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Notes on genus *Elgiva* Meigen, 1838 (Diptera, Sciomyzidae)

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Abstract. A short characteristic of the genus *Elgiva* Meigen, 1838 is given. On the basis of the material stored in Russian collections, the data on distribution of its species in the territory from East Europe to the Far East of Asia are significantly updated. A new synonym is proposed: *Elgiva solicita* Harris, 1780 = *E. manchurica* Rozkosny et Knutson, 1991, **syn. nov.** A new identification key for Palaearctic *Elgiva* is proposed. The Nearctic fauna of *Elgiva* is also discussed. In authors' opinion, all species of *Elgiva* described from America are closely related to *E. divisa* if not the same. So, we consider *E. connexa* a subspecies of *E. divisa connexa* Steyskal, 1954.

Keywords: Diptera, Sciomyzidae, *Elgiva*, taxonomy.

Заметки по роду *Elgiva* Meigen, 1838 (Diptera, Sciomyzidae)

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Аннотация. Дана краткая характеристика рода *Elgiva* Meigen, 1838. На основе материала из российских коллекций существенно дополнены данные о распространении голарктических видов *E. cucularia*, *E. solicita*, *E. divisa* на территории от Восточной Европы до Дальнего Востока. Предложен новый синоним: *Elgiva solicita* Harris, 1780 = *E. manchurica* Rozkosny et Knutson, 1991, **syn. nov.** Предложен новый ключ для определения палеарктических видов *Elgiva*. Обсуждена неарктическая фауна: по мнению авторов, все виды *Elgiva*, описанные из Америки, очень близки, если не конспецифичны *E. divisa*. Так, мы рассматриваем *E. connexa* как подвид *E. divisa connexa* Steyskal, 1954.

Ключевые слова: Diptera, Sciomyzidae, *Elgiva*, таксономия.

Introduction

Elgiva Meigen 1838 (= *Hydroneura* Hendel) is a Holarctic genus. It is characterized as follows. *Head* with 2 pairs of frontal setae and with strong ocellar setae. Cheek about as high as height of eye. Eye with stripes (in fresh specimens, see Figs 1–2). Pedicel about as long as postpedicel, postpedicel subtriangular. Arista thickened and brown in basal third, whitish in apical part, almost bare. *Thorax*. Scutal setae reduced: presutural supra-alar and acrostichal absent; 0 + 1 dorsocentral. Anepisternum, anepimeron, and meron setulose, subalar seta absent, prosternum bare or with hairs. *Wings* with posterior crossvein typically S-shaped. Wing hyaline but with more or less pronounced dark-grey pattern as in Fig. 3, both crossveins distinctly darkened. *Legs* yellow, *f2* with submedian *a* seta; *f3* with ventral spines; inner posterior margin of hind coxa with hairs.

Larvae of *Elgiva* are parasites on aquatic Gastropoda. Adults are usually found on vegetation near water, in temperate zone (like Moscow region) they are active from March to October. Imagoes probably overwintering.

We share Rozkosny's (1987) taxonomic point of view on the Palaearctic fauna of genus *Elgiva* as consisting of 3 valid species (*E. cucularia* Linnaeus, 1767, *E. solicita* Harris, 1780, *E. divisa* Loew, 1845). The later described *Elgiva manchurica* Rozkosny et Knutson, 1991 is synonymized here to *E. solicita*. Here we offer our point of view on taxonomy of the genus, including its American representatives, give new distributional data and revised identification key for *Elgiva*.

Material examined

Geographical coordinates are given in the decimal degrees. The full names of regions of Russian administrative subdivision are an entangled result of political and historical events of no interest for zoology, so they are listed as name (taken from English version of Wikipedia) and word "region".

Abbreviations: ZIN — Zoological Institute, Saint Petersburg, Russia; ZMUM — Zoological Museum of Moscow University, Russia; R. — river; L. — lake; reg. — region or province or state or aimak.

Elgiva cucularia Linnaeus, 1767
Figs 1, 6
Musca cucularia Linnaeus, 1767
Tetanocera punctithorax Roser, 1840
BELARUS: *Brest* reg., Pinsk (60 km E of Pinsk, 52.2°N 27.0°E), V. Gindtse, 2 June 1905, 1♀ (ZIN);
Gomel reg., Mozyr env., 52.05°N 29.31°E, N. Vikhrev, 11–14 June 2019, 1♂ (ZMUM);
Vitebsk reg., Ezerische, 55.83°N 30.00°E, N. Vikhrev, 16–17 May 2019, 1♂ (ZMUM).
Minsk reg., Borisov env., 54.15°N 28.63°E, D. Gavryushin, 7 July 2013, 1♂, 1♀ (ZMUM).
KAZAKHSTAN, *North Kazakhstan* reg.: Ishim R., 53.35°N 67.05°E, O. Kosterin, 15 August 2015, 1♂ (ZMUM).
NETHERLANDS, Berendonck (51.81N 5.78E), G. Pennards, 24 June 2001, 1♂ (ZMUM).
RUSSIA: *Arkhangelsk* reg., Solvychegodsk, 61.34°N 46.91°E, 17 August 2010, D. Gavryushin, 4♂, 2♀ (ZMUM);
Bashkortostan reg., Abzakovo-Murakaevo env. (53.8°N 58.7°E), 2–8 August 2008, K. Tomkovich, 1♂; Beloretsk env., Nura R., 53.97°N 58.34°E, 10 August 2012, D. Gavryushin, 1♂ (ZMUM);
Irkutsk reg., Malta vill. (52.84°N 103.52°E), 12 May 1907, D. Smirnov, 1♀ (ZIN); *Karachay-Cherkess* reg., Teberda Nature Reserve (43.29°N 41.63°E, 1600 m), 10–15 July 1982, K. Gorodkov, 1♀ (ZIN);
Khakassia reg., Beljo salt-lake, 54.65°N 90.18°E, 1–3 July 2011, K. Tomkovich, 1♂ (ZMUM);
Kursk reg., Oboyan env., Psyol R., 51.19°N 36.31°E, N. Vikhrev, 27 July 2007, 1♀; A. Ozerov, 6 September 2007, 1♂, 1♀ (ZMUM);
Mordovia reg., Pushta vill. env., 54.71°N 43.22°E: 18–22 May 2020, N. Vikhrev, 1♀; 8–12 June 2020, N. Vikhrev, 1♂, 2♀; 1–5 September 2020, N. Vikhrev, 1♂ (ZMUM);
Moscow reg., Naro-Fominsk env. (55.4°N 36.7°E), D. Gavryushin, 13 May 2006, 1♂; 1 April 2007, 1♂; 22–28 July 2006, 2♀; Kostino env., 56.311°N 37.764°E, N. Vikhrev, 24 April 2007, 2♂; 15 May 2007, 10♂; 2 July 2007, 2♀ (ZMUM);

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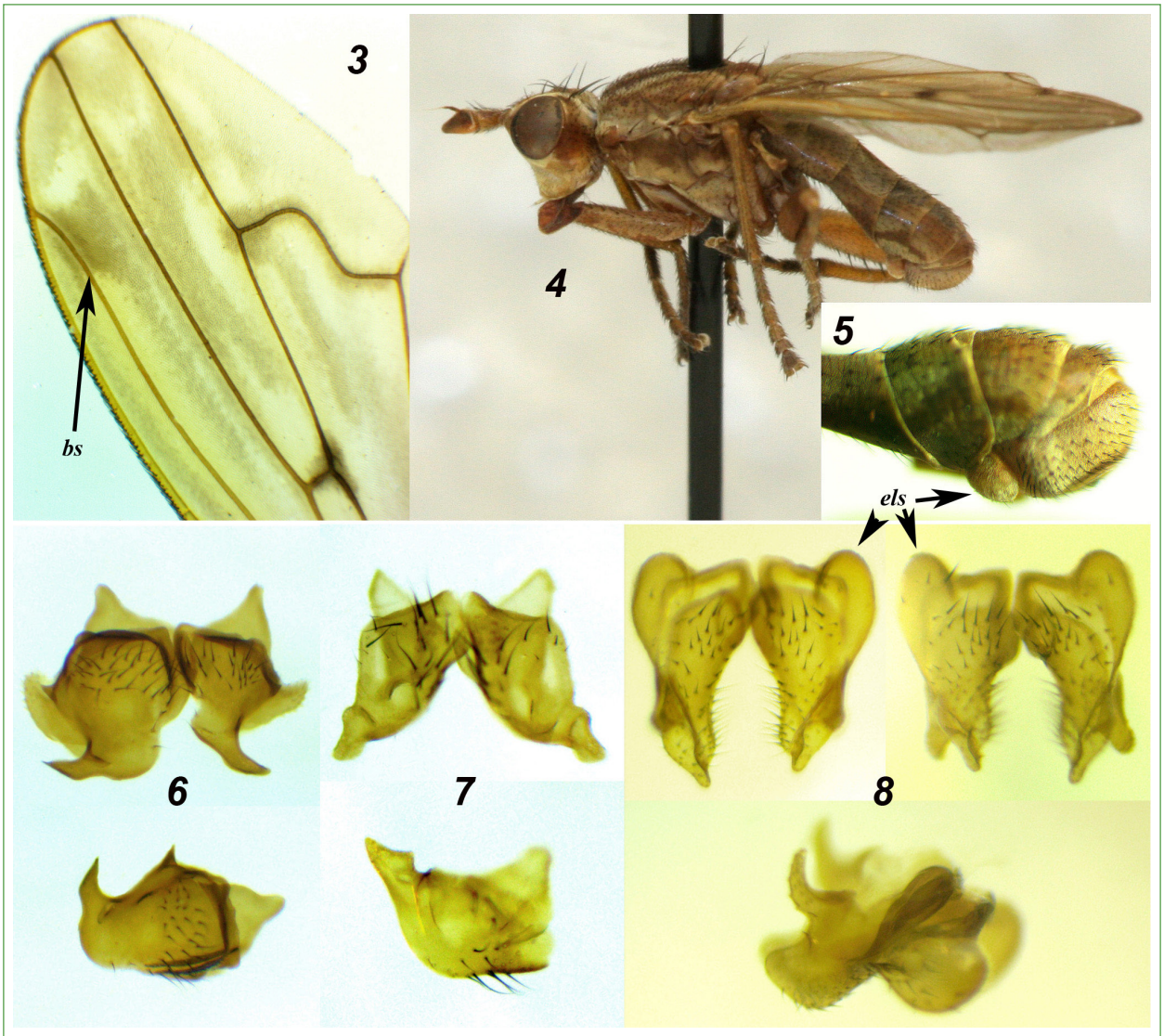
Figs 1–2. *Elgiva*: *1 — E. cucularia*, male; *2 — E. solicita*, female
Рис. 1–2. *Elgiva*: *1 —E. cucularia*, самец; *2 — E. solicita*, самка

Novgorod reg., Yuriev Monastery (58.49°N 31.28°E), 1 October 1968, K. Gorodkov, 1♂ (ZIN);
Novosibirsk reg., (50 km NE of Novosibirsk), 55.52°N 83.24°E, 22 May 2011, O. Kosterin, 1♂; Akademgorodok env., 54.86°N 83.05°E, O. Kosterin, 21 June 2008, 3♂, 1♀ (ZMUM);
Omsk reg., Omsk, Victory Park (54.96°N 73.36°E), O. Kosterin, 14–18 July 2007, 1♂; 10 April 2008, 1♀ (ZMUM);
Smolensk reg., Smolenskoye Poozerye National Park (55.5°N 31.9°E), V. Zlobin, 3–18 June 1992, 6♂, 5♀ (ZIN);
Tyumen reg., Tobolsk env., Zhukovo (58.2°N 68.3°E), 18 July 1935, Psamko, 1♀ (ZIN); *Voronezh* reg., Shilovsky forest (51.58°N 39.18°E), 7 September 1965, O. Negrobov, 1♂, 1♀ (ZIN); Ramon (51.92°N 39.35°E), A. Shatalkin, 12 September 1978, 1♀ (ZMUM). DISTRIBUTION. The western part of Palaearctic including Western Siberia. There is a specimen from Irkutsk region in East Siberia, so the eastern border of distribution needs to be clarified. The Northern limit of distribution is about 60°N, the southern limit is N Africa, Maghreb (Rozkosny 1987).

Elgva divisa Loew, 1845
Figs 4, 5, 8
Tetanocera divisa Loew, 1845
Hedroneura rufina Hendel, 1932
MONGOLIA: Khentii, Bayan-Adarga (48.56°N 111.08°E, 1020 m), 26 August 1975, E. Narchuk, 1♂ (ZIN);
RUSSIA: *Altai Rep*. reg., Seminsky pass env., Sarlyk R.,51.11°N 85.60°E, 1200 m, 28–30 June 2016, N. Vikhrev, 2♂ (ZMUM);
Chukotka reg., Meynypilgyno, 62.6°N 177.0°E, P. Tomkovich, 25–29 July 2015, 3♂; 21–30 June 2016, 1♂ (ZMUM);
Taymyr reg., Zhdanikha, 72.16°N 102.89°E, 27–30 August 1971, V. Zherikhin, A. Rasnitsin, I. Sukacheva, 2♂ (ZMUM);
Tuva reg., Uyuk R., 52.07°N 94.04°E, 800 m, 27 May 2018, N. Vikhrev, 1♂ (ZMUM);
Yakutia reg, Verkhoyansky distr., Stolby (67.54°N 134.11°E), 29 July 2008, A. Ovchinnikov, 1♂; Yakutsk env., Chocur-Muran Mt. (62.010°N 129.565°E, 200 m), 2 July 2008, A. Ovchinnikov, 1♂ (ZIN);
Yamalo-Nenets reg., Kharp, 66.81°N 65.78°E, N. Vikhrev, 10–13 July 2019, 16♂, 8♀; Salekhard env., 66.6°N 66.8°E, N. Vikhrev, 16–19 July 2019, 4♂ (ZMUM).
DISTRIBUTION. Holarctic. A cold-loving species. North of the Arctic circle in lowlands, in Russian Altai-Sayan Mts and Mongolian Khentii Mts it is distributed much further to the south, till 50°N. Other authors reported more southern records for *E. divisa*, for example, Rozkosny (1987) mentions Karelia and Omsk regions of Russia. We formulate the distribution of the species on the basis of only those specimens that we have examined ourselves and for the identification of which we are responsible.

Elgiva solicita Harris, 1780
Figs 2, 3, 7
Musca solicita Harris, 1780
Musca rufa Panzer, 1798
Tetanocera lineata Day, 1881



Figs 3–8. *Elgiva*: *3* — wing of *E. solicita* with butterfly-like dark spot near apex of R_{2+3}; *4* — *E. divisa*, male; *5* — close-up of abdomen of male *E. divisa* with ear-like structure at base of surstyli usually visible on intact specimen; *6* — surstyli of *E. cucularia* caudal and lateral; *7* — surstyli of *E. solicita* caudal and lateral; *8* — surstyli of *E. divisa* caudal (two projections) and lateral; ***bs*** — butterfly-like dark spot near apex of R_{2+3}; ***els*** — ear-like structure at base of surstyli

Рис. 3–8. *Elgiva*: *3* — крыло *E. solicita* с темным пятном в виде бабочки у конца R_{2+3}; *4* — *E. divisa*, самец; *5* — брюшко самца *E. divisa* с ушковидным выступом в основании сурстилей, обычно хорошо заметным у непрепарированных экземпляров; *6* — сурстили *E. cucularia* сзади и сбоку; *7* — сурстили *E. solicita* сзади и сбоку; *8* — сурстили *E. divisa* сзади (с двух ракурсов) и сбоку; ***bs*** — пятно в виде бабочки у конца R_{2+3}; ***els*** — ушковидное вздутие в основании сурстилей

Elgiva sundewalli Kloet & Hincks, 1945
Elgiva manchurica Rozkosny et Knutson, 1991 **syn. nov**.

PALAEARCTIC MATERIAL: BELARUS: *Brest* reg., Belovezhskaya Pushcha NR (52.5°N 23.8°E), 17 July – 7 August 1961, E. Narchuk, 1♂, 1♀ (ZIN);
Vitebsk reg., 12 km W of Myory, marshland "Boloto Mokh", 55.60°N 27.45°E, 19 September 2009, G. Sushko, 2♂, 2♀ (ZIN);
HUNGARY: 45 km S of Budapest, Domsod (47.09°N 19.00°E), 25 June 1970, K. Gorodkov, 1♀ (ZIN);
KAZAKHSTAN, *North Kazakhstan* reg.: Ishim R., 53.35°N 67.05°E, O. Kosterin, 15 August 2015, 1♂; Petropavlovsk, 54.84°N 69.12°E, O. Kosterin: 16 August

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2015, 2♀; O. Kosterin, 28 June 2015, 2♂ (all ZMUM).
NETHERLANDS, Wageningen (51.96°N 5.67°E) G. Pennards, 13 September 1990, 1♀ (ZMUM).
RUSSIA: *Altai Kray* reg., Zmeinogorsk distr., Kolyvanovskoe L., 51.35°N 82.19°E, O. Kosterin, 8 September 2007, 1♂ (ZMUM);
Amur reg.: Zeya env. (53.7°N 127.3°E), 20–21 June 1978, A. Shatalkin, 2♂, 2♀; 7 June 1981, A. Shatalkin, 2♂; 12 September 1981, A. Ozerov, 2♀ (ZMUM);
Buryatia reg., Uda River, 52.3°N 110.5°E, 22 June 1969, A. Rasnitsin, 2♂, 1♀ (ZMUM);
Khabarovsk reg., Okhotsk airport, 59.41°N 143.07°E, swamp in larch forest, 24 August 1987, K. Gorodkov, 5♂, 1♀ (ZIN); Bychikha vill., 48.31°N 134.83°E, O. Kosterin, 25 July 2020, 3♂, 2♀; 9 August 2020, 1♂, 1♀ (ZMUM);
Kaliningrad reg., Baltiysk env., 54.67°N 19.94°E, 23 August 2013, K. Tomkovich, 1♂ (ZMUM);
Kursk reg., Oboyan env., Psyol R., 51.19°N 36.31°E, K. Tomkovich, 14 May 2008, 1♂, 1♀ (ZMUM);
Mordovia reg., Pushta vill. env., 54.71°N 43.22°E: M. Esin, M. Yanbulat, 8–12 June 2020, 5♂, 4♀; N. Vikhrev, 1–5 September 2020, 3♂ (ZMUM);
Moscow reg., Naro-Fominsk env. (55.4°N 36.7°E), D. Gavryushin, 20 March 2007, 2♂; 17 April 2007, 4♂, 1♀; Kostino env., 56.311°N 37.767°E, N. Vikhrev, 8–10 May 2007, 4♂, 1♀ (ZMUM);
Omsk reg., Omsk, Victory Park (54.96°N 73.36°E), O. Kosterin, 27 August 2007, 1♂, 1♀; 14–18 July 2007, 1♂; 3 April 2008, 2♂, 1♀; 10 April 2008, 1♂; 24 June 2008, 6♂ (ZMUM);
Novosibirsk reg., Akademgorodok env., 54.86°N 83.05°E, O. Kosterin, 18 June 2009, 1♂; 9–10 September 2009, 1♂ (ZMUM);
Primorsky reg., Andreevka env., 42.68°N 131.11°E, N. Vikhrev: 25–30 June 2014, 2♀; 26–31 July 2018, 1♀; Lotos L., 42.46°N 130.64°E, N. Vikhrev: 1–3 July 2014, 6♂, 3♀; 28 July 2018, 2♀ (ZMUM);
Saint Petersburg reg., Luga disr., Yaschera (59.15°N 29.91°E), A. Stackelberg, 10 July–20 August 1963, 4♂, 6♀ (ZIN);
Yakutia reg, Indigirka R., 15 km S of Tyubelyakh (Tyubelyakh distr., 15 km S of Chumpu-Kytyl, 65.25°N 143.10°E), E. Narchuk, 11 July 1974, 15♂, 10♀ (ZIN); 30 km SEE of Ust-Nera (64.5°N 143.7°E), E. Narchuk, 6 July 1974, 2♂ (ZIN); Verkhoyansky distr., Stolby (67.54°N 134.11°E), A. Ovchinnikov, 29 July 2008, 1♂ (ZIN); Yakutsk env., Chocur-Muran Mt. (62.010°N 129.565°E), A. Ovchinnikov, 2 July 2008, 1♂ (ZIN); Khaptagay vill. (61.8°N 129.8°E), R. Kamenskaya, 2 July 1974, 1♂ (ZMUM);
Yaroslavl reg., Yaroslavl (57.6°N 39.9°E), A. Shatalkin, 18 August 1977, 1♂ (ZMUM).
NEARCTIC MATERIAL: CANADA: *Manitoba*, Whitewater L. (49.2°N 100.3°W), R.B. Madge, 22 June 1958, 1♂, 1♀ (labeled as *Elgiva sandewalli*, det. K and H. Shewell, 1965);
Saskatchewan, Saskatoon (52.1°N 106.7°W), J.R. Vockeroth, 27 September 1948, 1♂, 1♀ (ZIN).
USA: *Alaska*, Matanushka Valley (61.4°N 150.2°W), C. O. Berg, 26 June 1950, 1♀;
New York, Ithaca env. (42.5°N 76.5°W), C. O. Berg, 9 August 1954, 1♀ (with Steyskal's det. label: *Hydroneura rufa* Panzer) (ZIN).
DISTRIBUTION. Holarctic. Usually may be found at the same pond with *E. cucularia*; recorded together with *E. divisa* only in two localities in Yakutia.
SYNONYMY. *Elgiva manchurica* Rozkosny et Knutson, 1991 was described by a single male from China, Manchuria (= Heilongjiang prov.), Harbin (= 45.8°N 126.7°E). *E. divisa* have no ventral spines on the fore femur while *E. solicita* has. The authors did not find ventral spines on fore femur of the type specimen of *E. manchurica* and for this reason, compared it with *E. divisa*, did not compare it with *E. solicita* and described it as a new species. Sometimes the ventral spines on *f1* in *E. solicita* may be weak (often in Far Eastern specimens) or broken, or hardly visible because of folded fore tibia and femur. By all other characters *E. manchurica* is *E. solicita*: "bare prosternum … wing yellowish, distinctly darkened at apex of cell R_{4+5} [= dark spot near apex of R_{2+3}]… much broader more massive male gonosty-

li [= surstyli as in *E. solicita*, authors gave drawings of gonostyli [surstyli], it is clear on both lateral and caudal projections]" (Rozkosny et Knutson 1991: 67–69 and figs 1–2). We have not examined the holotype but we have three series from neighboring localities: Amur reg. (850 km North), Khabarovsk reg. (650 km North-East) and Primorsky reg. (500 km South-East from Harbin respectively), all these specimens belong to *E. solicita*. The ecological reasons (lowland at 45.8°N) also suggest *E. solicita*. Specimens of *E. solicita* from Far East of Palaearctic seem to have wing with stronger yellow tint and more distinct dark pattern than European, but western ones may have such wing colouration as well. So, *E. solicita* Harris, 1780 = *Elgiva manchurica* Rozkosny et Knutson, 1991, **syn. nov**.

Key to Elgiva ♂♀

1. Thorax bluish-grey dusted, contrasting to brownish abdomen. Anepisternum with a round brown spot below notopleural setae (Fig. 1). Anepisternum apart from hairs with 1 (0–2) rather strong seta. Cheek distinctly narrower than height of eye. ♂: surstyli as in Fig. 6: anterior lobe long, strongly curved, pointed at apex; posterior lobe small, also pointed at apex. (*f1* without ventral spines. Prosternum bare. Wings with a butterfly-like dark spot near apex of R_{2+3}. Both orbito-antennal and orbital spots contrasting black, distinct.) ..... ***cucularia*** Linnaeus
— Thorax brownish, concolour with abdomen. Anepisternum without dark spot and without strong seta, only with hairs. Cheek about as high as that height of eye **2**
2. Prosternum bare. *f1* in apical half with 1–2 *pv* and 1–4 *av* spines apart from fine hairs. Wings with a butterfly-like dark spot near apex of R_{2+3}. Orbito-antennal spot black, orbital spot usually present. Thoracic vittae less distinct. ♂: surstyli as in Fig. 7: anterior lobe wide, not curved; posterior lobe indistinct ..... ***solicita*** Harris
— Prosternum with 1–3 pairs of hairs. *f1* ventrally with fine hairs only. Wings without butterfly-like dark spot near apex of R_{2+3}. Orbito-antennal spot brown, orbital spot absent. Thoracic vittae more distinct. ♂: surstyli as in Fig. 8: anterior lobe wide and rounded at apex, posterior lobe long, strongly curved; outer basal part of each surstylus thickened, forming a characteristic ear-like structure. Apex of abdomen globular, ear-like structure at base of surstyli usually visible on intact specimen as in Figs 4–5 ..... ***divisa*** Loew

Notes on the Holarctic fauna of Elgiva

As shown above, the Palaearctic fauna of *Elgiva* is represented by three valid species. *E. cucularia*, distributed in Europe and Western Siberia, appears to be the most divergent one, this fact indicates that the genus *Elgiva* is originated from the Western Palaearctic. If so, the cold-resistant *E. solicita* and the Polar *E. divisa* entered America through the Bering Land Bridge, which was formed several times on the site of the Bering Strait while the ocean level was lowered.

Substantial variability in the wing pattern as well as in the development of frontal spots and ventral spines on *f1* is known for *E. solicita*. The American specimens of *E. solicita* often have a pair of hairs on prosternum (Orth, Knutson 1987). Nevertheless, the entire Holarctic population of *E. solicita* is considered as a single species, and we agree with this.

E. divisa has a Polar distribution, it is common in Chukotka Peninsula, migrations of this species to America seem quite probable. As follows from the new records given in the present paper, apart from Polar regions *E. divisa* also inhabits several southern mountain exclaves: in Altai and Sayan Mountains in Russia and Khentii Mountains in Mongolia. We suppose that these exclaves are refugiums of the last Glacial Period. The entire Palaearctic population is again considered as a single species, while in the Nearctic region *E. divisa* is split into complex of four related species:

E. divisa

CANADA: *Alberta*: 15 mi N of Banff, Banff-Jasper Hw. (51.26°N 115.92°W), 4500 ft (1400 m), R. Coyles, 25 July 1955, 1♂ (*Elgiva connexa*, det: Shewell, 1965).

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E. connexa Steyskal, 1954

E. divisa connexa Steyskal, 1954 **stat. nov.**
CANADA: *Alberta*: Banff, (51.18°N 115.58°W), C. Garrett, 25 May 1922, 1♂ (paratype *Hydroneura connexa*, Steyskal No 6050);
Ontario, Moose Factory (51.26°N 80.60°W), B.J. LeBoux, 10 June 1949, 1♀ (paratype *Hydroneura connexa*, Steyskal No 6050);
Manitoba, Fort Churchill (58.76°N 94.14°W), J.G. Chillcott, 3 June 1952, 1♀ (all ZIN).
USA, *Colorado*, Platte Canyon near Idlewild (presently Winter Park 39.89°N 105.76°W), J.M. Aldrich, 10 June 1927, 1♂, 1♀ (paratype *Hydroneura connexa*, Steyskal, No 51609 USNM) (ZIN).
REMARKS. Steyskal 1954: fig. 7 showed swellings on the tip of the male abdomen. It is not clear if we should regard these swellings as a genitalic or a non-genitalic character.

E. elegans Orth et Knutson, 1987
REMARKS. Two specimens from Platte Canyon listed here under *E. connexa* and were included in the type series *E. connexa* (by Steyskal 1954: 62). However, Orth, Knutson (1987: 836) listed them as *E. elegans*. The male from Platte Canyon has the swellings on the tip of the abdomen and should be identified as *E. connexa* according to the key offered by Orth, Knutson (1987). In our opinion, genital differential characters of this species are the most doubtful.

E. pacnowesa Orth et Knutson, 1987
REMARKS. Surstyli with robust lobes. No material examined.

Why the population of *E. divisa* is a single species in its homeland, i.e. in Palaearctic, despite the presence of mountain exclaves, but gave a complex of species when spread to the Nearctic? The reason is that different approaches are used to recognise species in the Palaearctic and Nearctic. The Palaearctic *E. solicita* and *E. divisa* are similar but they differ by a set of correlated characters both non-genitalic and genitalic; differences in male genitalia are unmistakable; females also can be identified. The species of the Nearctic *E. divisa* complex differ by a single genital character which is not convincing; females are undistinguishable.

There is an opinion that differences (even very small ones) in the structure of male genitalia are a more reliable argument for separating species than non-genitalic characters. However, we do not see confirmation of this either in the literature or in our own observations. In groups that are characterized by distinct sexual dimorphism (some Muscidae, for example, *Hydrotaea*), males are often easily distinguished by non-genitalic characters but have similar genitalia, the reverse situation is much rarer.

For taxa described as species of the Nearctic *E. divisa* complex it is unknown if they are reproductively isolated from each other or not. It is unknown for the vast majority of organisms. However, it is known, for example, that Neanderthals and humans did not lose the ability to interbreed, despite more than half a million years of isolation and significant morphological differences accumulated during this time (Reich 2018).

We believe that the taxonomy of Sciomyzidae has an obvious trend towards oversplitting, and this trend causes more harm than benefit (Vikhrev, Yanbulat 2019). In our opinion, Occam's presumption "entities should not be multiplied without necessity" is the best approach until otherwise is clearly indicated.

Without examination of the Nearctic material we cannot offer to synonymise, for example, *E. elegans*. However, we share Rozkosny's (1987) opinion that *E. connexa* is "very closely related if not identical" to *E. divisa* and we decrease its taxonomic rank to subspecies: *E. divisa connexa* Steyskal, 1954. Thus, American specimens may be identified either as *E. divisa* (any female, for example) or as *E. d. divisa* or *E. d. connexa* if necessary and possible.

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