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Description of five new species and notes on taxonomy of Scathophagidae (Diptera)

Описания пяти новых видов и замечания по таксономии Scathophagidae (Diptera)

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KEYWORDS: Diptera, Scathophagidae, taxonomy, new species, new synonyms, Europe, Russia.

КЛЮЧЕВЫЕ СЛОВА: Diptera, Scathophagidae, таксономия, новые виды, новые синонимы, Европа, Россия.

ABSTRACT. *Norellisoma vockerothi* sp.n. is described on specimens from Austria, Italy and Switzerland. Four species are described from Russia: *Scathophaga karelica*, sp.n. from Karelia, *Cleigastra sundukovi*, sp.n. and *Scathophaga hadleyi*, sp.n. from Kuril Islands, and *Acerocnema arctica*, sp.n. from Taimyr. Lectotype is designated for *Cordylura frigida* Holmgren, 1883. Four new synonyms are established: *Acanthocnema nigripes* Ringdahl, 1936 is a new synonym of *Acanthocnema latipennis* Becker, 1894; *Amaurosoma albipilum* Ringdahl, 1936 is a new synonym of *Nanna inermis* (Becker, 1894); *Scopeuma parviceps* Ringdahl, 1936 is a new synonym of *Scathophaga lutaria* (Fabricius, 1794); *Scopeuma villosiventre* Ringdahl, 1937 is a new synonym of *Scathophaga apicalis* (Curtis *in* Ross, 1835).

РЕЗЮМЕ. *Norellisoma vockerothi* sp.n. описан по экземплярам из Австрии, Италии и Швейцарии. Четыре вида описаны из России: *Scathophaga karelica*, sp.n. из Карелии, *Cleigastra sundukovi*, sp.n. и *Scathophaga hadleyi*, sp.n. с Курильских островов и *Acerocnema arctica*, sp.n. с Таймыра. Обозначен лектотип для *Cordylura frigida* Holmgren, 1883. Установлены 4 новых синонима: *Acanthocnema nigripes* Ringdahl, 1936 — новый младший синоним *Acanthocnema latipennis* Becker, 1894; *Amaurosoma albipilum* Ringdahl, 1936 — новый младший синоним *Nanna inermis* (Becker, 1894); *Scopeuma parviceps* Ringdahl, 1936 — новый младший синоним *Scathophaga lutaria* (Fabricius, 1794); *Scopeuma villosiventre* Ringdahl, 1937 — новый младший синоним *Scathophaga apicalis* (Curtis *in* Ross, 1835).

Introduction

There is a species in Scathophagidae collection housed at Museum für Naturkunde der Humboldt-Universität zu Berlin which was labelled as a new by J.R. Vockeroth in 1954. However its description was not published. I decided to describe this species and it is a pleasure for me to name this new species after Dr. J.R. Vockeroth. This great dipterologist was the first to compare Nearctic and Palaearctic faunas of Scathophagidae and distinguish holarctic species.

Four more new species are described below on the materials collected from Karelia, Kuril Islands and Taimyr Peninsula.

Besides, the results of the investigations of the type material of *Cordylura frigida* Holmgren, 1883 and holotypes of four scathophagid species, described by O. Ringdahl from Sweden are presented.

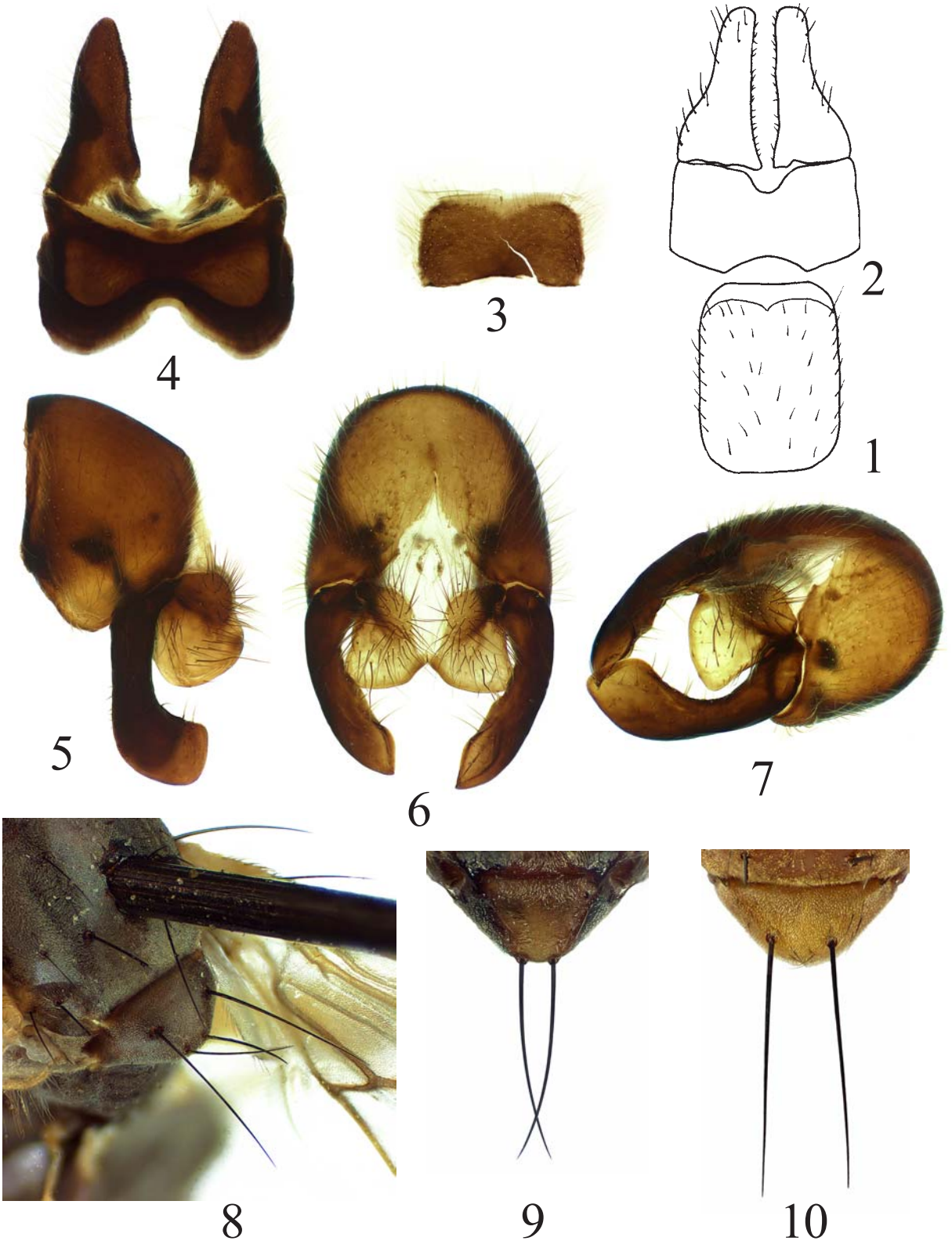
Terminology follows McAlpine [1981] and Cumming et al [2009], except that "postpedicel" is used for antennal flagellomere 1 (third antennal segment) [Stuckenberg, 1999].

The following abbreviations are used for depositories of the studied specimens: ISEA — Siberian Zoological Museum, Institute for Systematics and Ecology of Animals, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia; MZLU — Lund University, Lund, Sweden; NHRS — Naturhistoriska riksmuseet, Stockholm, Sweden; ZMHUB — Museum für Naturkunde der Humboldt-Universität, Berlin, Germany; ZMUM — Zoological Museum, Moscow State University, Moscow, Russia. Other abbreviations used: *a* — anterior; *d* — dorsal; *p* — posterior; *v* — ventral, and combinations of these latter four, all used for leg chaetotaxy.

Description of new species

Norellisoma vockerothi **sp.n.**
Figs 3–8.

MATERIAL. Holotype ♂, labelled "St. Moritz 3/7 10570", "Norellisoma n. sp. 1 det. J.R. Vockeroth 1954" (in ZMHUB). Type-locality: St. Moritz (Switzerland: ~46.50°N, 9.83°E).



Figs 1–10. *Norellisoma ivanae* Šifner (1–2), *N. vockerothi* sp.n. (3–8), *Norellisoma spinimanum* (Fallén) (10) and *Norellia tipularia* (Fabricius) (9), ♂♂: 1, 3 — sternite 4; 2, 4 — sternite 5; 5 — epandrium, cerci and surstyli, lateral view; 6 — epandrium, cerci and surstyli, dorsal view; 7 — epandrium, cerci and surstyli, dorsolateral view; 8–10 — scutellum. 1, 2 after Šifner, 2003.

Рис. 1–10. *Norellisoma ivanae* Šifner (1–2), *N. vockerothi* sp.n. (3–8), *Norellisoma spinimanum* (Fallén) (10) и *Norellia tipularia* (Fabricius) (9), ♂♂: 1, 3 — стернит 4; 2, 4 — стернит 5; 5 — эпандрий, церки и сурстили, сбоку; 6 — эпандрий, церки и сурстили, сверху; 7 — эпандрий, церки и сурстили, дорсолатерально; 8–10 — щиток. 1, 2 по Šifner, 2003.

Paratypes: 3 ♂♂, 4 ♀♀, same locality as holotype, 28.VI. (9419), 3.VII. (10566, 10567), 4.VII.(10616, 10617, 10642) and 16.VII (11722) (in ZMHUB and ZMUM); 2 ♂♂ [Italy] "Vallombrosa 54041 V" (in ZMHUB and ZMUM); 2 ♂♂ [Switzerland] "Licthal", 31.5.[19]13 and 6.6.[19]13 (in ZMHUB); 1 ♀ [Austria] "Schneeb Jul.55", "coll. H.Loew" (in ZMHUB).

DESCRIPTION. Length of body 5.8–7.6 mm. Length of wing 4.2–6.5 mm.

MALE, FEMALE. *Head* spherical. Frontal vitta matt, yellow; fronto-orbital plate blackish in upper part, with greyish pollen. Face, parafacial and gena yellow, with delicate whitish reflection. Ocellar triangle black. Postcranium black in upper part and yellow in lower 1/2 or 1/3, greyish microtrichose. Setae: 2 orbital, 2–3 frontal, 1 ocellar, 1 postocellar (short and thin, divergent), 1 inner vertical, 1 outer vertical; 1 pair of vibrissae. Antenna yellow. Postpedicel rounded apically, approximately 2 times as long as wide. Arista black, plumose on whole length. Palpus filiform, yellow.

Thorax and scutellum black, greyish microtrichose. Setae: 1 postpronotal, 2 notopleural, 1+2 supra-alar, 2 postalar, (1–2)+2 dorsocentral; 1 proepisternal (yellow or black), 1 anepisternal (black, near posterior margin) and 1 long katepisternal (black, in upper posterior corner). Proepisternum with hairs. Anepisternum and katepisternum with pale hairs in posterior half. Anepimeron bare. Scutellum with 2 pairs of strong setae (discal and apical, Fig. 8).

Legs yellow, but femora of mid and hind legs in some specimens blackish posterodorsally. Male femora and tibiae with longer hairs than in female. Fore femur with row of long *pv* and row of short *av*. Fore tibia with rows of long *pv* and *av*, 1–2 *d* and 1 *pd* in basal half, 1 preapical *d*. Mid femur with rows of thin *a* and 1 preapical *pd*; in male with moderate long yellow hairs ventrally. Mid tibia with 1–2 *pd*, 1 *ad*, 1 *av*, 1–2 *p* and ring of apical setae; in male with long yellow hairs posteriorly. Hind femur with row of thin *ad* and 3–4 *av* in apical quarter; in male with moderate long yellow hairs ventrally. Hind tibia with 1–2 *ad*, 1–2 *pd*, 1 *av* in apical third, 1 preapical *d* and 1 apical *av*; in male with moderate long yellow hairs ventrally.

Wing clear, with brown veins. R_1 bare. Calypters and their margins greyish. Halter yellowish.

Abdomen black, greyish pruinose; in female tergites 7–9 shiny. Male sternites 4 and 5 as in Figs 3–4. Epandrium and surstyli as in Figs 5–7. Right surstylus sligthly longer than left, but is of equal form.

COMPARISON. The unique character of the new species is the presence of two pairs of setae on scutellum: apical and discal (Fig. 8) and occupies intermediate position between species of *Norellia* Robineau-Desvoidy, 1830 (all with apical pair only, Fig. 9) and *Norellisoma* Wahlgren, 1917 (all species has only discal pair, Fig. 10). The new species is more similar to *Norellisoma ivanae* Šifner, 2003 in structure of male sternite 5 (Fig. 2 and Fig. 4), but is readily distinguished from this species by structure of male sternite 4 which is wider than long (Fig. 1 and Fig. 3).

DISTRIBUTION. Austria, Italy and Switzerland.

Scathophaga karelica, **sp.n.**
Figs 11, 13–16.

MATERIAL. Holotype ♂, RUSSIA: Karelia, Poyakonda (66.5892200°N, 32.8286717°E), 30.VI.2010, A.L. Ozerov (in ZMUM). Paratypes: 2 ♂♂, with same label as holotype (in ZMUM).

DESCRIPTION. Length of body 5.8–6.2 mm, length of wing 5.0–5.7 mm.

Male. *Head*. Frons reddish-yellow in lower part and blackish around ocellar triangle, matt. Ocellar triangle black. Fronto-orbital plate black, greyish microtrichose. Face, parafacial and gena reddish-yellow, with whitish microtrichia. Postcranium black, greyish microtrichose, with black setae and setulae in upper third or half, and with yellow hairs in lower part. Setae: 3 orbital, 5 frontal, 1 ocellar, 1 inner vertical, 1 outer vertical, 1 postocellar (divergent); 1 pair of strong vibrissae and 4–5 pairs of short subvibrissae present. Antenna black. Postpedicel with roundish apical corner, approximately 1.5 times as long as wide. Arista black, bare. Palpus long, yellow. Clypeus and proboscis black.

Thorax black, greyish microtrichose. Scutum with light stripes along acrostichal and dorsocentral lines, with following setae: 2 postpronotal, 2 notopleural, 1+2 supra-alar, 1 (small)+2 intra-alar, 2 postalar, and 2+3 dorsocentral; acrostichals in two rows, prescutellar acrostichals well developed. Proepisternum and proepimeron each covered with hairs and with 1 seta. Anepisternum covered with hairs on all surface and with 4–5 black setae along posterior margin. Katepisternum covered with long hairs and 1 strong seta in posterodorsal corner. Anepimeron covered with hairs. Scutellum black, with 2 pairs of strong scutellar setae: apical and basal.

Legs. Coxae, trochanters, femora black, greyish microtrichose. Tibiae brownish, but darkened in central part, without long hairs. Tarsi brownish. Fore tibia with 2 *pd*, 3 *d* (including preapical), 1 *p* at middle, 1 apical *v*, and 1 apical *pv* setae. Mid femur with preapical *p* and *pd*. Mid tibia with 2 *ad*, 2–3 *pd*, 1–2 *p*, 2 *v*, and ring of apical setae. Hind femur with row of *ad*, 1 preapical *pd*. Hind tibia with 3–4 *ad*, 3 *pd*, 2–3 *av*, 1 preapical *d*, and apical *ad* and *av*.

Wing tinged with brownish; veins blackish. R_1 bare. Calypteres, margins of calypters, and halteres yellowish.

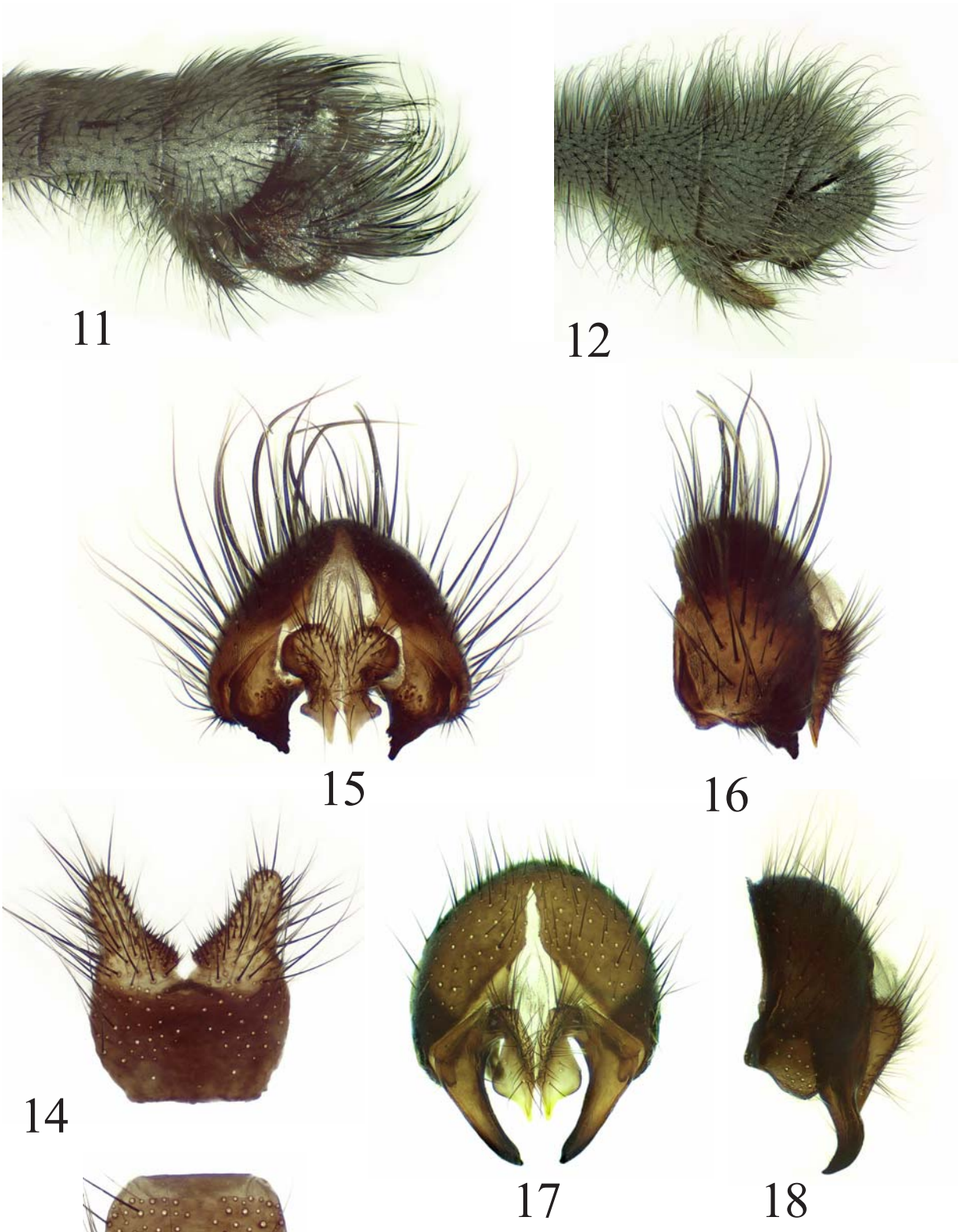
Abdomen black, greyish microtrichose, covered with not long hairs. End of abdomen as in Fig. 11. Sternites 4 and 5 as in Figs 13–14. Epandrium, cerci and surstyli as in Figs 15–16.

Female unknown.

COMPARISON. New species is very similar to *Scathophaga litorea* (Fallén, 1819), but is readily distinguished from it by the end of abdomen (Fig. 11 and Fig. 12) and structure of genitalia (Figs 15–16 and Figs 17–18).

NOTE. All flies were collected on stones in littoral zone of White Sea.

DISTRIBUTION. Russia: Karelia.



Figs 11–18. *Scathophaga karelica* sp.n. (11, 13–16) and *S. litorea* (Fallén) (12, 17–18), ♂♂: 11, 12 — end of abdomen, lateral view; 13 — sternite 4; 14 — sternite 5; 15, 17 — epandrium, cerci and surstyli, dorsal view; 16, 18 — epandrium, cerci and surstyli, lateral view.

Рис. 11–18. *Scathophaga karelica* sp.n. и *S. litorea* (Fallén), ♂♂: 11, 12 — конец брюшка, сбоку; 13 — стернит 4; 14 — стернит 5; 15, 17 — эпандрий, церки и сурстили, сверху; 16, 18 — эпандрий, церки и сурстили, сбоку.

Cleigastra sundukovi, **sp.n.**
Figs 19–23.

MATERIAL. Holotype ♂, RUSSIA: Kuril Islands, Shikotan I. Tserkovnaya Bay (43.75°N, 146.70°E), 10–14.VI.2012, Yu. Sundukov (in ZMUM). Paratypes: 5 ♂♂, 1 ♀ with same label as holotype (in ZMUM).

DESCRIPTION. Length of body 4.3–6.8 mm, length of wing 3.3–5.0 mm.

Male, female. *Head*. Frons black, matt. Ocellar triangle black. Fronto-orbital plate greyish microtrichose. Face, parafacial and gena pale yellow, with whitish microtrichia. Postcranium black, greyish microtrichose, covered with yellow hairs and with black postocular setae. Setae: 3 orbital, 3 frontal, 1 ocellar, 1 inner vertical, 1 outer vertical (short), 1 postocellar (divergent); 1 pair of strong vibrissae and 2 pairs of short subvibrissae present. Antenna black. Postpedicel with acutely angled upper apical corner, long, approximately 4 times as long as wide. Arista black, short haired on whole length. Palpus long, yellow. Clypeus and proboscis black.

Thorax black, greyish microtrichose. Scutum with following setae: 2 postpronotal, 2 notopleural, 1+2 supra-alar, 0+2 intra-alar, 2 postalar, and 3+3 dorsocentral; acrostichals in two rows, prescutellar pair not differentiated or only slightly longer than the other hairs on scutum. Proepisternum bare with 2 setae near lower margin. Proepimeron with 1 seta. Anepisternum covered with hairs in posterior half (pale yellow in male and black in female) and with 2–4 black setae along posterior margin. Katepisternum covered with long hairs in dorsal corner (pale yellow in male and black in female) and 3 strong setae in posterodorsal corner. Anepimeron bare. Scutellum black, with pair of strong lateral scutelar setae and pair of hair-like apical setae.

Legs. Coxae, trochanters, femora and tarsi black, but fore coxa outside and femora basally sometimes yellow; femora greyish microtrichose; tibiae yellow. Male coxae inside and femora ventrally with long pale yellow hairs; female coxae with black setae, femora ventrally without long hairs. Fore femur with rows of *d*, *ad* and *pd* setae; in female also with row of *pv* long thin setae. Fore tibia with 2 *pd*, 2 *ad*, 1 *p* at middle, and *v*, *d*, *p* apical setae. Mid femur with row of *a*, and preapical *p* and *pd* setae; in female also with 1 *av* at middle and 3–4 *v* (long but thin) in basal half. Mid tibia with 2 *ad*, 2 *pd*, 1 *p*, 1 *v*, and ring of apical setae. Hind femur with rows of *ad*, 1 preapical *pd* and 2–3 *d* setae; in female also with rows of *pv* and *av* setae. Hind tibia with 2–3 *ad*, 2–3 *pd*, 1 *av*, 0–1 *p*, 1 preapical *d*, and ring of apical setae.

Wing tinged with brownish; veins blackish; vein R_1 setulose on apical third of dorsal surface. Calypteres, margins of calypters, and halteres yellowish.

Abdomen black, greyish microtrichose, covered with black hairs. Tergites 2–6 each with row of long marginal setae. Sternites 4 and 5 as in Fig. 21. Epandrium, cerci and surstyli as in Figs 22–23.

COMPARISON. New species is very similar to *Cleigastra apicalis* (Meigen, 1826), but is readily distinguished from it by next. *C. apicalis* has femora yellow in ground color: fore femur yellow often with black stripe anteriorly, mid and hind femora yellow with black spot apically; male femora with black hairs ventrally; fore coxa yellow completely (Fig. 19). The new species has black femora completely or almost completely (basally sometimes yellow); male femora ventrally with long pale yellow hairs (Fig. 20). Sternites 4 and 5, epandrium, cerci and surstyli of both species not differing.

ETYMOLOGY. The new species is named after the collector, Yury Sundukov.

DISTRIBUTION. Russia: Shikotan Is.

Acerocnema arctica, **sp.n.**
Figs 24–27.

MATERIAL. Holotype ♂, Russia: Krasnoyarskiy Kray, Lake Taimyr, Baykuraneru Bay (~74.117°N, 100.95°E), 30.VII.–7.VIII.1976 (A. Rasnitsyn, I. Sukacheva) [in Russian] (in ZMUM).

Paratypes: 1 ♀, with same label as holotype (in ZMUM); 6 ♂♂, 1 ♀ Russia: Krasnoyarskiy Kray, N.–W. Taimyr penn., 12.5 km S. Dixon settl. (73.4°N 80.65°E), bank of Lemberova River, 9 and 26.VII.2012, Coll. A.Barkalov (in ISEA and ZMUM).

DESCRIPTION. Length of body 4.9–6.0 mm. Length of wing 3.5–4.2 mm.

Male, female. Head in profile higher than long. Frontal vitta matt, yellow; fronto-orbital plate yellow, sometimes blackish in upper part. Face, parafacial and gena yellow, with delicate whitish reflection. Ocellar triangle black. Postcranium black in upper half and yellow in lower half, greyish microtrichose. Height of gena sligthly less than vertical diameter of eye. Setae: 3 orbital, 2–3 frontal, 1 ocellar, 1 postocellar (short and thin, divergent), 1 inner vertical, 1 outer vertical; 1 pair of vibrissae. Scapus and pedicel blackish, postpedicel yellow in male and darkened in female. Postpedicel rounded apically, approximately 4–5 times as long as wide. Arista black, bare. Palpus filiform, yellow.

Thorax and scutellum black, greyish microtrichose. Scutum with four shining stripes: two between dorsocentral lines and with shining stripes distally of dorsocentral lines. Setae: 2 postpronotal (medial short), 2 notopleural, 1+2 supra-alar, 0+1 intra-alar, 2 postalar, 1+3 dorsocentral. Proepisternum with hairs and seta near lower margin. Proepimeron with seta. Anepisternum with pale hairs in posterior half and row of setae along posterior border. Katepisternum with pale hairs in posterior half and long seta in posterodorsal corner. Anepimeron bare. Scutellum with 2 pairs of strong setae (basal and apical).

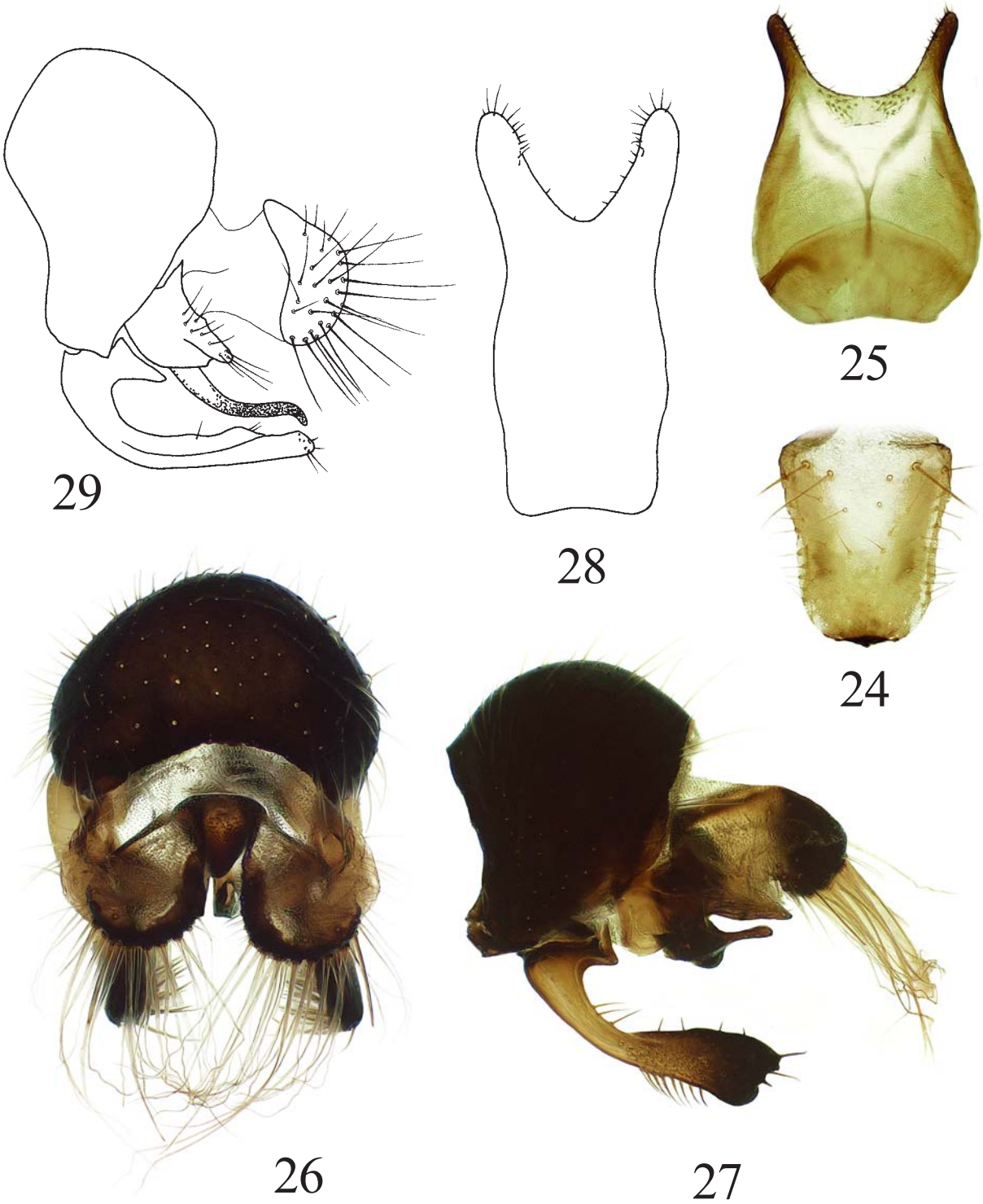
Legs yellow. Mid femur with preapical *pd* and *p*. Mid tibia with 1 *av*, 1 *pd*, 2 *ad*, 0–1 *p* and ring of apical setae. Hind tibia with 1–2 *ad*, 1–2 *pd*, 1 preapical *d* and 1 apical *av*.

Wing clear, with brown veins. R_1 bare. Calypters and their margins whitish. Halter yellowish.

Abdomen black, covered with yellow hairs. Male sternites 4 and 5 as in Figs 24–25. Epandrium and surstyli as in Figs 26–27.

Figs 19–23. *Cleigastra sundukovi*, sp.n. (20–23) and *Cleigastra apicalis* (Meigen, 1826) (19), ♂♂: 19 — habitus; 20 — same, holotype; 21 — sternites 4 and 5; 22 — epandrium, cerci and surstyli, dorsal view; 23 — epandrium, cerci and surstyli, lateral view.

Рис. 19–23. *Cleigastra sundukovi*, sp.n. (20–23) и *Cleigastra apicalis* (Meigen, 1826) (19), ♂♂: 19 — имаго; 20 — то же, голотип; 21 — стерниты 4 и 5; 22 — эпандрий, церки и сурстили, сверху; 23 — эпандрий, церки и сурстили, сбоку.

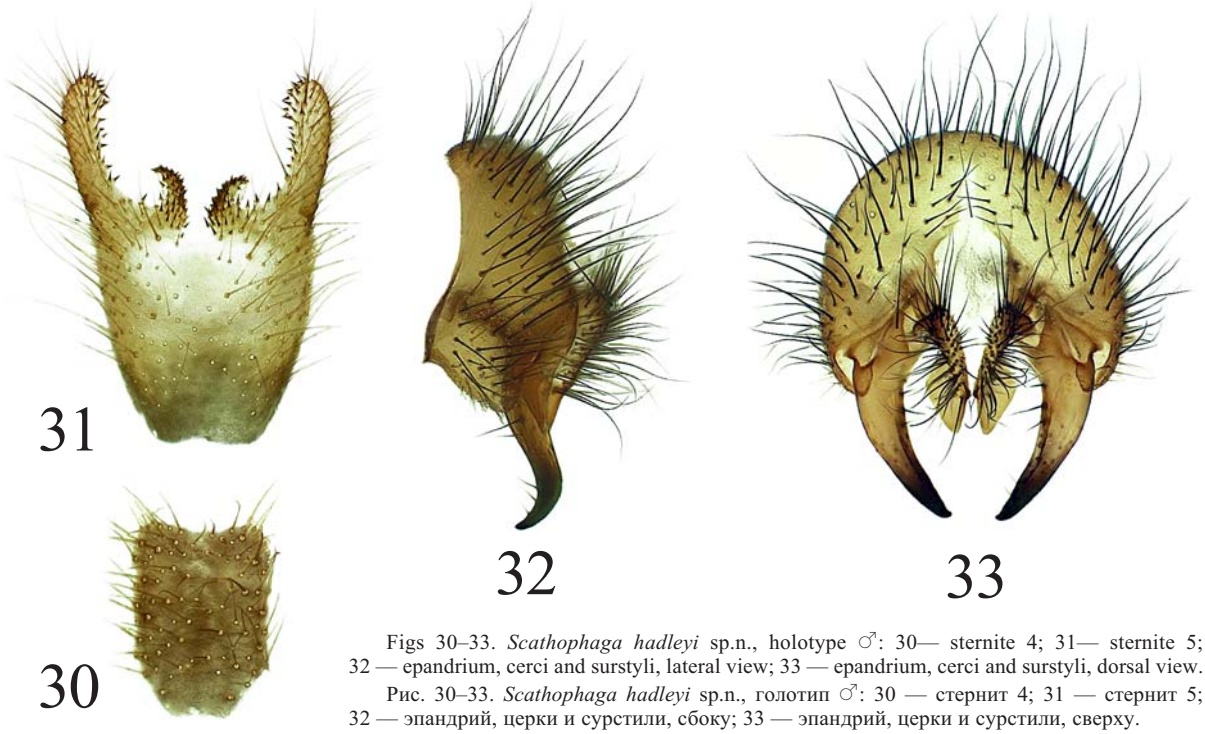


Figs 24–29. *Acerocnema arctica*, sp.n. (24–27) and *Acerocnema barkalovi* Ozerov, 2006 (28, 29), ♂♂: 24 — sternite 4; 25, 28 — sternite 5; 26 — epandrium, cerci and surstyli, dorsal view; 27, 29 — epandrium, cerci and surstyli, lateral view. 28, 29 after Ozerov, 2006.

Рис. 24–29. *Acerocnema arctica*, sp.n. (24–27) и *Acerocnema barkalovi* Ozerov, 2006 (28, 29), ♂♂: 24 — стернит 4; 25, 28 — стернит 5; 26 — эпандрий, церки и сурстили, сверху; 27, 29 — эпандрий, церки и сурстили, сбоку. 28, 29 по Ozerov, 2006.

COMPARISON. The new species is more similar to *Acerocnema barkalovi* Ozerov, 2006 by color of head and body, but differs by structure of postpedicel, male sternite 5 (Figs 25 and 28) and male genitalia (Figs 27 and 29). Postpedicel of *A. barkalovi* approximately 2,5 times as long as wide.

DISTRIBUTION. Russia: Krasnoyarskiy Kray (Taimyr Peninsula).



Figs 30–33. *Scathophaga hadleyi* sp.n., holotype ♂: 30— sternite 4; 31— sternite 5; 32 — epandrium, cerci and surstyli, lateral view; 33 — epandrium, cerci and surstyli, dorsal view.
Рис. 30–33. *Scathophaga hadleyi* sp.n., голотип ♂: 30 — стернит 4; 31 — стернит 5; 32 — эпандрий, церки и сурстили, сбоку; 33 — эпандрий, церки и сурстили, сверху.

Scathophaga hadleyi, **sp.n.**
Figs 30–33.

MATERIAL. Holotype ♂, RUSSIA: Kuril Islands, Shikotan I., Tserkovnaya Bay (43.75°N, 146.70°E), 11–17.VI.2012, Yu. Sundukov (in ZMUM). Paratypes: 2 ♀♀, with same label as holotype, but 25–30.IX. (in ZMUM).

DESCRIPTION. Length of body 5.7–6.8 mm, length of wing 5.5–6.7 mm.

Male, female. *Head*. Frons reddish-yellow in lower part and blackish around ocellar triangle, matt. Ocellar triangle black. Fronto-orbital plate greyish microtrichose. Face, parafacial and gena yellow, with whitish microtrichia. Postcranium black, greyish microtrichose, with black setae and setulae in upper third or half, and with yellow hairs in lower part. Setae: 3 orbital, 4–5 frontal, 1 ocellar, 1 inner vertical, 1 outer vertical, 1 postocellar (divergent); 1 pair of strong vibrissae and 4–5 pairs of short subvibrissae present. Scapus and pedicel reddish-yellow. Postpedicel black, with roundish apical corner, approximately 2 times as long as wide. Arista black, reddish-yellow basally, short haired on whole length. Palpus long, yellow. Clypeus and proboscis black.

Thorax black, greyish microtrichose. Scutum with light stripes along acrostichal and distally to dorsocentral lines, with following setae: 1–2 postpronotal, 2 notopleural, 1+2 supra-alar, 1+(2–3) intra-alar, 2 postalar, and 3+3 dorsocentral; acrostichals in two rows, prescutellar acrostichals well developed. Proepisternum and proepimeron each covered with hairs and with 1 seta. Anepisternum covered with hairs on all surface and with 3–4 black setae on upper posterior margin. Katepisternum covered with long hairs and 1 strong seta in posterodorsal corner. Anepimeron covered with hairs. Scutellum with 2 pairs of strong scutellar setae: apical and basal.

Legs. Coxae black, greyish microtrichose. Trochanters, femora, tibiae and tarsi yellow, but fore femur darkened dorsoanteriorly or in basal and central part. Fore tibia with 2–3 *pd*, 1 a*d* and 1 *p* at middle, 1 preapical *d*, and 1 apical *pv* setae. Mid femur with row of *ad* setae and preapical *p* and *pd*. Mid tibia with 2 *ad*, 3–4 *pd*, 1 *p*, 1 *v* (as setula in male), and ring of apical setae. Hind femur with 3–4 in apical third in male and row of *ad* in female. Hind tibia with 3–4 *ad*, 3 *pd*, 3 *av*, 1 preapical *d*, and apical *p*, *ad* and *v*.

Wing tinged with brownish; veins blackish, crossveins r–m and dm–cu no darkened. R1 bare. Calypteres, margins of calypters, and halteres yellowish.

Abdomen black, greyish microtrichose, in female segments 6 and 7 reddish-yellow; covered with not long light hairs in male and black setulae in female. Male sternites 4 and 5 as in Figs 30–31. Epandrium, cerci and surstyli as in Figs 32–33.

COMPARISON. New species is very similar to *Scathophaga litorea* (Fallén, 1819), but is readily distinguished from it by the yellow mid and hind femora, structure sternite 5, which with a pair of short central apical processes, and structure of cerci.

ETYMOLOGY. The new species is named after the developer of remarkable programm “CombineZP” Mr. Alan Hadley (Great Britan), with the help of which the illustrations were made.

DISTRIBUTION. Russia: Kuril Islands (Shikotan).

Notes on some types described by Holgmren and Ringdahl

frigida Holmgren, 1883: 176 (*Cordylura*).

This species was described by Holmgren from both sexes taken from "Matotschkin Scharr"[Novaya Zemlya, RUSSIA]. Only one male syntype without geographical label is deposited in NRMS and was examined by me. This specimen was also seen by J.R. Vockeroth, who labelled it as lectotype of *Cordylura frigida*, but this designation was not published. I have labelled it and designate it herewith as lectotype. Type-locality: Matochkin Schar, Novaya Zemlya (Russia). Lectotype is pinned. Condition is very good.

CURRENT NAME: *Allomyella frigida* (Holmgren, 1883).

NOTE. *A. frigida* was incorrectly recognized by Hackman [1956: 24, 58, Figs 58, 128] as *A. portenkoi* (Stackelberg, 1952) [see: Engelmark, 1999: 160], and later also by Gorodkov [1970: 455]. Vockeroth [1965: 835] recognized this species correctly.

nigripes Ringdahl, 1936: 165, 175 (*Acanthocnema*).

Described from a single male from "Snasahögarna i Jämtland". Holotype male in MZLU (good condition), labelled "Snasen 19.8-30". "alp", "Jä leg. O. Ringdahl", "Typus". Type-locality: "Gebirge Snasahögarna in Jämtland" (Sweden). Holotype is conspecific with *Acanthocnema latipennis* Becker, 1894.

CURRENT NAME: A jounior synonym of *Acanthocnema latipennis* Becker, 1894, **syn.n**.

parviceps Ringdahl, 1936: 175 (*Scopeuma*).

Described from a single male "im Vällista-Gebirge in Jämtland". Holotype male in MZLU (very good condition), labelled "Vällista 2.7-25", "Jä leg. O. Ringdahl", "Typus". Type-locality: "Vällista-Gebirge in Jämtland" (Sweden). Holotype is conspecific with *Scathophaga lutaria* (Fabricius, 1794).

CURRENT NAME: A jounior synonym of *Scathophaga lutaria* (Fabricius, 1794), **syn.n**.

albipilum Ringdahl, 1936: 177 (*Amaurosoma*).

Described from a single male taken " in Jämtland bei Vallbo". Holotype male in MZLU (good condition), labelled "Vallbo 29.6-35", "Holotypus", "Nanna inermis Becker H. de Jong det 1992". Type-locality: "Jämtland bei Vallbo" (Sweden). I agree with determination by H. de Jong.

CURRENT NAME: A jounior synonym of *Nanna inermis* (Becker, 1894), **syn.n**.

villosiventre Ringdahl, 1937: 38 (*Scopeuma*).

vulpinum Ringdahl, 1936: 173 (*Scopeuma*). Junior primary homonym of *Scopeuma vulpina* Coquillett, 1898.

villosiventre Ringdahl, 1937: 38 (new name for *Scopeuma vulpinum* Ringdahl, 1936).

Described from a single male "aus dem nördliehen Lappland bei Torneträsk in der Regio alpina".

Holotype male (abdomen dessected and mounted in tube with glycerol on the same pin with the specimen) labelled "Reg. arc.", 23.7. 191", "Torne Tr. Malaise", "Typus" and is conspecific with *Scathophaga apicalis* (Curtis *in* Ross, 1835). Type-locality: "Lappland bei Torneträsk in der Regio alpina" (Sweden).

CURRENT NAME: A jounior synonym of *Scathophaga apicalis* (Curtis *in* Ross, 1835), **syn**.**n**.

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