine. Vol. 11. N 2. Kiev: Naukova Dumka. 212 pp. (In Russian).
- Várkonyi G., Koponen M., Paappanen J., Österblad I., Fritzén N., Jussila R., Paukkunen J., Vikberg V. 2019. Parasitoid wasps – Parasitica. *The 2019 Red List of Finnish Species*. Helsinki: 439–450.
- Woldstedt F.W. 1874. Materialier till en Ichneumonologia Fennica. *Bidrag till kännedom af Finlands natur och folk*. Helsingfors, **21**: 3–92.
- Yakovlev E.B., Humala A.E., Polevoi A.V. 2001. Insects. *Biodiversity inventories and studies in central Karelia*. Petrozavodsk: 149–158. (In Russian).
- Yakovlev E.B., Polevoi A.V., Humala A.E. 1994. Insects reared from soil in *Vaccinium* pine forest. *Structural and functional organization of forest soils in mid-taiga subzone of Russian Karelia*. Petrozavodsk: 128–145. (In Russian).
- Yakovlev E.B., Polevoi A.V., Humala A.E. 1998. Materials on the insect fauna in the planned Kalevala National Park. *Biodiversity inventories and studies in the areas of Republic of Karelia bordering on Finland*. Petrozavodsk: 132–142. (In Russian).
- Yakovlev E.B., Scherbakov A.N., Polevoi A.V., Humala A.E. 2000. Insect fauna of the Paanajärvi National Park and proposed Kalevala National Park with particular emphasis on saproxylic Coleoptera, Diptera and Hymenoptera. *Biodiversity of old-growth forests and its conservation in the northwestern Russia*. Oulu: 103–157.
- Yu D.S.K., van Achterberg C., Horstmann K. 2016. *Taxapad 2016, Ichneumonoidea 2015. Database on flash-drive*. Nepean, Ontario, Canada.