

A new genus of the subfamily Orgilinae (Hymenoptera: Braconidae) in the fauna of the Russian Far East, with description of a new species

Новый род подсемейства Orgilinae (Hymenoptera: Braconidae) в фауне российского Дальнего Востока с описанием нового вида

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Ключевые слова: Восточная Палеарктика, Ichneumonoidea, Mimagathidini, *Eleonoria*, паразитоиды, таксономия, сравнение.

Abstract. The genus *Eleonoria* Braet et van Achterberg, 2000 from the braconid subfamily Orgilinae is recorded in the fauna of Russia for the first time. A new species, *Eleonoria asleleji* sp.n., is described and illustrated from the Primorskiy Territory. This is the northernmost record of *Eleonoria* in Asia.

Резюме. Род *Eleonoria* Braet et van Achterberg, 2000 из браконидного подсемейства Orgilinae впервые отмечается в фауне России. Новый вид *Eleonoria asleleji* sp.n. описывается и иллюстрируется из Приморского края. Это самое северное указание рода *Eleonoria* в Азии.

Introduction

The Braconidae parasitoids in the fauna of Russian Far East are very diverse and one of the most peculiar group in Russia. Besides Palaearctic components, this fauna includes a set of genera penetrating in this territory from the Oriental region.

The most complete information available on the Braconidae fauna of the Russian Far East was published in three books of the “Key to insects of the Russian Far East” [Belokobylskij et al., 1998, Belokobylskij, Tobias, 2000, 2007] and was summarised in the “Annotated catalogue of the insects of Russian Far East. Hymenoptera” [Belokobylskij et al., 2012] and more recently in the “Annotated catalogue of the Hymenoptera of Russia” [Belokobylskij et al., 2019]. However, the ongoing collecting of the braconids in this region regularly supplements the information on the diversity of the Far Eastern fauna of these parasitoids.

The peculiar subfamily Orgilinae is not rich in genera composition: only three tribes and 13 genera, mostly from tropical and subtropical regions, are known in the world fauna. Of these, only one genus — *Stantonia* Ashmead, 1904 from the tribe Mimagathidini, and two genera — *Orgilus* Haliday, 1833 and *Kerorgilus* van Achterberg, 1985 from the tribe Orgilini, have been re-

corded in the fauna of Russia until now [Belokobylskij et al., 1998; Belokobylskij, 2019].

The first member of the genus *Stantonia* Ashmead, *S. spasskensis* Belokobylskij, 1993, was described based on a single male collected in Primorskiy Territory [Belokobylskij, 1993], and any additional specimens of this species were not found [Belokobylskij et al., 1998, 2019; van Achterberg et al., 2017]. The second species of this genus, *S. ruficornis* Enderlein, 1921, was also recorded in the fauna of Primorskiy Territory recently [Belokobylskij, 2019].

The genus *Orgilus* Haliday is the most species-rich genus in the Russian fauna where 34 species were already recorded, of which 16 species were found only in the Russian Far East and eastern Siberia [Belokobylskij et al., 1998, 2019; Yu et al., 2016]. The genus *Kerorgilus* van Achterberg with its type species *K. zonator* (Szépligeti, 1896) was recently found in the fauna of Russia in the Astrakhan, Volgograd and Saratov Provinces and Altai Territory [Belokobylskij, 2019].

In this paper, the East Asian genus *Eleonoria* Braet et van Achterberg in Braet et al., 2000 is firstly recorded in the fauna of Russia, with description of a species new to science.

Materials and methods

The terminology employed for the morphological features, sculpture, and body measurements follows Belokobylskij and Maetô [2009] and Belokobylskij et al. [2024]. The wing venation nomenclature follows Belokobylskij and Maetô [2009] and Belokobylskij et al. [2024], with the terminology of van Achterberg [1993] shown in parentheses.

The specimen was examined using an Olympus SZ51 stereomicroscope. Photographs were taken with an Olympus OM-D E-M1 digital camera mounted on an Olympus SZX10 microscope (Zoological Institute

of the Russian Academy of Sciences, St Petersburg, Russia). Image stacking was performed using Helicon Focus 8.0. The figures were produced using the Adobe Photoshop CS6 program.

The holotype of new species is deposited in the collections of Zoological Institute of the Russian Academy of Sciences (St Petersburg, Russia; ZISP).

The present work is registered in ZooBank (www.zoobank.org) under urn:lsid:zoobank.org:pub:71D57924-DF62-435B-8199-A7B1D036E561

Taxonomy

Braconidae Nees, 1811

Orgilinae Ashmead, 1900

KEY TO ORGILINAE GENERA KNOWN IN THE FAUNA OF RUSSIA

1. Posterior margin of hind wing concave subbasally. Nervellus (cu-a) of hind wing strongly reclivous (directed towards base of wing). First abscissa of mediocubital vein (M+CU) of hind wing significantly shorter than second abscissa (1-M). Medial (basal) cell of hind wing very narrow. Second radiomedial vein (r-m) present or absent (tribe Mimagathidini) 2
- Posterior margin of hind wing convex or straight subbasally. Nervellus (cu-a) of hind wing weakly reclivous or subvertical. First abscissa of mediocubital vein (M+CU) of hind wing subequal to second abscissa (1-M) or longer. Medial (basal) cell of hind wing wide or large. Second radiomedial vein (r-m) always absent (tribe Orgilini) .. 3
2. Second radiomedial vein (r-m) present. Occipital carina partly present, reaching upper level of eyes. Third and fourth metasomal tergites without sharp lateral crease. Sclerotised part of second medial abscissa (2-M) of fore wing distinct *Stantonina* Ashmead, 1904
- Second radiomedial vein (r-m) absent. Occipital carina entirely absent. Third and fourth (at least in basal half) metasomal tergites with sharp lateral crease. Sclerotised part of second medial abscissa (2-M) of fore wing absent
Eleonoria Braet et van Achterberg in Braet et al., 2000
3. Clypeus latero-dorsally with pair of upwards bent processes. Tarsal claw very slender. Hind tarsus slender and long ...
..... *Kerorgilus* van Achterberg, 1985
- Clypeus without latero-dorsal processes. Tarsal claw less slender. Hind tarsus more robust and shorter
..... *Orgilus* Haliday, 1833

Eleonoria Braet et van Achterberg in Braet et al., 2000

Braet et al., 2000: 466; Chen et al., 2004: 343; Yu et al., 2016.

Type species: *Eleonoria mesembria* Braet et van Achterberg in Braet et al., 2000.

Notes. This small orgiline genus includes seven known species (with new one described here) recorded only in the eastern Asia, in Oriental and Palaearctic (its south-eastern part) regions: *Eleonoria asleleji* sp.n. (Russia: Primorskiy Territory), *E. chuchiensis* (Chou, 1995) (China: Taiwan), *E. hei* van Achterberg et Chen in Braet et al., 2000 (China: Zhejiang and Jiangsu), *E. infuscata* van Achterberg in Braet et al., 2000 (Indonesia), *E. japonica* Braet et van Achterberg in Braet et al., 2000 (Japan), *E. mesembria* Braet et van Achterberg in Braet et al., 2000 (Malaysia), and *E. philippinica* Braet et van Achterberg in Braet et al., 2000 (Philippines) [Yu et al., 2016].

Diagnostic characters. Head densely and rather finely granulate-coriaceous to punctate. Occipital carina absent completely. Ocelli arranged in obtuse triangle. Eye glabrous. Temple short, strongly curvedly narrowed behind eye. Ventral margin of clypeus straight or weakly convex. Malar suture absent. Mandible twisted in distal half. Maxillary palp long and slender, narrowed distally, distinctly longer than height of head. Antenna subfiliform, often with wide pale ring in its distal half. Scape of antenna wide, outer distinctly oblique apically. Mesosoma mostly granulate-coriaceous and sometimes with punctuation, 1.5–1.7 times longer than its maximum height. Pronope absent. Notauli complete, meeting posteriorly nearly middle of mesoscutum. Prescutellar depression (scutal sulcus) short, curved, densely crenulate. Prepectal carina present laterally, but usually absent ventrally. Precoxal sulcus shallow and wide, incomplete. Propodeum without areas delineated by carinae. Fore wing completely setose. Radial (marginal) cell never shortened, long and narrow. Second radial abscissa (3-SR + SR1) straight. Discoidal (discal) cell truncate anteriorly, sessile on parastigma. First medial abscissa (1-SR+M) straight or weakly sinuate; second medial abscissa (2-SR+M) short or long. Second radiomedial vein (r-m) absent; second radiomedial (submarginal) cell absent. Brachial vein (CU1b) present and weakly reclivous. Brachial (subdiscal) cell wide. In hind wing, baso-posterior margin slightly concave; hamuli 3. Medial (basal) cell narrow. First abscissa of mediocubital vein (M+CU) distinctly shorter than second abscissa (1-M). All legs (especially hind one) long and slender. Hind coxa long. Hind tibia long and narrow. Hind trochantellus long, with 1–5 teeth in its posterior margin. Hind tibia covered by rather dense spines. Tarsal claw without basal lobe. Metasoma long and narrow; laterotergites separated on second, third and basal half of fourth tergites and with sharp lateral crease. First tergite 1.9–2.4 times longer than its posterior width, mostly granulate-coriaceous; dorsope absent; small spiracular tubercles situated in anterior 0.25 of tergite. Second suture straight or weakly curved. Ovipositor long, distinctly longer than metasoma, not shorter than fore wing.

Eleonoria asleleji Belokobylskij, sp.n.

Figs 1–19.

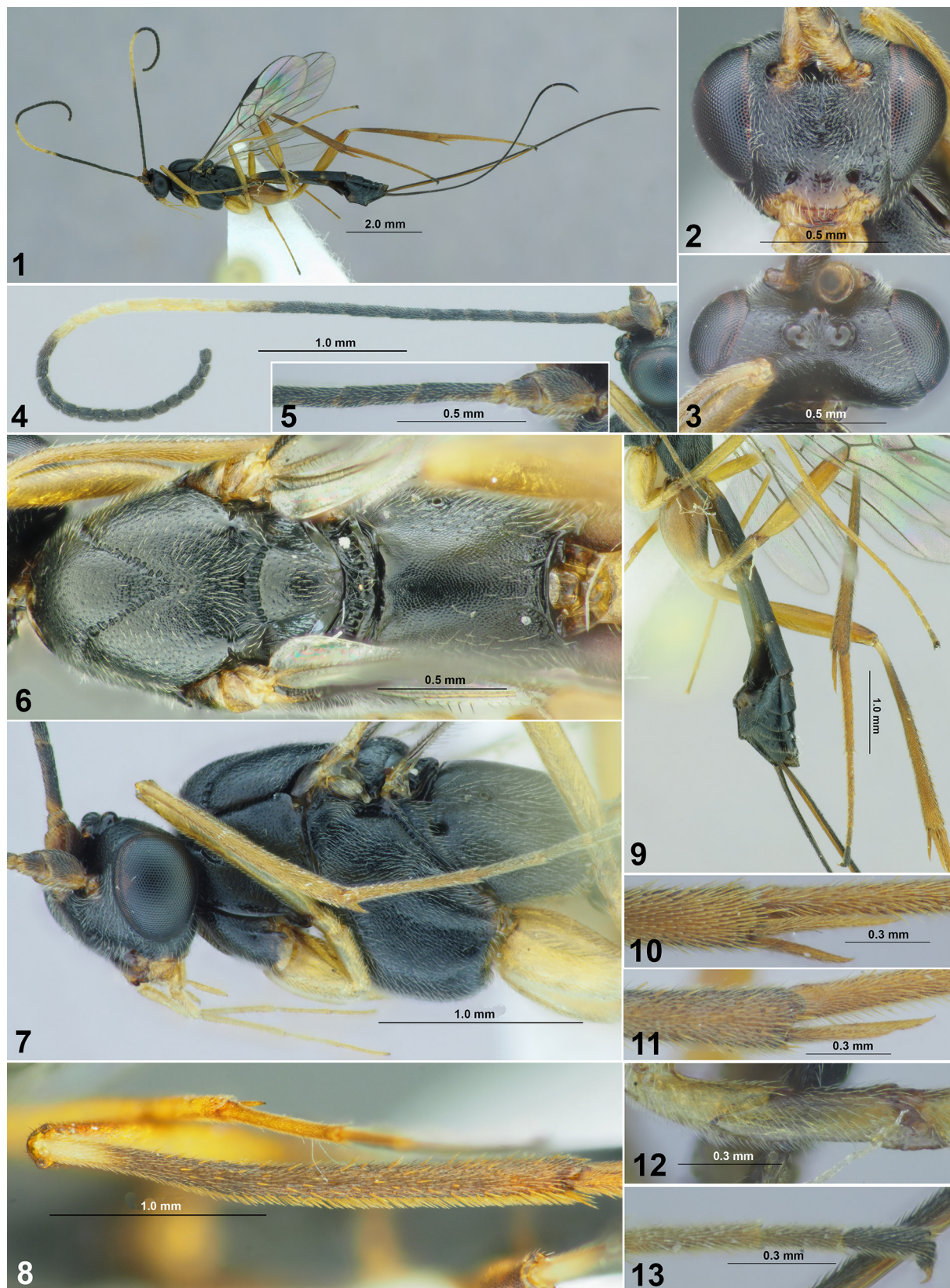
<https://zoobank.org/NomenclaturalActs/7813A77C-9E09-49D0-897B-FC3F7457FF25>

Type material. Holotype: female, Russia, Primorskiy Territory, Spassk-Dal'niy, forest, glade, 1.VIII.2025 (S. Belokobylskij leg.) (ZISP).

Description. Female (Fig. 1). Body length 6.0 mm; fore wing length 4.2 mm.

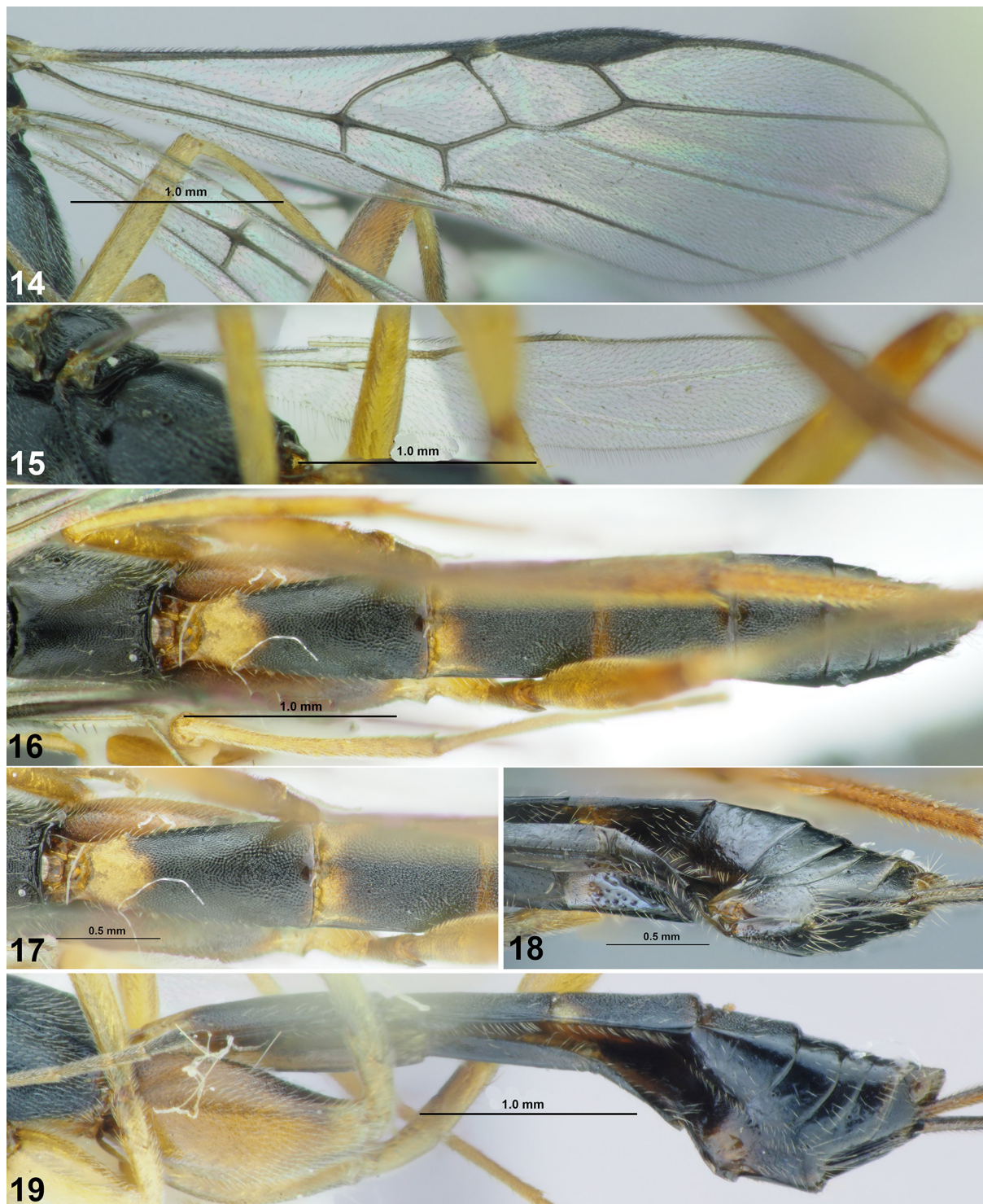
Figs 1–13. *Eleonoria asleleji* Belokobylskij, sp.n., female, holotype. 1 — body, lateral view; 2 — head, front view; 3 — head, dorsal view; 4 — antenna; 5 — basal segments of antenna; 6 — mesosoma, dorsal view; 7 — head and mesosoma, lateral view; 8 — hind tibia, dorsal view; 9 — hind leg; 10 — apex of hind tibia, spurs and base of hind basitarsus, subventral view; 11 — apex of hind tibia, spurs and base of hind basitarsus, sublateral view; 12 — hind trochanter and trochantellus, lateral view; 13 — hind tarsus and claw, lateral view.

Рис. 1–13. *Eleonoria asleleji* Belokobylskij, sp.n., самка, голотип. 1 — тело, вид сбоку; 2 — голова, вид спереди; 3 — голова, вид сверху; 4 — антенна; 5 — базальные членики антенны; 6 — мезосома, вид сверху; 7 — голова и мезосома, вид сбоку; 8 — задняя голень, вид сверху; 9 — задняя нога; 10 — вершина задней голени, шпоры и основание заднего базитарзуса, субвентральный вид; 11 — вершина задней голени, шпоры и основание заднего базитарзуса, сублатеральный вид; 12 — задние трохантер и трохантеллюс, вид сбоку; 13 — задняя лапка и коготок, вид сбоку.



Head (Figs 2, 3) width (dorsal view) 2.2 times its median length, 1.4 times width of mesoscutum. Occiput distinctly concave. Head behind eye (dorsal view) strongly and curvedly narrowed; transverse diameter of eye 4.5 times length of temple. Ocelli weakly enlarged, arranged in triangle with base

1.2–1.3 times its sides; POL 0.8 times Od, 0.5 times OOL; Od 0.7 times OOL. Eye large, about 1.3 times higher than broad. Face weakly convex, its width 1.1 times height of face and clypeus combined, equal to height of eye. Clypeus with weakly curved ventral margin; clypeal suture absent medially.



Figs 14–19. *Eleonoria asleleji* Belokobylskij, sp.n., female, holotype. 14 — fore wing; 15 — hind wing; 16 — propodeum and metasoma, dorsal view; 17 — first and second tergites of metasoma, dorsal view; 18 — apex of metasoma, ventro-lateral view; 19 — metasoma, lateral view.

Рис. 14–19. *Eleonoria asleleji* Belokobylskij, sp.n., самка, голотип. 14 — переднее крыло; 15 — заднее крыло; 16 — пропodeум и метасома, вид сверху; 17 — первый и второй тергиты метасомы, вид сверху; 18 — вершина метасомы, вид снизу и сбоку; 19 — метасома, вид сбоку.

Tentorial pits large and deep, distance between pits about 1.5 times distance between pit and eye. Malar space short, 0.8 times basal width of mandible. Head below eyes (front view) distinctly and almost linearly narrowed. Maxillary palp long and slender, 1.5 times longer than height of head.

Antenna (Figs 4, 5) relatively slender, almost filiform, more than 33-segmented (its apical segments missing). Scape relatively wide, 1.5 times longer than maximum width. First flagellar segment 4.8 times longer than its apical width, 1.2 times longer than second segment. Subapical segments 1.4–1.5 times longer than wide.

Mesosoma (Figs 6, 7) 1.7 times longer than high. Mesoscutum high and subperpendicularly elevated above pronotum (lateral view), 1.2 times longer than its maximum width (dorsal view). Prescutellar depression (scutal sulcus) short, weakly curved, medially 0.15 times as long as the weakly convex scutellum, with 11–12 transverse rugae. Precoxal sulcus shallow, narrow, oblique, crenulate, running along lower anterior 0.6 of mesopleuron. Metanotum without dorsal tooth, only weakly convex (lateral view). Propodeum evenly and weakly curvedly narrowed posteriorly (lateral view), without lateral tubercles, with small oval spiracle.

Wings (Figs 14, 15). Fore wing 3.6 times longer than its maximum width. Radial vein (r) arising from middle of pterostigma. Radial (marginal) cell not shortened; metacarp (1-R1) 1.3 times longer than pterostigma. First radial abscissa (r) almost as long as maximum width of pterostigma. Straight second radial abscissa (3-SR + SR1) almost 7.0 times longer than first abscissa (r) and formed very obtuse angle with it, 4.0 times longer than first radiomedial vein (2-SR). Discoidal (discal) cell 1.9 times longer than its maximum width. Recurrent vein (m-cu) straight, 1.5 times longer than second medial abscissa (2-SR+M), 0.9 times as long as first radiomedial vein (2-SR). Nervulus (cu-a) straight, weakly oblique, very weakly postfurcal (subinterstitial). Brachial (subdiscal) cell weakly widened distally, 2.5 times longer than its maximum width. Hind wing 6.8 times longer than its maximum width, its posterior margin weakly concave in basal 0.3. Medial (basal) cell narrow, weakly narrowed posteriorly, almost 13.0 times longer than maximum width. Radial (marginal) cell distinctly curvedly widened in basal half, then narrowed distally. First abscissa of mediocubital vein (M+CU) 0.7 times as long as second abscissa (1-M).

Legs (Figs 8–13). Hind femur narrow, 5.4 times longer than wide. Hind tibia with numerous, rather dense and strong yellowish spines between setae. Hind tarsus slender, as long as hind tibia. Hind basitarsus long, with numerous bristles between setae, 0.9 times as long as second to fifth segments combined. Second segment of hind tarsus 0.4 times as long as basitarsus, 2.0 times longer than fifth segment (without pretarsus). Claw simple, densely setose along inner margin.

Metasoma (Figs 16–19) narrow, 1.2 times longer than head and mesosoma combined. First tergite weakly and almost linearly widened towards apex, with distinct but small spiracular tubercles in basal 0.25; length of tergite 2.4 times its posterior width, almost 2.0 times longer than propodeum; its posterior width 1.6 times minimum anterior (subbasal) width. Medial length of second tergite 1.6 times its anterior width; 1.3 times length of third tergite. Suture between second and third tergites distinct, weakly curved and crenulate. Ovipositor sheath 2.0 times longer than metasoma, 1.15 times longer than body, 1.8 times longer than fore wing.

Sculpture and pubescence. Head mostly granulate-reticulate, face densely punctate and additionally coriaceous. Mesosoma entirely densely and finely granulate-coriaceous, propodeum without rugosity or areolation. Hind coxa and

femur densely reticulate-granulate. First to fourth metasomal tergites entirely densely punctulate-reticulate; fifth–seventh tergites finely reticulate-coriaceous. Mesoscutum entirely with dense, short and white setae.

Colour. Body mostly black; first metasomal tergite in basal quarter, second and third tergites narrowly basally yellow to brownish yellow. Antenna mostly black, two basal segments dark reddish brown, segments 11–17 yellowish white. Palpi entirely pale yellow. Legs mostly yellow to brownish yellow, hind coxa dorsally, hind tibia and tarsus infusate, partly light brown to brown, fifth tarsal segments dark brown. Wing hyaline; pterostigma black.

Male. Unknown.

Etymology. This species is named in honour of Professor Arkady Stepanovich Lelej, well-known Russian hymenopterist, the long-term Head of the Laboratory of Entomology of the Federal Scientific Center of the Terrestrial Biodiversity FEB RAS (Vladivostok), as a celebration of his 80th birthday.

Host. Unknown.

Distribution. Russia (Primorskiy Territory).

Comparative diagnosis. This new species is similar to Chinese *Eleonoria hei* van Achterberg et Chen, 2000 from Zhejiang and Jiangsu Provinces of China [Braet et al., 2000], but differs from latter in having the first flagellar segment of antenna 4.8 times longer than its apical width (Fig. 5) (5.2 times in *E. hei*), temple weakly curvedly narrowed posteriorly in dorsal view (Fig. 3) (directly narrowed in *E. hei*), frons entirely distinctly punctate-granulate to reticulate (Fig. 3) (smooth medially and finely punctate-coriaceous laterally in *E. hei*), first metasomal tergite 2.4 times longer than its posterior width (Figs 16, 17) (1.9 times in *E. hei*), spiracular tubercles of first tergite distinct in basal quarter (Figs 16, 17) (spiracles not protruding in *E. hei*), fourth metasomal tergite distinctly reticulate-punctate (Fig. 16) (finely punctate in *E. hei*), and body mostly black (Fig. 1) (at least partly reddish brown in *E. hei*).

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