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Annotated supplements to catalogues of the family Scathophagidae (Diptera) in the world, with new taxonomic data, notes on some species and new list of species

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A b s t r a c t : The last catalogues of the species of the family Scathophagidae for the individual zoogeographical regions were published in the following years: for the Afrotropical Region in 1976; for the Nearctic Region in 1965; for the Neotropical Region in 1984 and, partly, in 2010; for the Oriental Region in 1977 and for Palaearctic Region in 2008. The changes or additions published since the last catalogue form four basic groups: (I) new genera described (5 in Nearctic Region, 1 in Oriental Region, 8 in Palaearctic Region), (II) new species described (4 in Nearctic Region, 4 in Oriental Region, and 51 in Palaearctic Region), (III) new established synonyms (2 in Afrotropical Region, 1 in Nearctic Region, 4 in Neotropical Region, 4 in Oriental Region, 22 in Palaearctic Region), and (IV) new proposed combinations (1 in Afrotropical Region, 6 in Nearctic Region, 3 in Neotropical Region, 14 in Palaearctic Region).

K e y w o r d s : Diptera, Scathophagidae, taxonomy, zoogeographical regions, distribution, catalogue.

Introduction

The knowledge on the species of the family Scathophagidae is summarised in the catalogues dealing with the fauna of the individual zoogeographical regions. The following catalogues were published in the last fifty years: VOCKEROTH (1980) for the Afrotropical Region, VOCKEROTH (1965) for the Nearctic Region, ALBUQUERQUE (1984) and VOCKEROTH (2010) for the Neotropical Region, VOCKEROTH (1977) for the Oriental Region, and GORODKOV (1986) and ŠIFNER (2008) for the Palaearctic Region. The publication of Volume 4 of the new Manual of Afrotropical Diptera, containing also the Chapter dedicated to the Scathophagidae of this region should be available in 2022 (https://www.nhm.ac.uk/our-science/our-work/biodiversity/manual-afrotropical-diptera.html). The number of species recorded in the particular regions or subregions, including the individual countries, varies greatly and depends on the level of the performed faunistic and taxonomic research. The fauna of some regions or subregions are nearly to completely unknown (e. g. the Oriental Region and the Mediterranean Subregion of the Palaearctic Region).

This paper summarises the taxonomic changes made since the publication of the particular regional catalogues. Among the most important changes we must stress the changes based on revision of the oldest literature and verified by examination of the type specimens from Meigen's collection in Musée National d'Histoire Naturelle, Paris, and in Becker's collection in Museum für Naturkunde, Berlin and in Zoological Institute, St. Petersburg

(see OZEROV, 2014a,b and OZEROV & KRIVOSHEINA 2011c). Fundamental knowledge on the phylogenetic position of the family Scathophagidae among Muscoidea, on the phylogenetic relationships within Scathophagidae, and within *Scathophaga* in particular, as well as on the taxonomic status of some species, have been investigated by using various genetic markers (BERNASCONI et al. 1999, BERNASCONI 2000, BERNASCONI et al. 2000a,b, 2001, 2010; KUTTY et al. 2007). Therefore, the relationships in this family are now generally well understood (BERNASCONI et al. 2010).

Material and methods

In this paper, two subfamilies are recognised: the Delininae and the Scathophaginae (cf. COLLIN 1958). For the Palaearctic Region, we use the system of eight tribes proposed by ŠIFNER (2003, 2008). The text is arranged according to zoogeographical regions, and within each region the tribes, genera and species are arranged alphabetically.

All localities from the Czech Republic are accompanied with grid mapping codes according to PRUNER & MÍKA (1992). For the species of the Palaearctic Region, only the system proposed by Šifner (2003, 2008) is applied.

The following abbreviations of collections are used in the text:

CNC.....Canadian National Collection, Ottawa, Canada;

CAS .....Californian Academy of Sciences, San Franciscco, USA;

FSCP.....František Šifner privat collection, Praha (Chyňava), Czech Republic;

ISEA .....Institute of Systematics and Ecology of Animals, Novosibirsk, Russia;

MHNG.....Musée d'Histoire Naturelle, Genève, Switzerland;

MNHN.....Musée National d'Histoire Naturelle, Paris, France;

MZLU.....Museum and Departement of Zoology, Lund University, Lund, Sweden;

NHMW .....Naturhistorisches Museum, Wien, Austria;

NMRB .....National Museum, Rio de Janerrio, Brasil;

OU .....Obihiro University of Agriculture and Veterinary Medicine, Obihiro, Hokkaido, Japan;

SDEI .....Senckenberg Deutschen Entomologisches Institut, Münchenberg, Germany;

SZMN.....Siberian Zoological Museum, Novosibirsk, Russia;

TAUI .....Tel Aviv University, Tel Aviv, Israel;

ZISP.....Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia;

ZMUM.....Zoological Institute Moscow State University, Moscow, Russia;

ZMHU .....Museum für Naturkunde der Humboldt University, Berlin, Germany.

Taxonomy

Afrotropical Region

The Afrotropical fauna of the family Scathophagidae is very limited and it is unambiguously influenced by the level of faunistic research. Only five species are known from this region (VOCKEROTH 1980), including *Scathophaga soror* (WIEDEMAN, 1800). The latter species was commonly but erroneously considered as a synonym of *Scathophaga stercoraria* (LINNAEUS, 1758). The details on *Scathophaga soror* are mentioned by OZEROV (2009a, 2017a), BERNASCONI et al. 2010, and by VOCKEROTH (1976, 1980).

Scathophaga alata (BECKER, 1894)

Scopeuma alata (BECKER, 1894): 127

L e c t o t y p e : male, Mt. Kenya vers't Ouest, 2800-3200 m, Janv. 1912 (MNHN), designated by OZEROV (2009a), for detail OZEROV (2009a: 300-301 and 2017a: 187-190).

D i s t r i b u t i o n : Kenya (BECKER 1914, OZEROV 2009a).

Scathophaga foetulecta (SÉGUY, 1966), as *Scatophaga*

L e c t o t y p e : male, Cameroun, Mt. Babouto (MNHN), designated by OZEROV (2009a); for detail see OZEROV (2009a: 304 and 2017a: 193).

D i s t r i b u t i o n : Cameroon (SÉGUY 1966).

Scathophaga longiaculeata OZEROV, 2009a

H o l o t y p e : male, Ethiopia, Shawa, Menageska forest, 3050 m a.s.l., 9°02′N 38°35E, 19.IV.2005, A. Friedburg leg. (TAUI).

D i s t r i b u t i o n : Ethiopia, Uganda (OZEROV 2009a).

Scathophaga socia (BECKER, 1894)

Scopeuma socia (BECKER, 1894: 127)

L e c t o t y p e : male, Tanzania, Bismarck-Hügel, 2700-2800 m, IV.1912 (MNHN), designated by OZEROV (2009a); for detail OZEROV (2009a: 303 and 2017a: 191).

D i s t r i b u t i o n : Kenya, Tanzania (OZEROV 2009a).

Scathophaga soror (WIEDEMAN, 1818), as *Scatophaga*

This species was restituted as valid species by WERNER et al. 2006: 147.
Scatophaga capensis ROBINEAU-DESVOIDY, 1830: 625; OZEROV (2017: 192)
Scatophaga hottentota MACQUART, 1843: 342; OZEROV (2017: 192)

L e c t o t y p e : male, in Macquart collection under No. 1000 and locality "Cap" (MNHN), designated by OZEROV (2017a); for detail OZEROV (2017a: 192).
= *Scatophaga helenae* (THOMSON, 1869); OZEROV (2012: 14-16).

Nearctic Region

The last catalogue of the Nearctic Region was compiled by VOCKEROTH (1965); the author listed 145 species and one subspecies. VOCKEROTH (1987) described six monotypic genera which were not published with the term "gen.nov." or "nov.sp." as required Article 13 of the International Code of Zoological Nomenclature. These names, *Brokssiella*, *Dromogaster*, *Huckettia*, *Neorthocheta*, *Peratomyia* and *Synchysa*, were validated by VOCKEROTH (1995). ŠIFNER (1977) described a new species, *Leptopa hendeli*, from the territory of United States; this species and the new genus record for the Nearctic Region were omitted by VOCKEROTH (1987).

Brockssiella VOCKEROTH, 1995

T y p e s p e c i e s : *Microprosopa varicornis* CURRAN, 1927: 257
Brocksiella VOCKEROTH, 1987, nomen nudum

Brocksiella varicornis (CURRAN, 1927)

new comb. by VOCKEROTH (1995: 235)

D i s t r i b u t i o n : Canada (VOCKEROTH 1955).

Coniosternum lapponicum RINGDAHL, 1920

Scathophaga minuta (MALLOCH, 1935); ŠIFNER (2019: 41)

Coniosternum masneri ŠIFNER, 2017

H o l o t y p e : male, Canada, Nunavut, Chesterfield, N.W.T., 28.VII.1950, J. G. Chillcot leg. (FSPC). Ditribution: Canada (Šifner: 2017).

Coniosternum molle (BECKER, 1894)

C o m m e n t : The transfer of *Scathophaga mollis* to the *Coniosternum* is based on the shape of the male terminalia which are typical for the genus *Coniosternum* (ŠIFNER 2019: 42).

Coniosternum nigripalpis (BECKER, 1907)

C o m m e n t : The transfer of *Scathophaga nigripalpis* to the *Coniosternum* is based on the shape of the male terminalia which are typical for the genus *Coniosternum* (ŠIFNER 2019: 43).

Dromogaster VOCKEROTH, 1995

T y p e s p e c i e s : *Dromogaster incompta* VOCKEROTH, 1995: 732;
Dromogaster VOCKEROTH, 1987: 1094, nomen nudum

Dromogaster incompta VOCKEROTH, 1995

H o l o t y p e : male, Canada: Billy, Alta. [= Alberta], 1.VI.1924, D. Bryant leg. (CAS).

D i s t r i b u t i o n : Canada: Alberta, Saskatschevan (VOCKEROTH 1995).

Huckettia VOCKEROTH, 1995

Huckettia VOCKEROTH, 1987: 1096, nomen nudum

Huckettia nearctica VOCKEROTH, 1995

T y p e s p e c i e s : *Huckettia nearctica* VOCKEROTH, 1995: 733

H o l o t y p e : male, Canada: Beaver Hill Lake, N.W.T., 66°44N 104°20W, 29.VI.1966, G. E. Shewell leg. (CNC)

D i s t r i b u t i o n : USA - California, Los Angeles (VOCKEROTH 1995)

Leptopa hendeli ŠIFNER, 1977

H o l o t y p e : male, USA: Colorado, without data, with Hendel's handwritten label "*Leptopa* sp.n.", det. Hendel (NHMW).

D i s t r i b u t i o n : USA: Colorado (ŠIFNER 1977).

Neorthochaeta VOCKEROTH, 1995

T y p e s p e c i e s : *Ortachaeta dissimilis* MALLOCH, 1924: 174

Neortachaeta VOCKEROTH, 1987: 1096, nomen nudum
Neorthachaeta dissimilis (MALLOCH, 1924): 194, VOCKEROTH (1995: 733).
D i s t r i b u t i o n : Canada, USA (VOCKERTH 1995).

Peratomyia VOCKEROTH, 1995

T y p e s p e c i e s : *Hexamitocera vittata* COQUILLETT, 1898: 165

Peratomyia VOCKEROTH, 1987: 1096, nomen nudum
Peratomyia vittata (COQUILLETT, 1898): 165, VOCKEROTH (1995: 733).

D i s t r i b u t i o n : Canada, USA (VOCKEROTTH 1995).

Scathophaga islandica (BECKER, 1894)

status restituted by ŠIFNER (2018: 36)

C o m m e n t : The validity of this species was doubted by COLLIN (1931) and VOCKEROTH (1965). JAMES (1950) first synonymized this species with *Scathophaga litorea*. Restored as valid species by ŠIFNER (2018: 36).

Synchysa VOCKEROTH, 1995

T y p e s p e c i e s : *Coenosia tricincta* LOEW, 1869: 177
Synchysa VOCKEROTH, 1987: 1096, nomen nudum

Synchysa tricincta (LOEW, 1869)

new comb. by VOCKEROTH (1995: 734)

D i s t r i b u t i o n : Canada (VOCKEROTH 1995).

Neotropical Region

The first catalogue was compiled by VAN DER WULP (1897), the last catalogues by

ALBUQUERQUE (1984) and VOCKEROTH (2010), with only few notes published subsequently. Only three genera and eight species are known from this region: *Scatogera* ALBUQUERQUE, 1984 (1 species), *Scatomyza* FALLÉN 1810 (1 species) and *Scathophaga* MEIGEN, 1803 (6 species).

***Scatomyza* FALLÉN, 1810**

C o m m e n t : *Scatomyza* was restored as valid genus by OZEROV & KRIVOSHEINA (2011a) based on the presence of a postmetacoxal bridge. This character was first introduced by VOCKEROTH (2010) but without any taxonomic consequences.

***Scatomyza reses* (GIGLIO-TOS, 1893)**

Scatophaga reses (GIGLIO -TOS, 1893): 3

D i s t r i b u t i o n : Belize (former British Honduras) (GIGLIO-TOS 1893), Gautemala, Mexico (VOCKEROTH 1965), Bolivia (ALBUQUERQUE 1984).

***Scatogera primogenita* ALBUQUERQUE, 1984**

D i s t r i b u t i o n : Ecuador (ALBUQUERQUE 1984) and Colombia (WOLFF et al. 2016).

***Scathophaga furcata* (SAY, 1823)**

Pyropa furcata (SAY, 1823): 15

D i s t r i b u t i o n : Mexico (ALBUQUERQUE 1984, VOCKEROTH 1965), Guatemala, Costa Rica, Peru (VOCKEROTH 2010).

***Scathophaga chilensis* (ALBUQUERQUE, 1953)**, *as Scathophaga*

D i s t r i b u t i o n : Chile (ALBUQUERQUE 1953).

***Scathophaga peruensis* (LOPEZ & COURI, 1986), new combination**

Scopeuma peruensis (LOPEZ & COURI, 1986): 314, new comb. by ŠIFNER in this paper.

H o l o t y p e : male, Peru, Mina Manuclita, Boja, without further data (NMRB).

C o m m e n t : This species was omitted in previous catalogues (ALBUQUERQUE 1984, VOCKEOTH 2010). The transfer in the genus is realised by Šifner in this paper.

***Scathophaga stercoraria* (LINNAEUS, 1758)**

Musca stercoraria (LINNAEUS, 1758): 591

D i s t r i b u t i o n : Mexico, Haiti (ALBUQUERQUE 1984), Guatemala, Costa Rica (VOCKEROTH 2010). Portorico, Uruguay (CUNY 1983).

***Scathophaga tropicalis* (MALLOCH, 1931)**, as *Scatophaga*

D i s t r i b u t i o n : Chile, Peru (MALLOCH 1931, CUNY 1983), Argentina, Bolivia (SZILADY 1926).

C o m m e n t : *Scathophaga tropicalis* (MALLOCH, 1931) is *nomen novum* for

Scatophaga lanata SZILADY, 1926: 595. This species name has been previously used in the genus by LUNDBECK for *Scatophaga lanata* LUNDBECK, 1901: 294 (type locality: Greenland), it was synonymized by VOCKEROTH (1965: 834) (see also ŠIFNER 2008a: 160) with *Scathophaga apicalis* (CURTIS, 1833). The species *Scatophaga lanata* sensu SZILADY (1926) was originally described from Bolivia: "Typen aus Cororica und "Cillumbicara… ein Männchen aus Rimconada, in 4.000 m Höhe "; 7-10 mm. Type material was deposited in Naturhistorisches Museum in Budapest (Hungary) and was destroyed in 1956. MALLOCH (1931: 443) noted: "…I have seen it from Peru in the collection of the United States National Musem. MALLOCH (1935) noted: "*Scatophaga tropicalis* is very similar to *stercoraria*. The only South America species of this genus."

Scatomyza reses (GIGLIO-TOS, 1893)

Cordylura brevifrons VAN DER WULP, 1897; CUNY (1983: 12)
Cordylura vulpina VAN DER WULP, 1897; CUNY (1983: 12)
Scatophaga suilla var. *americana* MALLOCH, 1935; CUNY (1983: 13)
Scathophaga furcata (SAY, 1823)
Scatophaga vicina VAN DER WULP, 1897; CUNY (1983: 13)

Oriental Region

The Oriental Region reaches northward to 23° to 25° N with a transition area in the southwestern lowland of China, southward to Malaysia and eastward approximately to Wallace line. The first data related to the family Scathophagidae were published in the WALKER's (1860) catalogue and subsequently by VAN DER WULP (1896); both the authors cited only one species, *Cordylura bisignata* WALKER, 1860, from Sulawesi. VOCKEROTH (1977) mentioned four described and seven unnamed species in six genera.

Cordilura bisignata (WALKER, 1860)

Cordylura bisgnata (WALKER, 1860): 142

D i s t r i b u t i o n : Sulawesi (in original text Macassar) (WALKER 1860).

N o t e : The validity of this species is unclair and the revision of the taxon is necessary; OOSTERBROEK (1998) wrote it "…does not belong to the Scathophagidae".

Cordilura pulchra OZEROV & KRIVOSHEINA, 2012

H o l o t y p e : male, Vietnam, Lai Chau Province, Hoang Lien National Park, 22.347948°N 103.769714°E, 1900 m [a.s.l.], 19.iv.2012, A. L. Ozerov leg. (ZMUM).

D i s t r i b u t i o n : Vietnam (OZEROV & KRIVOSHEINA 2012).

Lubomyia ŠIFNER, 2010

T y p e s p e c i e s : *Lubomyia orientalis* ŠIFNER, 2010

Lubomyia orientalis ŠIFNER, 2010

H o l o t y p e : male, N.E. Burma, Kombaiti, 7000n. [?], 9.iv.1934, R. Malaise [leg?] (CNC).

C o m m e n t : This specis was mentioned by VOCKEROTH (1977: 436) as an unnamed species of the genus *Acerocnema*.

***Parallelomma merzi* OZEROV, 2011a**

D i s t r i b u t i o n : Thailand, Vietnam (OZEROV & KRIVOSHEINA 2011a).

C o m m e n t : MERZ (2006: 224) cited one male of *Parallelomma* sp. from MHNG as "...first genus of this family recorded from Thailand ". This specimen was later described by OZEROV & KRIVOSHEINA (2011a) as a new species.

***Scatomyza curtipilata* (FENG, 2002)**

Scatomyza fascipanicola OZEROV & KRIVOSHEINA, 2011a: 5; OZEROV & KRIVOSHEINA (2018: 2)
Heteroterma fajingensis WEI, 2006: 531, OZEROV & KRIVOSHEINA (2018: 2)

***Scatomyza mellipes* (COQUILLETT, 1899),** as *Scatophaga*

Scatophaga chinensis MALLOCH, 1935: 260, OZEROV & KRIVOSHEINA (2018: 7)
Scathophaga eoa OZEROV, 2007: 2, OZEROV & KRIVOSHEINA (2018: 7)

D i s t r i b u t i o n : China, India (VOCKEROTH, 1977), Vietnam, Japan, Nepal, Russia, Korea (OZEROV & KRIVOSHEINA 2011a).

***Scatomyza scybalaria* (LINNAEUS, 1758)**

Musca scybalaria (LINNAEUS, 1758): 599

D i s t r i b u t i o n : Vietnam (OZEROV & KRIVOSHEINA 2011a: 8).

***Scathophaga stercoraria* (LINNAEUS, 1758)**

Musca stercoraria (LINNAEUS, 1758): 599.

D i s t r i b u t i o n : China, India (VOCKEROTH 1977, ŠIFNER 2010)

Palaearctic Region

The last catalogue of Palaearctic Scathophagidae was compiled by ŠIFNER (2008a), with some additions and corrections supplemented by ŠIFNER (2009); it contains 38 genera, 221 valid species, 198 synonyms and 12 doubtful species.

S u b f a m i l y Delininae ROBINEAU-DESVOIDY, 1830

T r i b u s Delinini ŠIFNER, 2003

***Americina caucasica* (OZEROV, 2009b)**

Parallelomma caucasica (OZEROV, 2009b): 314

H o l o t y p e : male, Russia, Adygeya, N Lagonaki Mt., 44:093° 40.019°E, 1725 a.s.l., *Picea* forest, 28.VI.2009, coll. K. Tomkovish (ZMUM).

***Americina hostae* (HERING, 1955)**

Chylizosoma hostae (HERING, 1955): 6

C o m m e n t : This species was synonymized by ŠIFNER (1978: 290) with *Americina*

vittata (MEIGEN, 1826) (cf. ŠIFNER 2008a); revalidated by OZEROV (2009d: 312 in Russian, 317 in English) as a valid species.

Micropselapha basovi OZEROV, 2010b

Micropsalapha bohemica BARTÁK & KUBÍK 2012: 101, OZEROV (2014a: 320), (cf. ŠIFNER 2018: 1641, Note 1).

H o l o t y p e : male, Russia, Tatarstan, Kamskiy Reserve, Lake Raifa, 55.897357°N 48.733022°E, 13.v.2005, V. Basov leg. (ZMUM).

Mirekiana ŠIFNER, 2012

Mirekiana anthrax (SCHINER, 1864): 16, ŠIFNER (2012: 17).
= *Cleigastra carbonaria* POKORNY, 1887: 441, STROBL (1898: 182).

T y p e s p e c i e s : *Cleigastra anthrax* SCHINER, 1864

H o l o t y p u s : male, Czech Rep., Krkonoše Mts., (National Park), Úpské rašeliniště (peat bog) 21.-22.vii.1966, Šifner leg.

Neochirosia nigriceps (BECKER, 1894)

C o m m e n t : The transfer *Delina nigriceps* (BECKER, 1894) in the genus *Neochirosia* MALLOCH, 1919 was made by OZEROV (2009c: 238).

Neochirosia nikita OZEROV & KRIVOSHEINA, 2015

H o l o t y p e : male, Serbia, Stara Planina, 43.37°N 22.6O°E, 1.-8. V. 2015, N. Vikhrev (ZMUM).

Neochirosia pechorica OZEROV 2009c

H o l o t y p e : male, Russia, Archangelskaya oblast [= region], Nametskiy Reserve, 68:175957°N 53.645394°E, 19. viii. 2008, A. L. Ozerov leg. (ZMUM).

Neochirosia veratri (HENDEL, 1925)

C o m m e n t s : *Clidogastra veratri* was synonymized by ŠIFNER (2003: 63, 2008a: 175) with *Delina nigriceps* (BECKER, 1894); it was revalidated and transfered in the genus *Neochirosia* by OZEROV (2009c: 239). ŠIFNER (2018: 1637) mentioned *Neochirosia cepelaki* as valid in the genus *Neochirosia* by mistake.

S u b f a m i l y Scathophaginae ROBINEAU-DESVOIDY, 1830

T r i b e Amaurosomini ŠIFNER, 2003

C o m m e n t s : The use of the name *Amaurosoma* BECKER, 1894 or *Nanna* STROBL, 1894 was interpreted correctly by PÜCHEL (1999): the name *Nanna* STROBL, 1894 is a synonym of *Amaurosoma* BECKER, 1894. This problem was resolved in detail by ŠIFNER (2003).

Amaurosoma amurensis (OZEROV, 2010b), as *Nanna*

H o l o t y p e : male, Russia, Amurskaya oblast, town Zeya, 53.7485°N 127.2614°E, 14.vi.1978, A. Shatalkin leg. (ZMUM).

Amaurosoma articulatum BECKER, 1894

L e c t o t y p e : male, Number 29936 in Meigen's collection, 6.v. (MNHN), designated by OZEROV (2014b: 35) (see also ŠIFNER 2008a: 151).

Amaurosoma cryophila (OZEROV & KRIVOSHEINA, 2015), new combination

Nanna cryophila (OZEROV & KRIVOSHEINA, 2015): 228. The transfer in the genus *Amaurosoma* was made by ŠIFNER in this paper).

H o l o t y p e : male, Russia, Khabarovsk Region, Khicka R., 690 m, 49.05°N 137.43°E, 10.vi.2014, N. Vikhrev leg. (ZMUM).

Amaurosoma fasciatum (MEIGEN, 1826)

Cordylura fasciatum (MEIGEN, 1826): 238

H o l o t y p e : male, Number 2153 in Meigen's collection (MNHN), labelled by MEIGEN as *fasciata* (MNHN), for detail see OZEROV (2017a: 190).

Amaurosoma longicorne (VON ROSER, 1840)

Cordylura longicorne (VON ROSER, 1840)

H o l o t y p e (?): Germany, environs of Württenberg (cf. ŠIFNER 2008a: 154).

C o m m e n t : The redescription of this species based on one male and two females from Karelia by OZEROV (2010a: 3-5). The redescription of this species by ŠIFNER (2008b: 104) was a misidentification; the figures 1 to 3 (p. 104) belong to *Amaurosoma obenbergeri* ŠIFNER (2016).

Amaurosoma obenbergeri ŠIFNER, 2016

Amaurosoma longicorne (VON ROSER, 1840) (misidentification): ŠIFNER (2016: 114).

H o l o t y p e : male, Czech Republic, Bohemia mer., Malšice (6653), 4.x.1976, Jan Máca leg. (FSPC).

Amaurosoma obscuripes (BECKER, 1915)

Nanna indotatum ENGELMARK, 1999: 163, OZEROV & KRIVOSHEINA (2015: 144).

C o m m e n t : The species *Acerocnema obscuripes* BECKER, 1915 was considered by ŠIFNER (2008a: 198) as a junior synonym of *Acerocnema macrocera* (MEIGEN, 1826). However, OZEROV & KRIVOSHEINA (2015) confirmed it as valid species and included this species in the genus *Nanna* STROBL, 1894.

Amaurosoma rossolimoae (OZEROV, 2010b), new combination

Nanna rossolimoae (OZEROV, 2010b): 161; The transfer in the genus Amaurosoma was made by ŠIFNER in this paper.

H o l o t y p e : male, Russia, Amurskaya oblast, town Zeya, 53.7485°N 127.2614°E, A. Ozerov leg. (ZMUM).

Gabreta ŠIFNER, 2015

T y p e s p e c i e s : *Gabreta macai* ŠIFNER, 2015: 75

Gabreta macai ŠIFNER, 2015

H o l o t y p e : male, Czech Republic, Bohemia mer., Modrava (6946), Modravská Medvědí Mt., 1200 m, beertrap, 1.vi.2014, Jan Máca leg. (FSPC).

Julienomyia ŠIFNER, 2015

T y p e s p e c i e s : *Julienomyia miroslavi* ŠIFNER, 2015: 75

Julienomyia miroslavi ŠIFNER, 2015

H o l o t y p e : male, Czech Republic, Bohemia mer., Sezimovo Ústí (6654), Luna Natur Monument, 400 m, 1.vi.2001, Jan Máca leg. (FSPC).

Miroslava knajfli ŠIFNER, 2010

H o l o t y p e : male, Nepal, 27°57N 84°59E, Malaise trap No. 5, Canadian Nepal Expedition leg., as *Megaphthalmoides* sp. [det.?] (CNS).

Gonatherus planiceps (FALLÉN, 1826)

Gonatherus fumipennis HENDEL, 1930: 7, OZEROV (1930: 6)

T r i b e Cleigastrini ŠIFNER, 2003

OZEROV & KRIVOSHEINA (2015) based on the variability of chaetotaxy and the shape of some sternites proposed the following nomenclatorial acts: The genera *Gonarcticus* BECKER, 1894, *Gonatherus* RONDANI 1856, *Orthacheta* BECKER, 1894, *Spathephilus* BECKER, 1894 and *Amaurosoma* BECKER, 1894 (= *Nanna* STROBL, 1894 sensu OZEROV & KRIVOSHEINA 2010a) are proposed as synonyms of *Cleigastra* MACQUART, 1835. These authors recommend three subgenera: *Cleigastra* MACQUART s. str., *Gonatherus* RONDANI and *Orthacheta* BECKER. We do not follow this opinion in this paper.

Acerocnema arctica OZEROV, 2013

H o l o t y p e : male, Russia, Krasnoyarskiy Kray, Lake Taymyr, Baykuranera Bay, 74.117°N 102:95°E, 30. vii.-7. viii.1976, A. Ranitsin leg. (ZMUM).

Acerocnema breviseta (ZETTERSTEDT, 1846)

Cordylura breviseta ZETTERSTEDT, 1846: 2022
Acerocnema tiefi BECKER, 1894: 155, ŠIFNER (2003: 47).
Acerocnema pokornyi BECKER, 1894: 157, ŠIFNER 2003: 47.

H o l o t y p e : female, Denmark: "circa Hafniam" [Copenhagen env.], labelled: [18]62, as "*breviseta* Staeger 41", as holotype designated by J. R. Vockeroth in 1954 (MZLU).

C o m m e n t : Confirmed as valid species by OZEROV (2014a: 317).

Acerocnema flavifrons IWASA, 2013

H o l o t y p e : male, Japan, Nakasatsunai, Tokachi, Hokkaido, 26.v.2013, M. Iwasa leg. (OU).

Acerocnema kishimotoae IWASA, 2013

H o l o t y p e : male, Japan, Toyokoro, Tokachi, Hokkaido, 4.v.2013, M. Iwasa leg. (OU).

Acerocnema sinuata IWASA, 2013

H o l o t y p e : male, Japan, Nakasatsunai, Tokachi, Hokkaido, 26.v.2013, M. Iwasa leg. (OU).

Acerocnema richterae OZEROV, 2015

H o l o t y p e : male, Russia, Buryatia, Chamney, 50.402°N 103.8681°E, bottom land of Shibertuy River, 29.iv.971, V. Richter leg. (ZISP).

Cleigastra intermedia OZEROV & KRIVOSHEINA, 2016

H o l o t y p e : male, Russia, Novosibirsk Region, Solair Range, 54.55°N 84.86°E, 19.v.2015, O. Kosterin leg. (ZMUM).

Cleigastra maritima OZEROV & KRIVOSHEINA, 2016

H o l o t y p e : male, Russia, Promorskiy Kray, Gribnoe, 44.2574°N 132.6817°E, 10 km SE of Chernigorka, 10.v.1979, A Zinoviev leg. (ZISP).

Cleigastra sundukovi OZEROV, 2013

H o l o t y p e : male, Russia, Kuril Islands, Shikotan I., Traskovnaya Bay, 43.75°N 146.70°E, 10.-14.vi. 2002, Yu. Sundukov leg. (ZMUM).

Hajekiana ŠIFNER, 2016

T y p e s p e c i e s : *Hajekiana orlicensis* ŠIFNER, 2016.

Hajekiana orlicensis ŠIFNER, 2016a

H o l o t y p e : male, Czech Republic, Orlické hory Mts., National reserve Bukačka (5664), 18.vi.-5.viii.1994, yellow pan trap., Hájek leg. (FSPC).

Spathephilus nigriventris (LOEW, 1864)

Cordylura nigriventris (LOEW, 1864): 19

L e c t o t y p e : female, labelled "23/5 43, 11392", coll. Loew, Type *C. nigriventris* m., type locality "Posen" [Poland, Poznań] (ZMHB).
= *Cordylura breviventris* LOEW, 1873: 250, OZEROV (2010a: 5, new syononymy).

C o m m e n t : This species was cited by ŠIFNER (1968: 167, 2008a: 150-151) as *Spathephilus breviventris* (LOEW, 1873); the species *Cordylura nigriventris* was considered erroneously as a synonym of *Amaurosoma flavipes* (FALLÉN, 1819) (cf. ŠIFNER 2008a: 152-153).

T r i b e Cordilurini ŠIFNER, 2003

Cordilura aberrans (BECKER, 1894)

Cordylura rubifromtata BECKER, 1894: 91, OZEROV (2014b: 41.

Cordilura albilabris (FABRICIUS, 1805)

Ocyptera albilabris (FABRICIUS, 1805): 315

C o m m e n t : This species was formerly commonly placed in the genus *Phrosia* ROBINEAU-DESVOIDY, 1830. Nowadays, BERNASCONI & al. (2000) and KUTTY & al (2007), based on DNA sequences, proposed it placed among of *Cordilura* species.

Cordilura bezzi (SACK, 1937)

Cordylura bezzi (SACK, 1937): 18

L e c t o t y p e : male, Livrio, without data, designated by VOCKEROTH 1954 (SDEI).

C o m m e n t : This species was placed by ŠIFNER (2008) in the genus *Bucephalina* MALLOCH, 1909.

Cordilura ciliata (MEIGEN, 1826)

Cordylura ciliata (MEIGEN, 1826): 231

L e c t o t y p e : male, Number 2137 in Meigen's collection (MNHN), designated by Ozerov; for detail see OZEROV (2017a: 190).

Cordilura fulvifrons OZEROV, 1997

C o m m e n t : OZEROV & KRIVOSHEINA (2014a) completed the original data on the type locality: "This species was described from Boitsova 46.9823°N 134.3246°E. ŠIFNER (2008a) included this species in the genus *Scoliaphleps* BECKER, 1894; by OZEROV (1997) it is placed in the genus *Cordilura*.

Cordilura fuscipes (ZETTERSTEDT, 1838)

Cordylura apicata HENDEL, 1830: 4, OZEROV (2007: 6).
Cordilura grunini OZEROV & KRIVOSHEINA, 2017a

H o l o t y p e : male, Russia, Primorskiy kray, valley of the river Serebryanka, 45.04878°N 136.63558°E, 17.iv.1937, Grunin leg. (ZISP).

Cordilura kosterini OZEROV & KRIVOSHEINA, 2014a

H o l o t y p e : male, Russia, Primorskiy Kray, Lotus Lake, 42:46°N 130.64°E, 1.-3.viii.2014, O. Kosterin leg. (ZMUM).

Cordilura monochroma OZEROV & KRIVOSHEINA, 2014a

H o l o t y p e : male, Russia, Sachalin oblast, Kuril Islands, Kunashir I., 43.026°N 145.862°E, 6.vii.2013, Yu. Sundukov leg. (ZMUM).

Cordilura negrobovi OZEROV & KRIVOSHEINA, 2017a

H o l o t y p e : male, Russia, Republic of Buryatia, East Sayan, Arschan, Tagarlay, 51.8786°N 192.3927°E, 3.vii.1965, Negrobov leg. (ZISP).

Cordilura picticornis (LOEW, 1864)

Codylura picticornis (LOEW, 1864): 22
Cordylura latigenis HENDEL, 1930: 3, OZEROV (1007: 7).

L e c t o t y p e : female, Number 11369, designated by Vockeroth 19[54] (ZMHB), for detail see OZEROV (2014b: 40).

Cordilura rufipes (MEIGEN, 1826)

Codylura rufipes (MEIGEN, 1826): 242

H o l o t y p e : Number 2144, in Meigen's collection (MNHN); for detail see OZEROV (2017a: 193).

Cordilura sidorenkovi OZEROV & KRIVOSHEINA, 2012a

H o l o t y p e : male, Russia, Primorskiy Kray, Larorskiy reserve, 43.0052°N 134.1238°E (ZMUM).

Milania ŠIFNER, 2010

T y p e s p e c i e s : *Norellisoma agrion* SÉGUY, 1948: 169.

Milania agrion (SÉGUY, 1948)

new comb. by ŠIFNER (2010: 610)

Norellisoma agrion SÉGUY, 1948

Milania longiabdomina (SUN, 1992)

Norellia longiabdomina (SUN, 1992), ŠIFNER (2010: 612).

Mixocordylura parva OZEROV, in OZEROV & KRIVOSHEINA, 2011b

H o l o t y p e : male, Russia, Altay, Kurayski range, 2500 m a.s.l., 50.33°N 87.75°E, mountain tundra, 3.viii.2008, A. Barkalov leg. (SZMN).

Norellisoma armipes (MEIGEN, 1826)

Cordylura armipes (MEIGEN, 1826): 234

L e c t o t y p e : male, number 2142 in Meigen's colletion (MNHN); for detail see OZEROV (2017a: 190).

C o m m e n t : The male genitalia and abdominal sternites 5 and 4 were dissected and illustrated by OZEROV (2009b). This species was erroneously synonymized as *Norellisoma spinimanum* by ŠIFNER (2008a: 130).

Norellisoma flavicorne (MEIGEN, 1826)

Cordylura flavicorne (MEIGEN, 1826): 239

L e c t o t y p e : male, Number 2157 in Meigen's collection (MNHN), originally labelled by Meigen (Dr. L. Matile, pers. comm. to F. ŠIFNER in 1970); for detail see OZEROV (2017a: 191).

C o m m e n t : The validity of this species is under debate (cf. OZEROV 2017a: 191). However, the exmined specimens from the Czech Republic including their variability confirm unambiguously *N. flavicorne* as a valid species (ŠIFNER, unpubl.)

Norellisoma flavostriatum OZEROV 2008a

H o l o t y p e : male, Russia, Sochi, environs Estosadok, Mt. Psechatsa, subalp. (43°41'28°N 40°22°E), 14.-18.vi.2008, K. Tomkovich leg. (ZMUM).

Norellisoma lituratum (MEIGEN, 1826)

Cordylura lituratum (MEIGEN, 1826): 238

L e c t o t y p e : male, Number 2141 im Meigen's collection (MNHN); for detail OZEROV (2017a: 192).

= *Norellisoma altaicum* (OZEROV, 2008): 2 as *Norellia*, OZEROV & KRIVOSHEINA (2020b: 110).

Norellisoma nervosum (MEIGEN, 1826)

Cordylura nervosum (MEIGEN, 1826: 234)

L e c t o t y p e : male, Number 2141 in Meigen's collection (MNHN); for detail see OZEROV (2017a: 192).

Norellisoma nigrovenosum OZEROV, 2008a

H o l o t y p e : male, Azerbaijan, Lenkoran Distr., Burzaly, 38:65855°N 48.7793°E, 27.x.2008, D. Daryushin leg. (ZMUM).

Norellisoma oreinum Ozerov, 2009b

H o l o t y p e : male, Russia, Adygea, N Lagonaki Mt., Arich cave env, 44.093°N 40.019°E, 1725 m a.s.l., *Picea* forest, 26.-28.vi.2009, coll. K. Tomkovich (ZMUM).

Norellisoma spinimanum (FALLÉN, 1819)

Norellisoma septentrionale HENDEL, 1930: 2, OZEROV (2007: 7).

Norellisoma striolatum (MEIGEN, 1826)

Cordylura striolatum (MEIGEN, 1826): 235

L e c t o t y p e : male, Number 2146 in Meigen's collection (MNHN); for detail see OZEROV (2017a: 194).

Norellisoma tomkovichi OZEROV, 2010b

H o l o t y p e : male, Russia, Adygea, N Lagonaki Mt., 1830 m, 44.050°N 40.018°E, meadow, 20.-23.8.2009, coll. K. Tomkovich (ZMUM).

Norellisoma vockerothi OZEROV, 2013

H o l o t y p e : male, Switzerland, St. Moritz, 3/7 1057 D, 46.58°N 9.83°E, det J. R. Vockeroth 1954 as *Norellisoma* n.sp. (ZMUM).

Parallelomma albipes (FALLÉN, 1819)

Cordylura unicolor LOEW, 1864: 16, OZEROV (2014b: 41)

L e c t o t y p e : *C. unicolor*, female, Number 11373, designated by Vockeroth (SDEI).

C o m m e n t : *Cordylura unicolor* was erroneously synonymized by ŠIFNER (2008a: 114) with *Americina vittata* (MEIGEN, 1826).

Parallelomma fuscipes (ZETTERSTEDT, 1838)

Cordylura apicata HENDEL, 1930: 4, OZEROV (2007: 6)
Cordylura nigrithorax HENDEL, 1930: 5, OZEROV (2007: 7)

Cordylura ochracea HENDEL, 1930: 6, OZEROV (2007: 7)

Suwaia ŠIFNER, 2009

T y p e s p e c i e s : *Parallelomma longicornis* HENDEL, 1913: 77.

Suwaia longicornis (HENDEL, 1913)

new comb. by ŠIFNER (2009: 290)

Parallelomma longicornis HENDEL, 1913

C o m m e n t : This species was placed by VOCKEROTH (1977: 437) in the genus *Megapthalma* BECKER, 1894; for details see OZEROV (2014b: 38).

T r i b e Gimnomerini ŠIFNER, 2003

Gimnomera RONDANI 1866

Langechristia OZEROV, 1999: 510, OZEROV (2019a: 197).

Gimnomera amica (OZEROV, 1999)

comb.nov., des. by OZEROV (2014: 34)

C o m m e n t : The holotype of this species is a female; ŠIFNER (2008a: 135) erroneously cited it as a male.

Gimnomera kirgizica OZEROV, 2008a

H o l o t y p e : male, Kyrg. [yzstan], Issykkul area, Ala Bush pass, 2365 m a.s.l., 13.vii.[19]94, Milko leg. (MHNG).

Gimnomera montana OZEROV & KRIVOHEINA, 2013

H o l o t y p e : male, Russia (North Osetia-Allama, range Bakhty Laparyrag, (42.9383°N 44.2872°E), 1720m. (ZISP)

Gimnomera nigricorpus OZEROV, 2019b

H o l o t y p e : male, Russia, Krasnoyarski Krai, Taimyr, Agapa (ca. 71.412°N 89.2689°E), the River Pyasia, 14.vii. 167, Gorodkov (ZISP).

Gimnomera novgorodae (OZEROV, 2006)

Cochliarum novgorodae (OZEROV, 2006): 334
Cochliarium sorokinae OZEROV, 2006: 335, OZEROV (2019b: 207)

Gimnomera nudipedis OZEROV, 2019b

H o l o t y p e : male, Russia, Krasnoyarski Krai, Taimyr, Agaps (ca: 71.412°N 89.2689°E), the River Pyasia, 14.vii.1967, Gorodkov (ZISP).

Gimnomera palliseta OZEROV, 2019b

H o l o t y p e : Male, RUSSIA, Magadan Oblast, Sokol env. (59:92°N 150:71°E), 11-19. vii. 2014, N. Vikhrev (ZMUM).

Gimnomera speciosa (OZEROV, 1999)

comb. nov., des. by OZEROV (2014: 41)

Gimnomera tibialis (MALLOCH, 1919),

Dasypleuron tibialis (MALLOCH, 1919)
Cochliarium sibiricum ENGELMARK, 1999: 164, OZEROV (2019b: 212).

Gimnomera ziegleri (OZEROV, 1999)

comb.nov., des by Ozerov (2014: 42)

Norellia altaica OZEROV 2008b

H o l o t y p e : male, Russia, Altaiskiy Kray, 45 km E Ust-Ulagan, the upper reaches of the Old River, 50.5°N 88.57°E, 2020 m, 17.vii.2005, coll. V. Sorokina (ZMUM). Female unknown.

Norellia spinipes (MEIGEN, 1826)

Corylura spinipes (MEIGEN, 1826): 237

L e c t o t y p e : male, with disc. no."2349/40" in Meigen's colletion (MNHN); designated by OZEROV (2017a: 193) as lectotype.

Norellia tipularia (FABRICIUS, 1794)

Musca tipularia (FABRICIUS, 1794): 337

C o m m e n t : *Musca tipularia* was considered nomen dubium (ŠIFNER 2003: 32, 2008a: 179); DE JONG (1985: 21) cited *Norellia* (= *Musca*) *tipularia* as a valid species; *Norellia tipularia* was redescribed by OZEROV & FREIDBERG (2010). The type specimen of Musca tipularia is not present in the collection of FABRICIUS (ZIEMSEN 1964) (cf. ŠIFNER 2003a: 32).

Norellisoma yolduense (OZEROV, 2008b)

H o l o t y p e : male, Russia, Altaiskiy Kray, 45 km E Ust-Ulagan, the upper reaches of the Old River, 50°N 88.57°E, 2020 m, 19.vii.2005 (SZMN).

T r i b e Hydromyzini ŠIFNER, 2003

The genus *Okeniella* HENDEL, 1907 was synonymized with the genus *Pogonota* ZETTERSTEDT, 1860 by OZEROV (2016). The basic differences between species of both genera are based on the shape of cerci: in species of *Okeniella* those are separated and fused only basally, in species of *Pogonota* those are fused almost at the whole lenghth; there are differences in the morphology of fore legs and the shape of male abdominal sternites 4 to 5. KUTTY & al. (2007), based on DNA sequences, suggested the both genera as synonyms.

Bostrichopyga crassipes (ZETTERSTEDT, 1838)

Bostrichopyga borealis HENDEL, 1930: 385, OZEROV (2014b: 87).

H o l o t y p e of *B. borealis*: male, Norway, Austad, 58.090°N 7.0442°E, Norway (Salt) Strand, red label *Bostrichopyga* sp.n., Type. *Bostrichopyga borealis*, Mus. Caes. Vidobob. (NHMW). For datails see OZEROV & KRIVOSHEINA (2014b: 87).

C o m m e n t : In the original HENDEL's (1930) paper the data on the type of *B. borealis* were only fragmentary (cf. ŠIFNER 2008a: 141).

Chaetosa punctipes (MEIGEN, 1826)

L e c t o t y p e : male, with a disc. no."2352/40" in Meigen's collection (MNHN), designated by OZEROV (2017a: 193) as lectotype.

Pleurochaetella barkalovi OZEROV & KRIVOSHEINA, 2012b

H o l o t y p e : male, Russia, Krasnoyarsk Kray, NW Taimyr pen., 12.5 km S. Oreon. settl., 73°24N 80°39E, bank of Lemberova River, 6.-26.vii.2012, coll. A. Barkalov (ISEA).

Spaziphora tomkovichi OZEROV, 2011

H o l o t y p e : male, Russia, Chukotka, Amadyr. Distr., Meynipylgino, 62.576°N 177.023°E, lake morene, 10.-13.vii.2011, P. S. Tomovich leg. (ZMUM).

T r i b e Microprosopini ŠIFNER, 2003

OZEROV (2017a) included the genus *Allomyella* MALLOCH, 1923 as a subgenus in the genus *Microprosopa* BECKER, 1894 based on the presence or absence of the hairs on anepimeron and the shape of male abdominal sternite 5.

ŠIFNER (2013a) reclassified the genus *Microprosopa* and the subgenus *Paramicroprosopa* sensu RINGDAHL, 1936 which he raised to the generic rank, providing key to genera of the Microprosopini. In the genus *Paramicroprosopa* he included the following species: *P. hoberlandti* (ŠIFNER, 1981), *P. bartaki* (ŠIFNER, 1999), *P. frontata* (ZETTERSTEDT, 1838), *P. ozerovi* (ŠIFNER, 2008b), *P. pokornyi* (ŠIFNER, 2011).

Acanthocnema sternalis SUWA, 1986

Ancanthocnema vikhrevi OZEROV & KRIVOSHEINA, 2014b: 204 as *Acanthocnema*. OZEROV (2019a: 330).

Allomyella unguiculata (MALOCH, 1919)

Allomyia unguiculata (MALOCH, 1919):80
Allomyella borealis CURRAN, 1927: 260, OZEROV & BARKALOV (2014: 469), by author's first discovery in the Palaearctic Region.

Megaphthalmoides japonicus OZEROV, 2008a

H o l o t y p e : male, Japan, Osaka Prefecture, 800 m, Izumi Katswiagi, 24.ix.1993, A. Friedberg & F. Kaplan leg. (TAUI).

Microprosopa gruberi ŠIFNER, 2013a

H o l o t y p e : male, Slovakia, Malá Fatra Mts., Štefanová - Stohové pol'any (= mountain meadows), 17.v.1975, Šifner leg. (FSPC).

Microprosopa paveli OZEROV & KRIVOSHEINA, 2013b

H o l o t y p e : male, Russia, Chukotka, Meynipylgino, 62.5385°N 177.0519°E (ZMUM).

Microprosopa preisleri ŠIFNER, 2013a

H o l o t y p e : male, Czech Republic, Krkonoše Mts. (5660), Modrý důl (= valley), 10.vii.1963, Šifner leg. (FSPC).

Microprosopa taymirica OZEROV, 2017b

H o l o t y p e : male, Russia, Krasnodarskiy Kray, Lake Engel'gardt, 75.101°N 100.2349°E, 2.viii.1967, Gorodkov leg. (ZISP).

Microprosopa zemani ŠIFNER, 2013a

H o l o t y p e : female, Czech Republic, Krkonoše Mts. (5659), Sedmidolí, Erlenbach bouda (= chalet), 8.-18.vi.1968, Doskočil leg. (FSPC).

Microprosopa zlobini OZEROV, 2008a

H o l o t y p e : male, Russia, North Ossetia, environs of Buron, Tsey gorge, 42.793055°N 43.92216°E, 1764 m (ZMUM).

***Paramicroprosopa bartaki* (ŠIFNER, 1999)**, as *Microprosopa*

***Paramcroprosopa frontata* (ZETTERSTEDT, 1838)**, as *Scatomyza*

***Paramicroprosopa hoberlandti* (ŠIFNER, 1981)**, as *Microprosopa*

***Paramicroprosopa ozerovi* (ŠIFNER, 2008)**, as *Microprosopa*

***Paramicroprosopa pokornyi* (ŠIFNER, 2011)**, as *Microprosopa*

H o l o t y p e : male, Czech Republic, Chyňava (5950), PLA Křivoklátsko, 50.040°N, 14.037°E, 11.-14.vi.2010, Šifner leg. (FSPC).

Trichopalpus fraternus (MEIGEN, 1826)

Cordylura fraternus (MEIGEN, 1826): 243

L e c t o t y p e : male, Number 2162 in Meigen's colletion ((MNHN); designated by OZEROV (2017a: 191) (see also ŠIFNER 2008a: 140).

T r i b e Scathophagini ŠIFNER, 2003

Coniosternum alashanicum (OZEROV & KRIVOSHEINA, 2019c), new combination

as *Scathophaga*, comb.nov. by ŠIFNER, in this paper.

H o l o t y p e : male, China, [Alashan or Alxa, 38.8442°N 105.7070°E], 30.v.1908, Kozlov (ZISP).

Coniosternum decipiens (HALIDAY, 1832)

Coniosternum fluviale (RONDANI, 1867): 113, OZEROV & KRIVOSHEINA (2020a: 227)
C o m m e n t : This nomenclatoric act is unclear; it is not figured the pregonite.

Coniosternum dvoraki ŠIFNER, 2016

H o l o t y p e : male, Czech Republic, Slavkovský les (= forest), Lazy, Lesný (5941), smrčina (= spruce forest), pivní past (= beer trap), 12.-30.vi.2004, Dvořák leg. (FSPC).

Coniosternum kovari ŠIFNER, 2013b

H o l o t y p e : male, Tajikistan, Hissar Mts., Vaahab distr., Magov, 38°40N 69°06E, 18.-21.ix.1989, I. Kovář leg. (NMPC).

Coniosternum lapponicum RINGDAHL, 1920

Scatophaga minuta MALLOCH, 1935: 255, ŠIFNER (2018b: 41).

C o m m e n t : The species *S. minuta* was erroneously synonymized with *Coniosternum obscurum* (FALLÉN, 1819) by VOCKEROTH (1965: 839).

Scatomyza FALLÉN, 1810

T y p e s p e c i e s : *Musca scybalaria* LINNAEUS, 1758: 591

C o m m e n t : The genus *Scatomyza* FALLÉN, 1810 was revalidated by OZEROV & KRIVOSHEINA (2011a: 3). It differ from *Scathophaga* MEIGEN, 1803 by the presence of a metacoxal bridge (cf. VOCKEROTH 2010: 1268, Fig. 7).

Scatomyza amplipennis (PORTSCHINSKIY, 1887

Scatophaga amplipennis (PORTSCHINSKIY, 1887): 199, OZEROV & KRIVOSHEINA (2011a: 4).

Scatomyza magnipennis (PORTSCHINSKIY, 1887)

Scatophaga magnipennis (PORTSCHINSKIY, 1887): 198, OZEROV & KRIVOSHEINA (2011a: 4).

L e c t o t y p e : male, Kyrgyzstan, loc. Sankul (= Sankul Lake), designated by OZEROV & KRIVOSHEINA (2013: 4)

Scatomyza medvedevi OZEROV & KRIVOSHEINA, 2018a

H o l o t y p e : male, Nepal, Rasuwa Disom, Buddha Mandir env., 28.08.79°N 85.39.00°E, 4215 m, 13.-14.iii.2017, coll. A. Medvedev (ZMUM).

Scatomyza mellipes (COQUILLETT, 1899)

Scatophaga mellipes (COQUILLETT, 1899): 335, OZEROV & KRIVOSHEINA (2011a: 8).
Scatophaga chinensis MALLOCH, 1935: 260, OZEROV & KRIVOSHEINA (2011a: 8).
Scathophaga eoa OZEROV, 2007: 2, OZEROV & KRIVOSHEINA (2011a: 8).

Scatomyza nigrolineata OZEROV & KRIVOSHEINA, 2018a

H o l o t y p e : male, Nepal, Rasuwa disom, Buddha Mandir env., 28.08.79°N 85.39.00°E, 4215 m, 13.-14.iii.2017, coll. A. Medvedev (ZMUM).

Scatomyza scybalaria (LINNAEUS, 1758): 599

Musca scybalaria (LINNAEUS, 1758): 599 OZEROV & KRIVOSHEINA (2011a: 8).

Scatomyza sinensis (SUN, 1996)

Scathophaga sinensis (SUN, 1996): 630, OZEROV & KRIVOSHEINA (20181a: 11).
Scathophaga calceata OZEROV, 2009: 425, OZEROV & KRIVOSHEINA (2018a: 11).

Scatophaga analis (MEIGEN, 1826)

Cordylura analis (MEIGEN, 1826): 251
Scathophaga bohemiae ŠIFNER, 2000: 193, ŠIFNER (2018: 1644).

Scathophaga annae ŠIFNER, 2019

H o l o t y p e : male, Norway, Svalbard, Spitzbergen Island, locality Pyramiden, 78°39′22″N 16°19′30″E, 15.vii.2015, Anna Mácová leg. (FSPC).

Scathophaga incompleta OZEROV & KRIVOSHEINA, 2020a

H o l o t y p e : male, Russia, Kalmykia, Priutnoe env. (46.1°N 43.5°E), 2.-3.v. 2013, N. Vikhrev (ZMUM).

Scathophaga intermedia (WALKER, 1849)

Scathophaga hadleyi OZEROV 2013: 88, OZEROV (2019a: 330).
Scathophaga buryatica OZEROV & KRIISHEINA, 2019c

H o l o t y p e : male, Russia, East Sayan, Samarta (52:0944°N, 101:1372°E), 40km NO of Mondy, 1.viii.1965, Gorodkov (ZMUM).

Scathophaga karelica OZEROV, 2013

H o l o t y p e : male, Russia, Karelia, Poyakonda, 66.589220°N 32.828671°E, 30.vi.2010, A. L. Ozerov leg. (ZMUM).

Scathophaga karmazini ŠIFNER, 2020

H o l o t y p e : male, Austria, Hohe Tauern, Stubnerkogel Mt., 2240 m a.s.l., 27.vii.2001, Šifner leg. (FSPC).

Scathophaga merdaria (FABRICIUS, 1794)

Musca merdaria (FABRICIUS, 1794): 344

C o m m e n t : This species was confirmed as valid species and distinguished from *Scathophaga stercoraria* (LINNAEUS, 1758) based on the differences of males and females terminalia by ŠIFNER (2020: 736, Figs 37-40).

Scathophaga moraviensis ŠIFNER, 2011

H o l o t y p e : male, Czech Republic, Moravia, Bílé Karpaty Mts., Malá Vrbka (7170), Čertoryje, 48.859°N 17.431°E, 360 m, Malaise trap, 25. v.-15.vi.2910, Macek & Chvojka leg. (FSPC).

Scathophaga simaceki ŠIFNER, 2018

H o l o t y p e : male, Norway, Svalbard, Spitzbergen Island, locality Pyramiden, 78°39′22″N 16°19′30″E, 15.vii.2015, Anna Mácová leg. (FSPC).

Scathophaga stercoraria (LINNAEUS, 1758)

Musca stercoraria (LINNAEUS, 1758)
Chione ichneumonea ROBINEAU-DESVOIDY, 1830, OZEROV (2017a: 192).

C o m m e n t : *Chione ichneumonea* was mentioned by ŠIFNER (2008a: 177) as *nomen dubium*.

Scathophaga yakutica OZEROV, 2017c

H o l o t y p e : male, Russia, Yakutia, Aldan Plateau, 60 km SE of Tommot, right bank of Russkaya River, ca. 58.56°N 126:56°E, 15.vii.2007, A. A. Popov (ZMUM).

Table 1. A list of the world fauna of species of the family Scathophgidae to 2020.

	Afrotropical Region	Nearctic Region	Neotropical Region	Oriental Region	Palaearctic Region
D e l i n i n a e ROBINEAU - DESVOIDY, 1830					
Americina MALLOCH, 1923					
caucasica (OZEROV, 2009)					X
hostae (HERING 1955),					X
media (MEIGEN, 1826)					X
sellata (HACKMAN, 1956)					X
vittata (MEIGEN, 1826)					X
Delina ROBINEAU-DESVOIDY, 1830					
nigrita (FALLÉN, 1819)		X			X
Leptopa ZETTERSTEDT, 1838					
filiformis ZETTERSTEST, 1838					X
hendeli ŠIFNER, 1977		X			
Micripselapha BECKER, 1894					
basovi OZEROV, 2010					X
filiformis (ZETTERSTEDT, 1846)					X
Mirekiana ŠIFNER, 2012					
anthrax ŠIFNER, 2012					X
Neochirosia MALLOCH, 1917					
atrifrons (COQUILLETT, 1910)	X				
nigriceps (BECKER, 1894)					X

	Afrotropical Region	Nearctic Region	Neotropical Region	Oriental Region	Palaearctic Region
nikita OZEROV & KRIVOSHEINA, 2015					X
nuda MALLOCH 1922	X				
pechorica OZEROV, 2009					X
setiger MALLOCH, 1917	X				
veratri (HENDEL, 1925)					X
S c a t h o p h a g i n a e ROBINEAU-DESVOIDY, 1830					
Acanthocnema BECKER,1894					
albibarba (LOEW, 1869)		X			
capillata (LOEW, 1872)		X			
glaucescens (LOEW, 1864)		X			X
himalaica SUWA, 1986					X
longispina SUWA, 1986					X
nigrimana (ZetterStedt, 1846)					X
ruficauda CURRAN, 1929		X			
sternalis SUWA, 1986					X
Acerocnema BECKER, 1894					
barkalovvi OzeRov, 2006					X
lobanovi OZEROV, 2006					X
macrocera (MEIGEN, 1826)					X
paradoxopyga STACKELBERG, 1952					X
Allomyella MALLOCH, 1923					
albipennis (ZETTERSTEDT,1838)		X			X
borealis CURRAN, 1927		X			
brevipennis MALLOCH, 1923		X			
crinipes (RINGDAGHL, 1928		X			X
frigida (HOLMGREN, 1883)		X			X
portenkoi (STACKELBERG, 1952)		X			X
unguiculata (MALLOCH, 1919)		X			
Amaurosoma BECKER, 1894					
amurensis OZEROV, 2010)					X
armillatum (ZETTERSTEDT,1846		X			X
articulatum BECKER, 1894					X
atripes MALLOCH, 1931		X			
bernasconii ŠIFNER, 2008					X
bispinosa MALLOCH, 1920		X			
brevifrons (ZETTERSTEDT, 1838)					X

	Afrotropical Region	Nearctic Region	Neotropical Region	Oriental Region	Palaearctic Region
bruneicosta JOHNSON, 1927		X			X
cryophila (OZEROV & KRIVOSHEINA, 2015)					X
fasciatum (MEIGEN, 1826)					X
flavipes (FALLÉN, 1819)					X
inerme BECKER, 1894					X
katmaiensis MALLOCH, 1920		X			
leucostoma (ZETTERSTEDT, 1846)					X
loewi (BECKER, 1894)		X			X
longicorne (VON ROSER, 1840					X
nigrifrontatum BECKER, 1894					
obenbergeri ŠIFNER, 2016					X
pallidipes MALLOCH, 1922		X			
puberulum BECKER, 1894					X
rossolimoae (OZEROV, 2010)					X
similis (COQUILLETT, 1902)		X			
tibiellum (ZETTERSTEDT, 1838)					X
truncatum (FAN, 1976)					X
unispinosa MALLOCH, 1920		X			
Bostrichopyga BECKER, 1894					
crassipes (ZETTERSTEDT, 1838)					X
Brockssiella VOCKEROTH, 1955					
varicornis (CURRAN, 1927)		X			
Ceratinostoma MEADE, 1885					
ostiorum (CURTIS, 1832)		X			X
Chaetosa COQUILLETT, 1898					
churchilli MALLOCH, 1931		X			
punctipes (MEIGEN, 1826)		X			X
Cleigastra MACQUART, 1835					
apicalis (MEIGEN, 1826)					X
intermedia OZEROV & KRIVOSHEINA, 2016					X
maritima OZEROV & KRIVOSHEINA, 2016					X
sundukovi OZEROV, 2013					X
Coniosternum BECKER, 1894					

	Afrotropical Region	Nearctic Region	Neotropical Region	Oriental Region	Palaearctic Region
alashainicum (OZEROV & KRIVOSHEINA, 2019)					X
decipiens (HALIDAY, 1832)					X
dvoraki ŠIFNER, 2016					X
fluviale RONDANI, 1867					X
kovari ŠIFNER, 2013					X
infumatum BECKER, 1907					X
jezeki ŠIFNER, 1981					X
kaszabi ŠIFNER, 1975					X
lapponicum RINGDAHL, 1920		X			X
masneri ŠIFNER, 2017		X			
mihalyi ŠIFNER, 1975					X
milani ŠIFNER, 1981					X
moceki ŠIFNER, 2004					X
molle (BECKER, 1894)					X
nelsoni ŠIFNER, 2003					X
nigripalpe (BECKER, 1907)					X
nigrohirtum CZERNY, 1909					X
obscurum (FALLÉN, 1819)		X			X
tinctinerve BECKER, 1894					X
Cordilura FALLÉN, 1810					
aberrans BECKER, 1894					X
adrogans CRESSON, 1918		X			
aemula COLLIN, 1958					X
alberta (CURRAN, 1927)		X			
albicoxa JAMES, 1955		X			
albilabris (FABRICIUS, 1805)					X
angustifrons LOEW, 1863		X			
amurenssis OZEROV, 2007					X
atrata ZETTERSTEDT, 1846		X			X
atripennis JAMES, 1955		X			
banksi JAMES, 1955		X			
bezzi (SACK, 1937)					X
bicoloripes OZEROV, 1997					X
ciliata (MEIGEN, 1826)					X
ciliatipes JAMES, 1955		X			
confusa LOEW, 1863		X			
criddlei CURRAN, 1929		X			
cuspidata SASAKAWA, 1986					X
dimidiata (CRESSON, 1918)		X			
deceptiva MALLOCH, 1923		X			

	Afrotropical Region	Nearctic Region	Neotropical Region	Oriental Region	Palaearctic Region
emarginata (MALLOCH, 1923)		X			
fasciventris CURRAN, 1927					X
flavovenosa BECKER, 1894		X			X
femoralis SUN, 1993					X
fulvifrons OZEROV, 1997					X
gagatina LOEW, 1969		X			
glabra LOEW, 1869		X			
grunini OZEROV & KRIVOSHEINA, 2014					X
gracilipes LOEW, 1869		X			
impudica RONDANI, 1866					X
intermedia (CURRAN, 1927)		X			
kakaberans OZEROV, 1997					X
kosterini OZEROV & KRIVOSHEINA, 2014					X
krocha OZEROV, 2007					X
latifrons LOEW, 1869		X			
loewi JAMES, 1955		X			
luteola MALLOCH, 1924		X			
marginata (MALLOCH, 1931)		X			
munda LOEW, 1869		X			
monochroma OZEROV & KRIVOSHEINA, 2014					X
negrobovi OZEROV & KRIVOSHEINA, 2017					X
nigrifrons SUN, 1993					X
nigriseta RONDANI, 1867					X
nubecula SASAKAWA, 1986					X
ontario CURRAN, 1929		X			
passiva CURRAN, 1929		X			
picipes MEIGEN, 1826					X
picticornis Loew, 1864		X			X
pilosella (COQUILLETT, 1898)		X			
pleuritica LOEW, 1863		X			
praeusta (LOEW, 1864)		X			
proboscoidea ZETTERSTEDT, 1838		X			X
pudica MEIGEN, 1826		X			X
pulchra OZEROV & KRIVOSHEINA, 2012				X	
remota OZEROV, 1997					X
rufimana MEIGEN, 1826		X			X
rufipes MEIGEN, 1826		X			X
sagitifera GORODKOV, 1974					X

	Afrotropical Region	Nearctic Region	Neotropical Region	Oriental Region	Palaearctic Region
scapularis LOEW, 1869		X			
setosa LOEW, 1860		X			
shatalkini OZEROV, 1997					X
sidorenkovi OZEROV & KRIVOSHEINA, 2012					X
sibirica GORODKOV, 1974					X
sifneri OZEROV, 2007					X
similis SIEBKE, 1873					X
socialis BECKER, 1894					X
tartariana OZEROV, 2007					X
tarsalis (MALLOCH, 1923)		X			
umbrosa LOEW, 1873					X
varitibia LOEW, 1876		X			
varicornis CURRAN, 1929		X			
zaitzevi GORODKOV, 1974					X
Cordylurella MALLOCH, 1919					
nana (LOEW, 1864)		X			
nebulosa (COQUILLETT, 1898)		X			
rufula CURRAN, 1927		X			
Cosmetopus BECKER, 1894					
dentimanus (ZETTERSTEDT, 1838					X
longus (WALKER, 1849)		X			
ringdahli ANDERSON, 1974					X
Dromogaster VOCKEROTH, 1995					
incompta VOCKEROTH, 1995		X			
Ernoneura BECKER, 1894					
argus (ZETTERSTEDT, (1818)		X			X
Gabreta ŠIFNER, 2015					
macai ŠIFNER, 2015					X
Gimnomera RONDANI, 1867					
alanica OZEROV, 1999					X
albipila (ZETTERSTEDT,1846)					X
alpina ŠIFNER, 2003					X
amica (OZEROV, 1999)					X
castanipes (BECKER, 1894)		X			X
cerea (COQUILLETT, 1908)		X			

	Afrotropical Region	Nearctic Region	Neotropical Region	Oriental Region	Palaearctic Region
cuneiventris (ZETTERSTEDT, 1846)		X			
dorsata (ZETTERSTEDT, 1838)					X
fasciventris MALLOCH, 1920		X			
hirta HENDEL, 1930					X
incisurata MALLOCH, 1920		X			
kirkizica OZEROV, 2008					X
lasiostoma (BECKER, 1894)					X
novgorodovae (OZEROV, 2006)					X
slovaca ŠIFNER, 2003					X
speciosa (OZEROV, 1999)					X
subvittata (MALLOCH, 1919		X			X
tarsea (FALLÉN, 1819)					X
tatrica ŠIFNER, 2003					X
tukuringa (OZEROV, 1999)					X
ziegleri (OZEROV, 1999)					X
Hajekiana ŠIFNER**,** 2015					
orlicensis ŠIFNER, 2015					X
Hexmitocera BECKER 1894					
loxocerata (FALLÉN, 1826)					X
martineki ŠIFNER, 2003					X
vockerothi ŠIFNER, 2004					X
Huckettia VOCKEROTH**,**1995					
nearctica VOCKEROTH, 1995		X			
Hydromyza FALLÉN, 1823					
confluens LOEW, 1863		X			
livens (FABRICIUS, 1794)					X
Jezekia ŠIFNER, 2009					
kmenti ŠIFNER, 2009					X
Julienomyia ŠIFNER, 2015					
miroslavi ŠIFNER, 2015					X
Lasioscelus BECKER, 1894					
immundus (ZETTERSTEDT, 1838)		X			X
nigricans (LOEW, 1873)					X
sahlbergi BECKER, 1900)		X			X

	Afrotropical Region	Nearctic Region	Neotropical Region	Oriental Region	Palaearctic Region
Lubomiyia ŠIFNER, 2010					
orientalis ŠIFNER, 2010				X	
Megaphthalma BECKER, 1894					
palida palida (FALLÉN, 1819)					X
palida americana MALLOCH, 1924		X			
Megaphthalmoides RINGDAHL, 1936					
unilineatus (ZETTERSTEDT, 1838)		X			X
japonicus OZEROV, 2008					X
Microprosopa BECKER, 1894					
diversipes CURRAN, 1927		X			
frontata (ZETTERSTEDT, 1838)					X
gruberi ŠIFNER, 2013					X
haemorrhoidalis (MEIGEN, 1826)					X
heteromyzina (ZETTERSTEDT, 1938)					X
lacteipennis RINGDAHL, 1920					X
lineata (ZETTERSTEDT, 1938)		X			X
pallidicauda (ZETTERSTEDT, 1838)		X			X
paveli OZEROV & KRIVOSHEINA, 2013)					X
preisleri ŠIFNER, 2013					X
taymirica OZEROV, 2017					X
varicornis CURRAN, 1927		X			X
zemani ŠIFNER, 2013					X
zlobini OZEROV, 2008					X
Milania ŠIFNER, 2010					
agrion (SÉGUY, 1948)					X
longiabdomina (SUN, 1992)					X
Miroslava ŠIFNER, 2016					
knaifli ŠIFNER, 2016					X
jitkae ŠIFNER, 1999					X
montana ŠIFNER, 1999					X
Neorthochaeta VOCKEROTH, 1995					
dissimilis (MALLOCH, 1924)		X			
Norellia ROBINEAU - DESVOIDY, 1830					

	Afrotropical Region	Nearctic Region	Neotropical Region	Oriental Region	Palaearctic Region
spinipes (MEIGEN, 1826)					X
tipularia (FABRICIUS, 1794)					X
Norellisoma WAHLGREN, 1917					
alpestre (SCHINER, 1864)					X
armipes (MEIGEN, 1826)					X
caucasicum (OZEROV, 1993)					X
femorale (LOEW, 1864)					X
flavicorne (MEIGEN, 1826)					X
flavostriatum OZEROV, 2008					X
insulare (OZEROV,1993)					X
ivanae ŠIFNER, 2003					X
japonicum HIRONAGA & SUWA 2005					X
jelineki ŠIFNER, 2006					X
lesgiae (BECKER, 1894)					X
lituratum (MEIGEN, 1826)					X
mireki ŠIFNER, 1977					X
mirusae ŠIFNER, 1974					X
montanopratense (OZEROV, 1993)					X
nervosum (MEIGEN, 1826)					X
orientale (OZEROV, 1993)					X
seguyi ŠIFNER, 1973					X
spinimanum (FALLÉN, 1819)		X			X
striolatum (MEIGEN, 1826)					X
sylviae ŠIFNER, 1999					X
triangulum (SUN, 1992)					X
vockerothi OZEROV, 2013					X
vonickai ŠIFNER, 2008					X
yolduense (OZEROV, 2008)					X
Okeniella HENDEL, 1907					
caudata (ZETTERSTEDT, 1838)					X
dasyprocta (LOEW, 1864)		X			
gorodkovi OZEROV, 2006					X
stackelbergi GORODKOV, 1967					X
Orthacheta BECKER, 1894					
cornuta (LOEW, 1863)		X			
pilosa ZETTERSTEDT, 1838)					X
Paracosmetopus HACKMAN, 1956					
helleni HACKMAN, 1956					X

	Afrotropical Region	Nearctic Region	Neotropical Region	Oriental Region	Palaearctic Region
Paramicroprosopa RINGDAHL, 1936					
bartaki ŠIFNER, 1999					X
frontata (ZETTERSTEDT, 1838)					X
hoberlandti (ŠIFNER, 1981)					X
ozerovi (ŠIFNER, 2008)					X
pokornyi (ŠIFNER, 2011)					X
Parallelomma BECKER,					
albipes (FALLÉN, 1819)					X
fuscipes (ZETTERSTEDT, 1846)		X			X
lautereri ŠIFNER, 2002					X
merzi OZEROV, 2009				X	
Phrosia ROBINEAU - DESVOIDY, 1830					
remmi (ELBERG, 1972)					X
Peratomyia VOCKEROTH, 1995					
vittata (COQUILLETT, 1898)		X			
Plethochaeta COQUILLETT, 1901					
testacea (MALLOCH, 1931)		X			
varicolor COQUILLETT, 1901		X			
Pleurochaetella VOCKEROTH, 1965					
barkalovi OZEROV & KRIVOSHEINA, 2012					X
simplicipes (BECKER, 1900)		X			X
Pogonota ZETTERSTEDT, 1860					
barbata, ZETTERSTEDT, 1838		X			X
gilvipes (LOEW, 1863)		X			
pallida MALLOCH, 1931		X			
Scatomyza FALLÉN, 1810					
amplipennis PORTSCHINSKIY, 1887					X
curtipiilata (FENG, 2002)				X	
magnipennis PORTSCHINSKIY, 1887					X
medvedevi OZEROV & KRIVOSHEINA, 2018					X
mellipes (COQUILLETT, 1899)				X	X
reses (GIGLIO-TOS, 1893)			X		
scybalaria (LINNAEUS, 1758)					X

	Afrotropical Region	Nearctic Region	Neotropical Region	Oriental Region	Palaearctic Region
nigrolineata OZEROV & KRIVOSHEINA, 2018					X
sinensis (SUN, 1996)					X
Scatogera ALBUQUERQUE, 1984					
primogenita ALBUQUERQUE, 1984			X		
Scathophaga MEIGEN, 1803					
alata (Becker, 1894)	X				
albidohirta (BECKER, 1907)					X
aldrichi (MALLOCH, 1920)		X			
analis (MEIGEN, 1826)					X
annae ŠIFNER, 2018					X
apicalis CURTIS, 1935		X			X
calida (HALIDAY, 1832)					X
chilensis (ALBUQUERQUE, 1953)			X		
cineraria (MEIGEN, 1826)					X
cordylurina (HOLMGREN, 1883)					X
crinita (COQUILLETT, 1901)		X			X
dasythrix (BECKER, 1894)					X
exalata OZEROV, 1996					X
foetulecta (SÉGUY, 1966)	X				
frigida COQUILLETT, 1900		X			
furcata (SAY, 1823)		X	X		X
gigantea (ALDRICH, 1923)					
grisea MALLOCH, 1920		X			
hiemalis (JAMES, 1950)		X			
incola BECKER, 1900		X			X
inquinata (MEIGEN, 1826)					X
intermedia WALKER, 1849		X			
islandica BECKER, 1894		X			X
jizerensis ŠIFNER, 2004					X
karelica OZEROV, 2013					X
karmazini ŠIFNER, 2020					X
litorea (FALLÉN, 1819)		X			X
longiaculeata OZErov, 2009	X				
lutaria (FABRICIUS, 1794					X
merdaria (FABRICUS, 1794)					X
monticola MALLOCH, 1924		X			
moraviensis ŠIFNER, 2011					X
multisetosa (HOLMGREN, 1883)					X
nigrolimbata CRESSON, 1918		X			

	Afrotropical Region	Nearctic Region	Neotropical Region	Oriental Region	Palaearctic Region
obscurinervis (BECKER, 1900)		X			X
odontosternita FENG, 1999					X
orcasae, MALLOCH, 1935		X			
peruensis (LOPEZ & COURI, 1986)			X		
pictipennis (OLDENBERG, 1923)		X			X
simaceki ŠIFNER, 2018					X
socia BECKER, 1894	X				
soror WIEDEMAN, 1818	X		X		X
staryi ŠIFNER, 2000					X
stercoraria (LINNAEUS, 1758)		X	X	X	X
suilla (FABRICIUS, 1794)		X			X
taeniopa (RONDANI, 1867)					X
tropicalis (MALLOCH, 1931)			X		
varipes (HOLMGREN, 1883)					X
villosiventris (RINGDAHL, 1937)					X
vlastae ŠIFNER, 2000					X
Scoliaphleps BECKER, 1894					
fulvifrons (OZEROV, 1997)					X
ustulata (ZETTERSTEDT, 1838)		X			X
Spathephilus BECKER, 1894					
nigriventris LOEW, 1864)					X
Spaziphora RONDANI, 1856					
cincta (LOEW, 1863)		X			
hydromyzina (FALLÉN, 1819)					X
Staegeria RONDANI, 1856					
kunzei (ZETTERSTEDT, 1821)					X
unicornuta DZIEDZICKI, 1887					X
Synchysa VOCKEROTH, 1995					
tricincta (LOEW, 1869)		X			
Trichopalpus RONDANI, 1856					
fraternus (MEIGEN, 1826)					X
nigribasis CURRAN, 1927		X			
obscrellus (ZETTERSTEDT, 1846)		X			X

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Summary

In this paper, we summarise nomenclatorial changes in the family Scathophagidae during the last 30-40 years. Moreover, the list of species of the family Scathophagidae summarise the number of valid species in the word fauna by the end 2020.

(I) The world fauna of this family contains 362 valid species in 65 genera; the number of genera or subgenera depends on the criterias applied by the single authors. (II) The Afrotropical Region contains 5 species in a single genus. (III) The Nearctic Region contains 84 species in 35 genera. (IV) The Neotropical Region contains 9 species in two genera. (V) The Oriental Region contains 8 described species in 5 genera. (VI) The Palaearctic Region contains 256 species in 44 genera.

In the arctic to temperate zone of the Palaearctic and Nearctic regions, 39 species were found, which is only 10.2 % of all species occurring the Holarctic Region. The differences in the number of species among the individual regions depend on the level of faunistic and taxonomic research.

Two species, *Scatomyza janmayeni* Séguy, 1938 from Palaearctic Region and *Cordilura bissignata* (Walker, 1860) from Oriental Region, should be considered as doubtful species.

Zusammenfassung

Diese Arbeit beinhaltet grundlegende neue Erkenntnisse über die Forschung der Familie Scathophagidae in den letzten 30-40 Jahren und das Verzeichnis der Arten gibt die Übersicht der anerkannten Arten bis ins Jahr 2020. Über derzeitige taxonomische Kriterien und das Wissen über die zoogeografische Verbreitung der Arten dieser Familie kann man folgende Angaben geben:

(I) In der Weltfauna der Familie Scathophagidae wurden insgesamt 362 gültige Arten in 65 Gattungen festgestellt; die Anzahl der Gattungen oder Untergattungen sind von den angewendeten Kriterien der einzelnen Autoren abhängig. (II) Afrotropische Region: 5 Arten in einer Gattung. (III) Nearktische Region: 84 Arten in 35 Gattungen. (IV) Neotropische Region: 9 Arten in drei Gattungen. (V) Orientalische Region: 8 Arten in 5 Gattungen. (VI) Paläarktische Region: 256 Arten in 44 Gattungen.

In den arktischen und gemäβigten Zonen der Paläarktischen und Nearktischen Regionen wurden nur 39 Arten (10,2%) gemeinsam für beide Regionen festgestelt. Unterschiede in Zahl der Arten zwischen den Regionen sind von der faunistischen und taxonimischen Forschung abhängig.

Die zwei Arten, *Scatomyza janmayeni* SÉGUY, 1938 aus die Paläarktische Region und *Cordilura bissignata* (WALKER, 1860) aus der Orientalische Region sind als fraglich zu betrachten.

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