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**NEW FOR THE FAUNA OF KUNASHIR ISLAND MOTHS AND BUTTERFLIES (LEPIDOPTERA: CARPOSINIDAE, ZYGAENIDAE, TORTRICIDAE, GEOMETRIDAE, NOTODONTIDAE, EREBIDAE, NOLIDAE, NOCTUIDAE, LYCAENIDAE)**

**S. A. Rybalkin<sup>1)</sup>, B. Benedek<sup>2)</sup>, V. V. Dubatolov<sup>3,4)</sup>**

1) *Researcher, Mira pr. 21–82, Snezhinsk, Chelyabinsk region, 456776, Russia. E-mail: rybalkinsa@mail.ru*

2) *2045 Törökbálint, Árpád u. 53, Hungary. E-mail: benedekia@gmail.com*

3) *Federal State Institution "Zapovednoe Priamurye", Yubileynaya street, 8, Bychikha village, Khabarovskii krai, 680502, Russia. E-mail: vvdubat@mail.ru*

4) *Institute of Systematics and Ecology of Animals, Siberian Branch of Russian Academy of Sciences, Frunze str. 11, Novosibirsk, 630091, Russia.*

**Summary.** *Odontosia walakui* Kobayashi, 2006 (Notodontidae) is recorded from Russia for the first time. Thirty three moth and butterfly species are new for the fauna of Kuril Islands. The records of four species, *Conistra fletcheri* (Sugi, 1958), *Lithophane socia* (Hufnagel, 1766), *Melanchra postalba* (Sugi, 1982), and *Diarsia ruficauda* (Warren, 1909), from Kunashir Island are confirmed by examinations of their genitalia. Tortricidae species recorded from Kunashir but absent in the Catalogue of the Lepidoptera of Russia are listed. All records of *Dolbina exacta* (Staudinger, 1892) from Kunashir Island belong to *D. tancrei* (Staudinger, 1887) and former species is excluded from the fauna of island.

**Key words:** moths, butterflies, fauna, new records, Kuril Islands, Russian Far East.

**С. А. Рыбалкин, Б. Бенедек, В. В. Дубатолов. Новые для фауны острова Кунашир чешуекрылые (Lepidoptera: Carposinidae, Zygaenidae, Tortricidae, Geometridae, Notodontidae, Erebidae, Nolidae, Noctuidae, Lycaenidae) // Дальневосточный энтомолог. 2022. N 457. С. 13-32.**

**Резюме.** Впервые для фауны России приводится *Odontosia walakui* Kobayashi, 2006 (Notodontidae). Тридцать три вида чешуекрылых насекомых впервые указывается для Курильских островов. Достоверность указания четырех видов [*Conistra fletcheri* (Sugi, 1958), *Lithophane socia* (Hufnagel, 1766), *Melanchra postalba* (Sugi, 1982) и *Diarsia ruficauda* (Warren, 1909)] для Курильских островов подтверждена изучением их гениталий. Приводятся пропущенные в «Каталоге чешуекрылых России» виды семейства Tortricidae, ранее отмечавшиеся на Кунашире. Указания о находке на острове Кунашир *Dolbina exacta* (Staudinger, 1892) основано на ошибочном определении и относятся к известному с острова *D. tancrei* (Staudinger, 1887).

## INTRODUCTION

An annotated lists of species of the families Zygaenidae, Noctuidae and Nolidae distributed in the Russian Far East has been published recently (Efetov, 2016; Kononenko, 2016a; Sinev, 2019). A lot of novelties for the fauna of Kunashir Island species was recorded later (Rybalkin & Yakovlev, 2017; Rybalkin *et al.*, 2018, 2019; Dubatolov, 2019). However, *Gastropacha populifolia* (Esper, 1784), Lasiocampidae (Rybalkin *et al.*, 2018), *Oreta pulchripes* Butler, 1877, Drepanidae, *Pseudoips sylpha* (Butler, 1879), Nolidae from Kunashir (Rybalkin *et al.*, 2019) were omitted in the “Catalogue of the Lepidoptera of Russia” (Sinev, 2019). Among Macrolepidoptera species set collected in Kunashir, Dubatolov (2019) reported *Triphaenopsis cinerascens* (Butler, 1885) from Andreevsky and Danilovsky Kordons (new record for Southern Kurils), this species Rybalkin also collected in Tretyakovo in September, 2019 (Figs 22–23), and *Apamea commixta* (Butler, 1881) from Danilovsky Kordon (Kuril Nature Reserve); the last record was new for Kunashir but not for the Southern Kuril Islands (Kononenko, 2016b). Later, Rybalkin (2020a, b) added some species new for the Kunashir fauna: *Garaeus specularis* (Moore, 1868), *Ennomos nephotropa* (Prout, 1930), *Gigantalcis flavolinearia* (Leech, 1891), *Dysstroma korbi* (Heydemann, 1929), Geometridae, *Agrius convolvuli* (Linnaeus, 1758), Sphingidae, *Caligula jonasi* (Butler, 1877), Saturniidae, *Bombyx mandarina* (Moore, 1872), Bombycidae, *Phalerodonta manleyi* (Leech, 1889), Notodontidae, *Orgyia thyellina* (Butler, 1881), Erebidae: Lymantriinae, *Daseochaeta viridis* (Leech, 1889), *Ctenoplusia albostrata* (Bremer et Grey, 1853), *C. ichinosei* (Dufay, 1965), *Thysanoplusia intermixta* (Warren, 1913), *Macdunnoughia hybrida* (L.Ronkay, 1986), *Amphipyra livida* ([Denis et Schiffermüller], 1775), *Triphaenopsis lucilla* Butler, 1878, *Ipimorpha retusa* (Linnaeus, 1761), *Hydraecia mongoliensis* Urbahn, 1967 (the species determination was later affirmed by the male genitalia structure), *Spodoptera depravata* (Butler, 1879), *Mniotype melanodonta* (Hampson, 1906), *Gortyna basalipunctata* (Graeser, 1889), *Conistra fletcheri* (Sugi, 1958), *Lithophane socia* (Hufnagel, 1766), *Dryobotodes pryeri* (Leech, 1900), *Edentelorta edentata* (Leech, 1889), *Diarsia ruficauda* (Warren, 1909), *Euxoa karschi* (Graeser, 1890). Not all of them were included in the “Catalogue of the Lepidoptera of Russia” (Sinev (ed.), 2019) and the internet-version of the “Catalogue of the Lepidoptera of Russia, ver. 2.1. of 10.06.2021”. Unfortunately, some of these identifications were not correct; for example, all photos of *P. sylpha* (Butler, 1879), except for the figured in the publication (Rybalkin *et al.*, 2019), which Dubatolov have examined, turned out to be *P. prasinana* (Linnaeus, 1758).

Not all Tortricidae species cited from Kunashir by Dubatolov (1994) were included in the “Catalogue of Lepidoptera of Russia” (Sinev, 2019) for the Kuril Archipelago, the omitted species are: *Acleris abietana nigrilineana* Kawabe, 1963, *A. comariana* (Lienig et Zeller, 1846), *A. lacordairana* (Duponchel, 1836), *A. nigriradix* (Filipjev, 1931), *A. perfundana* Kuznetzov, 1962, *A. strigifera* (Filipjev, 1931), *A. ulmicola* (Meyrick, 1930), *A. (Croesia) indignana* (Christoph, 1881), *Choristoneura diversana* (Hübner, 1817), *Aphelia septentrionalis* Obratzsov, 1959. Rybalkin also collected some of them in Tretyakovo in 2021: *A. abietana nigrilineana* Kawabe, 1963, *A. lacordairana* (Duponchel, 1836), *A. nigriradix* (Filipjev, 1931), and *A. strigifera* (Filipjev, 1931). However, records of *Spatalistis bifasciana* (Hübner, 1787) from Kunashir and Sakhalin by Dubatolov (1994) were reidentified later as *S. egesta* Razowski, 1974 (Sinev *et al.*, 2019).

In the present paper we add new data on Lepidoptera of Kunashir. The material was collected by the first author in this island in 2015, 2017, 2019 and 2021. Moths were collected by a light trap using a DRV-250 lamp, butterflies – by net. Most part of the material is deposited in the private collection of S. Rybalkin, partly – in Siberian Zoological Museum of the Institute of Systematics and Ecology of Animals, SB RAS (Novosibirsk). New for Kuril Islands species are asterisked (\*).

## NEW RECORDS

### Family Carposinidae

#### \**Meridarchis jumboa* Kawabe, 1980

Fig. 54

**MATERIAL.** **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 18.V–4.VI 2021, 1 ♂, leg. S. Rybalkin.

**DISTRIBUTION.** Russia (Primorskii krai, Sakhalin) (Ponomarenko, 2016), Japan (Hokkaido, Honshu), Korea (Nasu, 2013a). Here this species is recorded for the first time from the Southern Kuril Islands.

**REMARKS.** The species is easily recognizable by large triangular dark costal spot and a black dot at dorsal margin on forewings.

### Family Zygaenidae

#### \**Hedina tenuis* (Butler, 1877)

Fig. 1

**MATERIAL.** **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 17.VII 2015, 1 ♀, leg. S. Rybalkin.

**DISTRIBUTION.** Russia (Middle/Low Amur basin, with no exact data, Primorskii krai), Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima, Amami, Okinawa), Korea, China, NE India (Efetov, 2016). Here this species is recorded for the first time from the Southern Kuril Islands.

**REMARKS.** The species was identified by the female genitalia structure.

### Family Tortricidae

#### \**Pseudeulia asinana vermicularis* (Meyrick, 1935)

Fig. 47

**MATERIAL.** **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 18.V–4.VI 2021, 4 ♂, 7 ♀, leg. S. Rybalkin.

**DISTRIBUTION.** Russia (S. Khabarovskii krai, Primorskii krai, Sakhalin (Sinev *et al.*, 2019)), NE. and E. China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu); the nominotypical subspecies occurs in Europe, Minor Asia, Transcaucasia (Kuznetsov, 2001). Here this species is recorded for the first time from the Southern Kuril Islands.

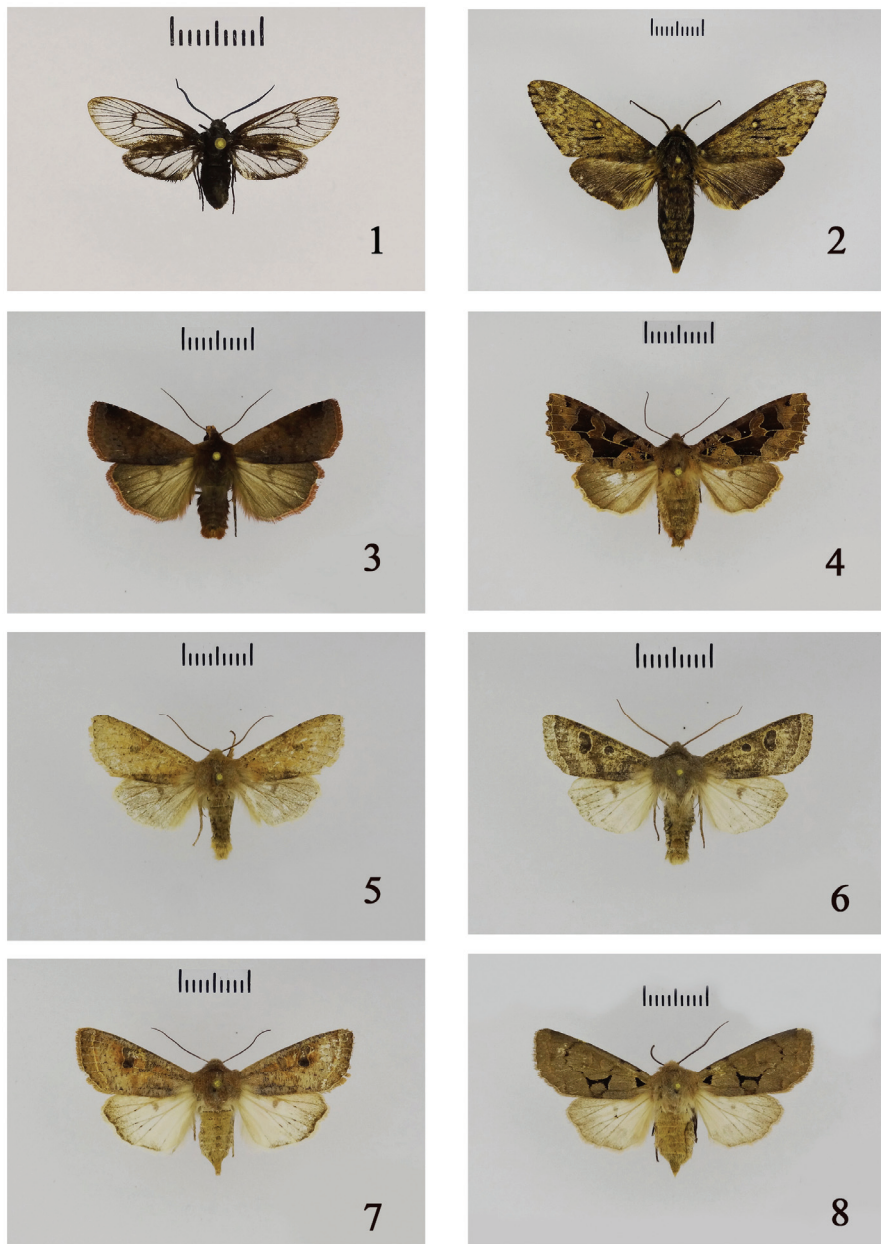
**REMARKS.** Jinbo (2013) considered *P. asinana* (Hübner, 1799) and *P. vermicularis* Meyrick, 1935 as different species in Japan, but Kuznetsov (2001) treated them to be conspecific.

#### \**Gravitarmata margarotana* (Heinemann, 1863)

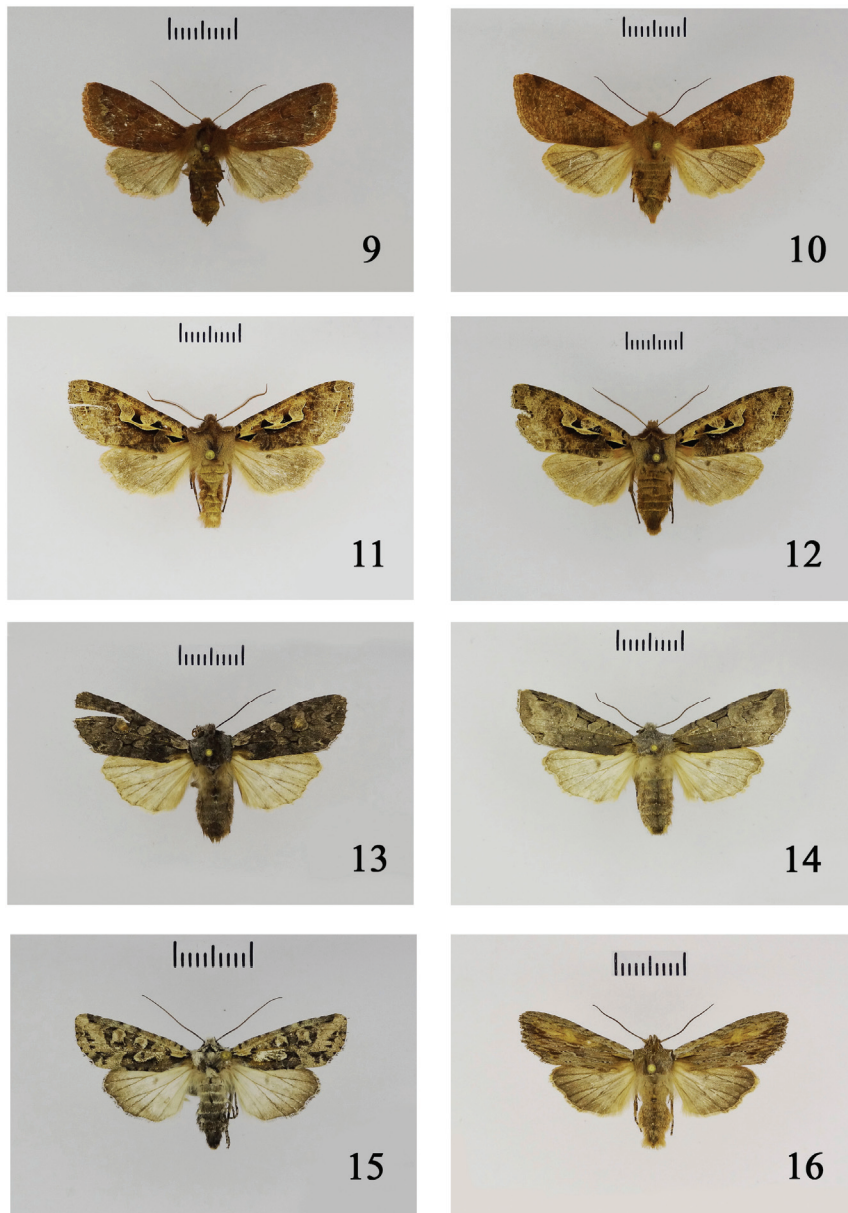
Fig. 48

**MATERIAL.** **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 18.V–4.VI 2021, 1 ♀, leg. S. Rybalkin.

**DISTRIBUTION.** Russia (S. Amur Region, S. Khabarovskii krai, Primorskii krai; S. European Russia, Crimea (Sinev *et al.*, 2019)), Europe, NE. China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima) (Kuznetsov, 2001; Nasu, 2013b). Here this species is recorded for the first time from the Southern Kuril Islands.

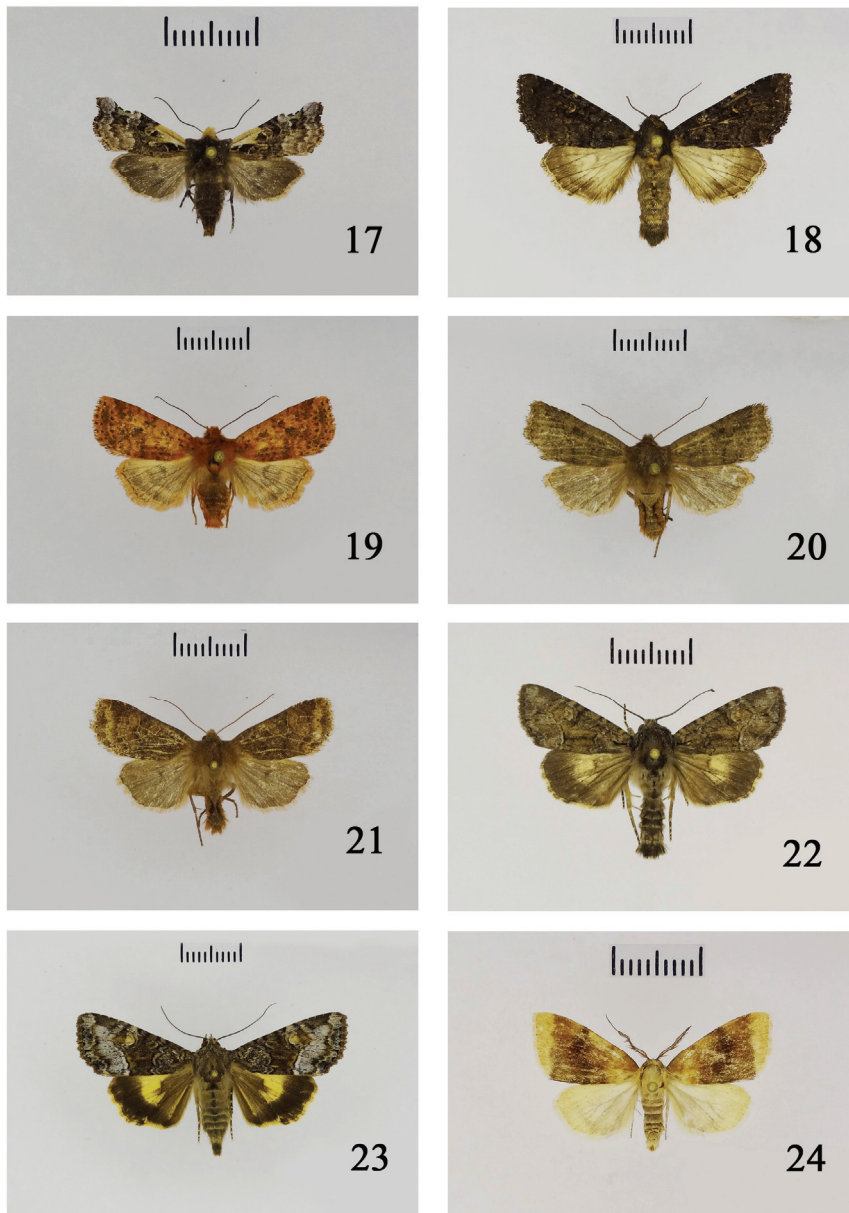


Figs 1–8. Moths from Kunashir Island, dorsal view. 1 – *Hedina tenuis* (Butler, 1877), ♀; 2 – *Dolbina tancrei* Staudinger, 1887, ♂; 3 – *Diarsia ruficauda* (Warren, 1909), ♂; 4 – *Clavipalpula aurariae* (Oberthür, 1880), ♀; 5 – *Orthosia incerta* (Hufnagel, 1766), ♂; 6, 7 – *Orthosia ella* (Butler, 1878), ♂ (6) and ♀ (7); 8 – *Orthosia carnipennis* (Butler, 1878), ♀.

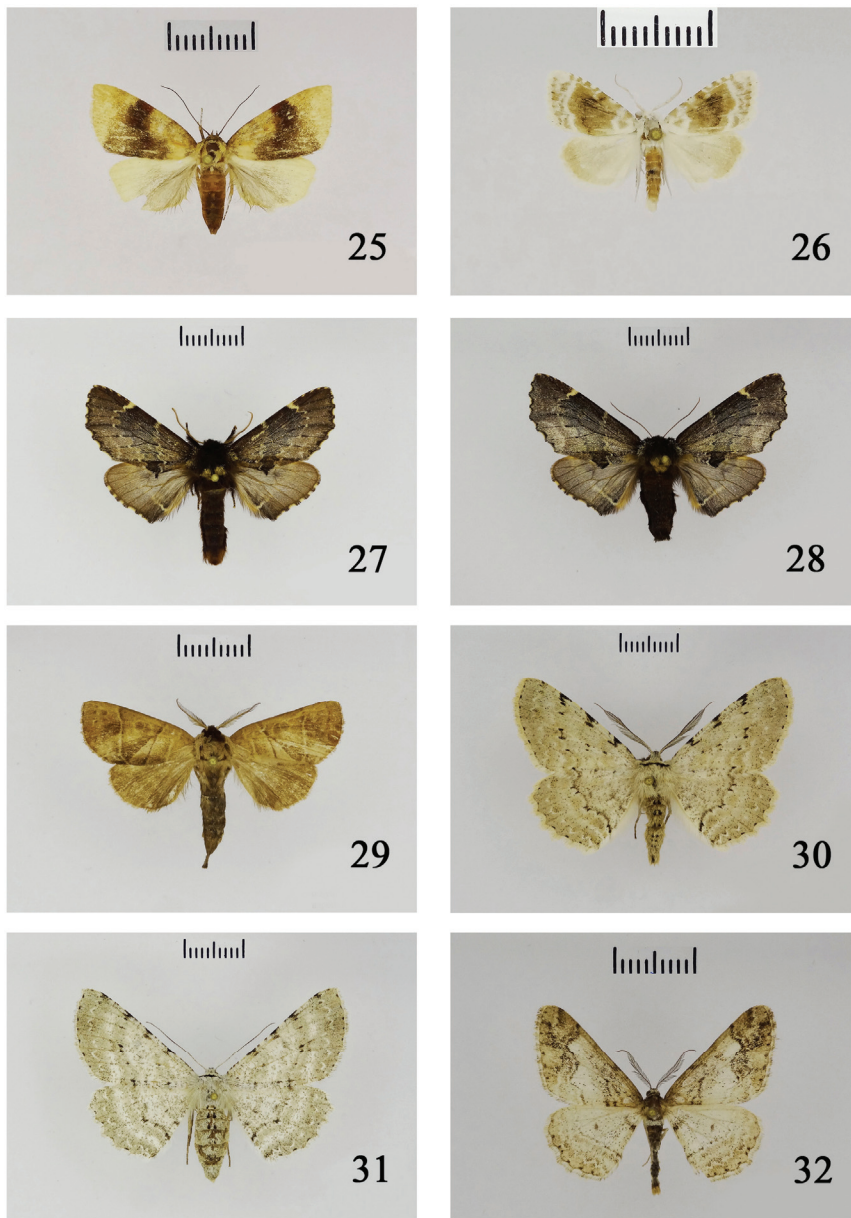


Figs 9–16. Moths from Kunashir Island, dorsal view. 9 – *Orthosia odiosa* (Butler, 1878), ♀; 10 – *Anorthoa angustipennis* (Matsumura, 1926), ♀; 11, 12 – *Perigrapha hoenei* (Püngeler, 1914), ♂ (11) and ♀ (12); 13 – *Lithophane consocia* (Borkhausen, 1792), ♀; 14 – *Lithophane plumbealis* (Matsumura, 1926), ♀; 15 – *Lithophane venusta* (Leech, 1889), ♀; 16 – *Lithophane socia* (Hufnagel, 1766), ♂.

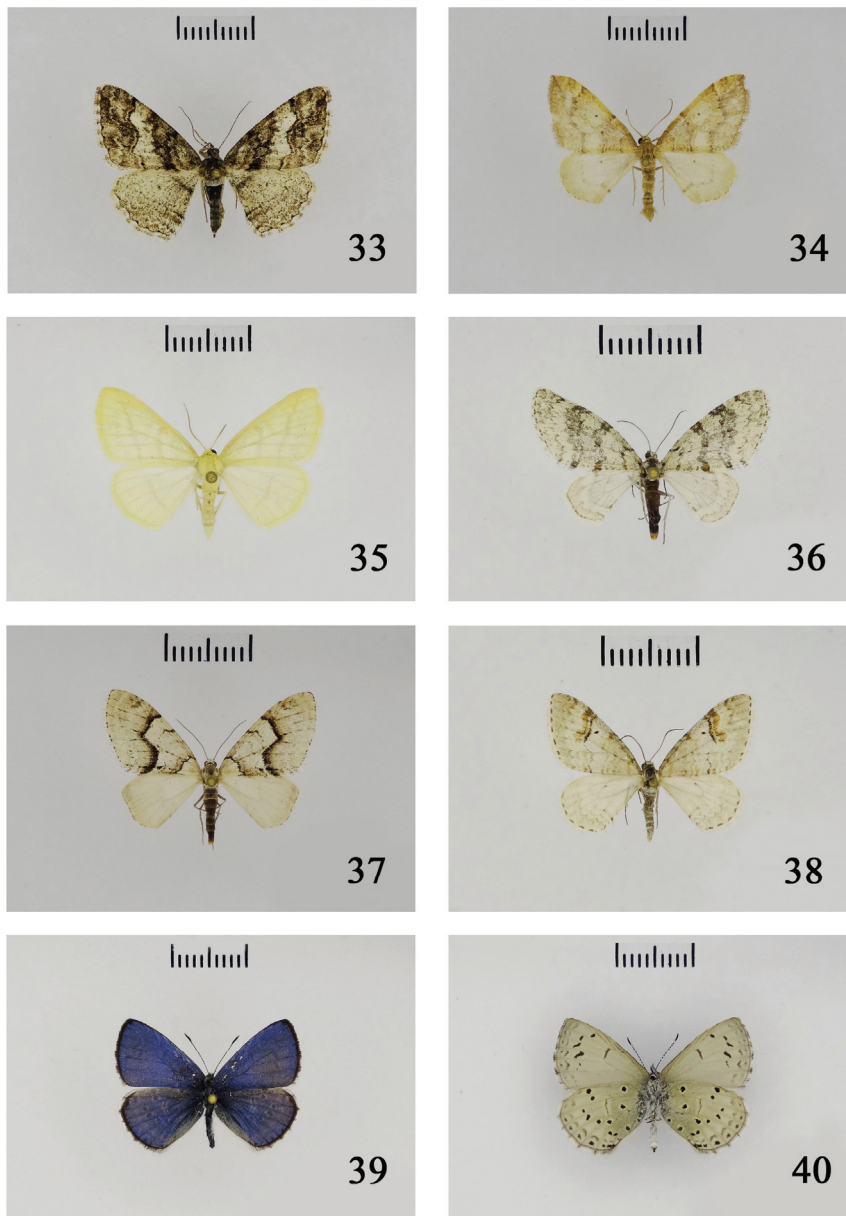




Figs 17–24. Moths from Kunashir Island, dorsal view. 17 – *Teratoglaea pacifica* (Sugi, 1958), ♀; 18 – *Melanchra postalba* (Sugi, 1982), ♂; 19 – *Conistra castaneofasciata* (Motschulsky, 1861), ♂; 20 – *Conistra grisescens* (Draudt, 1950), ♂; 21 – *Conistra fletcheri* (Sugi, 1958), ♂; 22, 23 – *Triphanopsis cinerescens* (Butler, 1885), ♂ (22), ♀ (23); 24 – *Gelastocera kotschubeji* (Obraztsov, 1943), ♂.



Figs 25–32. Moths from Kunashir Island, dorsal view. 25 – *Gelastocera kotschubeji* (Obraztsov, 1943), ♀; 26 – *Meganola albula* ([Denis et Schiffermüller], 1775), ♂; 27, 28 – *Orthosia walakui* Kobayashi, 2006, ♂ (27) and ♀ (28); 29 – *Clostera anastomosis* (Linnaeus, 1758), ♂; 30, 31 – *Lassaba nikkonis* (Butler, 1881), ♂ (30), ♀ (31); 32 – *Pseuderannis lomezemia* (Prout, 1930), ♂.



Figs 33–40. Butterflies and moths from Kunashir Island, dorsal view (33–39) and ventral view (40). 33 – *Pseuderannis lomozemina* (Prout, 1930), ♀; 34 – *Idiotephria evanescens* (Staudinger, 1897), ♂, 35 – *Parabapta aetheriata* (Graeser, 1889), ♂; 36 – *Trichopteryx hemana* (Butler, 1878), ♂; 37 – *Trichopteryx ustata* (Christoph, 1881), ♂; 38 – *Venusia semistrigata* (Christoph, 1881), ♂; 39, 40 – *Celastrina sugitanii* (Matsumura, 1919), ♂.





Figs 41–48. Butterflies and moths from Kunashir Island, dorsal view (41,42, 44–48) and ventral view (43). 41 – *Celastrina sugitanii* (Matsumura, 1919), ♀; 42–43 – *Callophris* (*Ahlbergia*) *ferrea* (Butler, 1866), ♂; 44–46 – *Lymantria mathura* (Moore, 1866), ♂ (44, 45), ♀ (46); 47 – *Pseudeulia asinana vermicularis* Meyrick, 1935, ♀; 48 – *Gravitarmata margarotana* (Heinemann, 1863), ♀.

**\**Pelochrista decolorana* (Freyer, 1842)**

**MATERIAL.** **Russia:** Kunashir Island, Yuzhno-Kurilsk, Nature Reserve “Kurilsky” administration territory, by light, 31.VII–1.VIII 2019, 1 ♂, leg. V. Dubatolov.

**DISTRIBUTION.** Russia (S. Amur Region, S. Khabarovskii krai, Primorskii krai; European Russia, Crimea, Caucasus, W. Siberia, Tuva, S. Yakutia (Sinev *et al.*, 2019)), Middle Europe, Transcaucasia, Kazakhstan, Mongolia, China, Korea, Japan (Hokkaido) (Kuznetsov, 2001; Nasu, 2013b). Here this species is recorded for the first time from the Southern Kuril Islands.

**REMARKS.** The specimen has much darker wing coloration than continental ones.

**Family Geometridae**

**\**Lassaba nikkonis* (Butler, 1881)**

Figs 30, 31

**MATERIAL.** **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 18.V–4.VI 2021, 17 ♂, 5 ♀, leg. S. Rybalkin.

**DISTRIBUTION.** Russia (Sakhalin Island), Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima, Yaku) (Belyaev, 2016). This species is recorded from Kuril Islands for the first time.

**\**Pseuderannis lomozeria* (Prout, 1930)**

Figs 32, 33

**MATERIAL.** **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 18.V–4.VI 2021, 31 ♂, 43 ♀, leg. S. Rybalkin.

**DISTRIBUTION.** Russia (S. Amur Region, S. Khabarovskii krai, Primorskii krai, S. Sakhalin Island, S. Sakhalin Island, S. Sakhalin Island, S. Sakhalin Island), Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima) (Belyaev, 2016). This species is recorded from Kuril Islands for the first time.

**\**Idiotephria evanescens* (Staudinger, 1897)**

Fig. 34

**MATERIAL.** **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 18.V–4.VI 2021, 15 ex., leg. S. Rybalkin.

**DISTRIBUTION.** Russia (S. Khabarovskii krai, Primorskii krai), Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima) (Belyaev, 2016). This species is recorded from Kuril Islands for the first time.

**\**Parabapta aetheriata* (Graeser, 1889)**

Fig. 35

**MATERIAL.** **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 21.V–1.VI 2021, 9 ex., leg. S. Rybalkin.

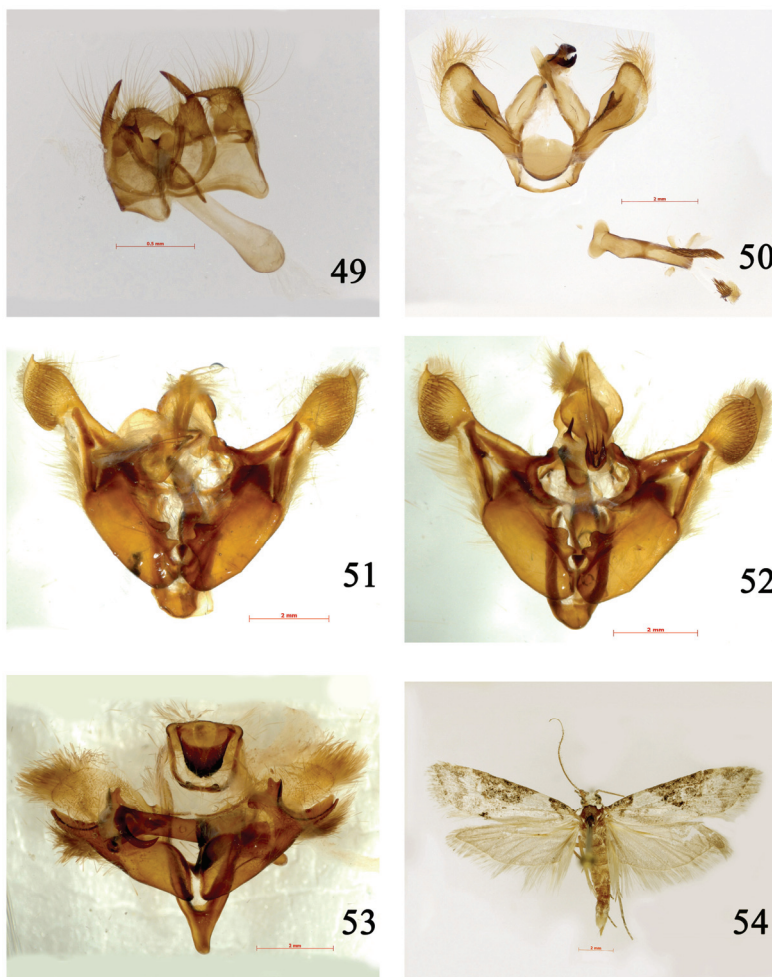
**DISTRIBUTION.** Russia (S. Amur region, Jewish AO, S. Khabarovskii krai, Primorskii krai), Korea, Japan (Hokkaido, Honshu, Shikoku) (Belyaev, 2016). This species is recorded from Kuril Islands for the first time.

**\**Trichopteryx hemana* (Butler, 1878)**

Fig. 36

**MATERIAL.** Russia: Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 18.V–4.VI 2021, more than 100 ex., leg. S. Rybalkin.

**DISTRIBUTION.** Russia (S. Amur region, S. Khabarovskii krai, Primorskii krai), NE China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima) (Belyaev, 2016). This species is recorded from Kuril Islands for the first time.



Figs 49–54. Male genitalia (49–53) of Lepidoptera and micromoth (54) from Kunashir and Sakhalin. 49 – *Celastrina sugitanii* (Matsumura, 1919); 50 – *Odontosia walakui* Kobayashi, 2006; 51, 52 – *Melanchra postalba* (Sugi, 1982), from Kunashir (51) and Sakhalin, Korsakovo District, 10 km NW Lesnoe, Dolinka River (52); 53 – *Dolbina tancrei* Staudinger, 1887; 54 – *Meridarchis jumboa* Kawabe, 1980.

**\**Trichopteryx ustata* (Christoph, 1881)**

Fig. 37

**MATERIAL. Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 20–24.V 2021, 5 ex., leg. S. Rybalkin.

**DISTRIBUTION.** Russia (S. Khabarovskii krai, Primorskii krai, S. Sakhalin), NE China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu) (Belyaev, 2016). This species is recorded from Kuril Islands for the first time.

**\**Venusia semistrigata* (Christoph, 1881)**

Fig. 38

**MATERIAL. Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 20–25.V 2021, 6 ex., leg. S. Rybalkin.

**DISTRIBUTION.** Russia (S. Khabarovskii krai, Primorskii krai), Korea, Japan (Hokkaido, Honshu, Shikoku) (Belyaev, 2016). This species is recorded from Kuril Islands for the first time.

**Family Sphingidae**

***Dolbina tancrei* Staudinger, 1887**

Figs 2, 53

*Dolbina tancrei*: Dubatolov, 1991: 183.

*Dolbina exacta*: Rybalkin & Yakovlev, 2017: 14, fig. 6.

**MATERIAL. Russia:** Kunashir Island: Ivanovsky cape, 2–22.VII 1989, 2 ♂, 3 ♀, leg. V.V. Dubatolov, A.V. Barkalov; 4.5 km NW Mendeleevo airport, Tretyakovo village, 8–19.VII 2017, 2 ♂, leg. S. Rybalkin.

**DISTRIBUTION.** Russia (S. Amur region, Yewish AO, S. Khabarovskii krai, Primorskii krai, Kunashir), NE and N China, Korea, Japan (Hokkaido, Honshu, Shikoku) (Tshistjakov & Belyaev, 2016). This species is recorded from Kunashir by Dubatolov (1991) from Ivanovsky cape.

**REMARKS.** All identifications were affirmed by examination of the male genitalia structure: this species has the aedeagus apex with a strong crescent-like processus. The forewing upperside lacks a lightening in its outer wing part below apex; such lightening is a common feature of *D. exacta* Staudinger, 1892.

**Family Notodontidae**

**\**Odontosia walakui* Kobayashi, 2006**

Figs 27, 28, 50

**MATERIAL. Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 22.V–4.VI 2021, 12 ♂, 1 ♀, leg. S. Rybalkin.

**DISTRIBUTION.** Japan (Hokkaido) (Kobayashi *et al.*, 2006).

**REMARKS.** This species is new for the fauna of Russia and is closely related to *O. brinikhi* Dubatolov, 2006 from East Siberia and Sikhote-Alin Mts. (Kobayashi *et al.*, 2006).

**\**Clostera anastomosis* (Linnaeus, 1758)**

Fig. 29

**MATERIAL. Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 26.VII 2015, 1 ex., leg. S. Rybalkin.

**DISTRIBUTION.** Russia (European part, W. Caucasus, Ural, W. Siberian plain, Altai, Sayan, Baikal region, S. Transbaikalia, S. and Central Yakutia, Amur Region, Yewish AO, Khabarovskii krai, Primorskii krai, Sakhalin), Europe, NE Turkey, W Transcaucasia, N. and E. Kazakhstan, N. Mongolia, NE, E. and SW China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima) (Schintlmeister, 2008; Kobayashi, 2011; Tshistyakov & Dubatolov, 2016). This species is new for the fauna of S. Kuril Islands.

**Family Nolidae**

**\**Meganola albula* ([Denis et Schiffermüller], 1775)**

Fig. 26

**MATERIAL. Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 17–28.VII 2015, 1 ex., 20.VII–10.VIII 2017, 23 ex., leg. S. Rybalkin.

**DISTRIBUTION.** Russia (European part, N. Caucasus, Ural, S. Siberia, Amur Region, Jewish AO, Khabarovskii krai, Primorskii krai, Sakhalin), Europe, Transcaucasia, Kazakhstan, Mongolia, China, Korea, Japan (Rishiri, Hokkaido, Honshu, Shikoku, Kyushu, Tsushima, Yaku, Okinawa) (Sasaki, 2011; Kononenko, 2016a). This species is new for the fauna of Kuril Islands.

**\**Gelastocera kotschubeji* (Obraztsov, 1943)**

Figs 24, 25

**MATERIAL. Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 16.VII 2017, 2 ♂, 1 ♀, leg. S. Rybalkin.

**DISTRIBUTION.** Russia (Primorskii krai), Japan (Hokkaido, Honshu, Shikoku, Kyushu), Korea (Kononenko, 2016a). This species is recorded for the first time from the Kuril Islands.

**Family Erebidae**

**Subfamily Lymantriinae**

**\**Lymantria (Nyctria) mathura* (Moore, 1866)**

Figs 44–46

**MATERIAL. Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 1–18.IX 2021, 24 ♂, 4 ♀, leg. S. Rybalkin.

**DISTRIBUTION.** Russia (S. Amur region, Yewish AO, S. Khabarovskii krai, Primorskii krai, Sakhalin Island), China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Yaku, Amami) (Kishida, 2011; Tshistyakov *et al.*, 2016). This species is recorded from Kuril Islands for the first time.

**Family Noctuidae**

**\**Conistra (Dasycampa) albipuncta* (Leech, 1889)**

**MATERIAL. Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 19–27.V 2021, 1 ♂, leg. S. Rybalkin.



DISTRIBUTION. Russia (S. Amur Region, S. Khabarovskii krai, Primorskii krai), China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima) (Eda & Shikata, 2011; Kononenko, 2016a). This species is recorded from Southern Kuril Islands for the first time.

REMARKS. The species is easily determined by a widely bifurcated valve apex. There is no photo because the male available has a very poor condition of the wings.

**\**Conistra (Dasycampa) castaneofasciata (Motschulsky, 1861)***

Fig. 19

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 19–27.V 2021, 11 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Khabarovskii krai, Primorskii krai), China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu) (Kononenko, 2016a). This species is recorded from Southern Kuril Islands for the first time.

***Conistra (Conistra) fletcheri (Sugi, 1958)***

Fig. 21

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 19–27.V 2021, 14 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Khabarovskii krai, Primorskii krai, Sakhalin), Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima) (Eda & Shikata, 2011; Kononenko, 2016a). This species was noted for the Kuril Islands on Kunashir (Rybalkin, 2020b).

REMARKS. Determination was affirmed by the male genitalia structure.

**\**Conistra (Conistra) grisescens (Draudt, 1950)***

Fig. 20

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 19–27.V 2021, 3 ♂, 1 ♀, 2 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Amur Region, S. Khabarovskii krai, Primorskii krai), China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu) (Kononenko, 2016a). This species is recorded from Southern Kuril Islands for the first time.

REMARKS. The species is easily identified by noticeably asymmetrical left and right valve length, and a series of strong cornuti.

**\**Teratoglaea pacifica (Sugi, 1958)***

Fig. 17

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 21–22.V 2021, 7 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Khabarovskii krai, Primorskii krai, Sakhalin), Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima) (Eda & Shikata, 2011; Kononenko, 2016a; Matov *et al.*, 2019). This species is recorded from Southern Kuril Islands for the first time.

**\**Lithophane consocia (Borkhausen, 1792)***

Fig. 13

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 28.V 2021, 1 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (European Russia, NW. Caucasus, S. Ural, W. Siberia, Altai, Sayan, Transbaikalia, S. Yakutia, Amur region, Yewish AO, Khabarovskii krai, Primorskii krai, Kamchatka, Sakhalin), Europe, Baltic countries, Belarus, Ukraine, Kazakhstan, China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu) (Kononenko, 2016a). This species is recorded from Southern Kuril Islands for the first time.

**\**Lithophane plumbealis* (Matsumura, 1926)**

Fig. 14

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 20–22.V 2021, 2 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Khabarovskii krai, Primorskii krai, Sakhalin), China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu) (Kononenko, 2016a). This species is recorded from Southern Kuril Islands for the first time.

***Lithophane socia* (Hufnagel, 1766)**

Fig. 16

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 19.V – 4.VI 2021, 5 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (European Russia, NW. Caucasus, Ural, W. Siberia, S. Siberia, NE Siberia, Transbaikalia, Amur region, Khabarovskii krai, Primorskii krai, Sakhalin), W. Europe, Baltic countries, Belarus, Ukraine, Kazakhstan, Mongolia, China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu) (Kononenko, 2016a). This species has already been reported for the Kuril Islands in the Kunashir Island (Rybalkin, 2020b).

**\**Lithophane venusta* (Leech, 1889)**

Fig. 15

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 4.VI 2021, 1 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Khabarovskii krai, Primorskii krai), China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu) (Kononenko, 2016a). This species is recorded from Southern Kuril Islands for the first time.

**\**Clavipalpula aurariae* (Oberthür, 1880)**

Fig. 4

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 18–28.V 2021, 21 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Amur region, Yewish AO, S. Khabarovskii krai, Primorskii krai), Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima), Korea, China (Yoshimatsu, 2011; Kononenko, 2016a). The species is recorded from Kuril Island for the first time.

**\**Orthosia incerta* (Hufnagel, 1766)**

Fig. 5

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 20.V 2021, 2 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (European Russia, N. Caucasus, Ural, Siberia, Amur region, Khabarovskii krai, Primorskii krai, Sakhalin), W. Europe, N. Africa, Baltic countries, Belarus, Ukraine, Middle East, Kazakhstan, Middle Asia, China, Korea, Japan (Hokkaido, Honshu) (Kononenko, 2016a). The species is recorded from Kuril Island for the first time.

**\**Orthosia ella* (Butler, 1878)**

Figs 6, 7

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 18.V–4.VI 2021, 53 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (Ural, Transbaikalia, S. Amur region, S. Khabarovskii krai, Primorskii krai), China, Korea, Japan (Hokkaido, Honshu, Shikoku) (Yoshimatsu, 2011; Kononenko, 2016a). The species is recorded from Kuril Island for the first time.

**\**Orthosia carnipennis* (Butler, 1878)**

Fig. 8

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 4.VI 2021, 1 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Amur region, S. Khabarovskii krai, Primorskii krai, Sakhalin Island), China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima) (Yoshimatsu, 2011; Kononenko, 2016a). This species is recorded from the Southern Kuril Islands for the first time.

**\**Orthosia odiosa* (Butler, 1878)**

Fig. 9

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 18.V–4.VI 2021, 8 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Khabarovskii krai, Primorskii krai), China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima) (Yoshimatsu, 2011; Kononenko, 2016a). This species is recorded from the Southern Kuril Islands for the first time.

**\**Orthosia paromoea* (Hampson, 1905)**

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 18.V–4.VI 2021, 1 ♂, leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Khabarovskii krai, Primorskii krai), China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu) (Yoshimatsu, 2011; Kononenko, 2016a). This species is recorded from the Southern Kuril Islands for the first time.

REMARKS. Identified by the male genitalia structure because the male available has very poor wing condition.

**\**Anorthoa angustipennis* (Matsumura, 1926)**

Fig. 10

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 18–28.V 2021, 1 ♀, 4 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Amur region, S. Khabarovskii krai, Primorskii krai, Sakhalin Island), China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima) (Yoshimatsu, 2011; Kononenko, 2016a). This species is recorded from the Southern Kuril Islands for the first time.

REMARKS. Identification was affirmed by examination of the male genitalia structure.

**\*Perigrapha hoenei (Püngeler, 1914)**

Fig. 11-12

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 18–22.V 2021, 6 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Khabarovskii krai, Primorskii krai, Sakhalin Island), China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima, Yaku) (Yoshimatsu, 2011; Kononenko, 2016a). This species is recorded from the Southern Kuril Islands for the first time.

**Melanchra postalba (Sugi, 1982)**

Figs 18, 51, 52

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 16–28.VII 2015, 6 ex., 10–25.VII 2017, 2 ♂, leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Khabarovskii krai (new record, the species is common, together with its sibling *Melanchra persicariae* (Linnaeus, 1761) in Khabarovsk suburbs), Primorskii krai, Sakhalin Island (Rybalkin *et al.*, 2018), Kunashir Island), China, Korea, Japan (Hokkaido, Honshu) (Kononenko, 2016a; Rybalkin *et al.*, 2018; Rybalkin *et al.*, 2019).

REMARKS. Identification of specimens from Kunashir and Sakhalin was confirmed by the male genitalia structure.

**Diarsia ruficauda (Warren, 1909)**

Fig. 3

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 29.V–4.VI 2021, 1 ♂, 1 ♀, 8 ex., leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Khabarovskii krai (Dubatolov, 2015), Primorskii krai), China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu) (Kononenko, 2016a). This species was reported from Kunashir Island (Rybalkin, 2020b).

REMARKS. Determination is confirmed by male genitalia structure.

**Family Lycaenidae**

**\*Callophris (Ahlbergia) ferrea (Butler, 1866)**

Figs 42, 43

MATERIAL. **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 20–27.V 2021, 8 ♂, leg. S. Rybalkin.

DISTRIBUTION. Russia (S. Amur region, S. Khabarovskii krai, Primorskii krai, Sakhalin Island), China, Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu) (Streltsov, 2016). This species is recorded from Southern Kuril Islands for the first time.

**\**Celastrina sugitanii* (Matsumura, 1919)**

Fig. 39-41, 49

**MATERIAL.** **Russia:** Kunashir Island, 4.5 km NW Mendeleevo airport, Tretyakovo village, 20–27.V 2021, 20 ♂, 8 ♀, leg. S. Rybalkin.

**DISTRIBUTION.** Russia (Sakhalin Island), China, Korea, Japan (Hokkaido, Honshu, Kyushu) (Kawazoe & Wakabayashi, 1976). This species is recorded from Southern Kuril Islands for the first time.

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Address: Federal Scientific Center of the East Asia Terrestrial Biodiversity (former Institute of Biology and Soil Science), Far East Branch of the Russian Academy of Sciences, 690022, Vladivostok-22, Russia.  
E-mail: storozhenko@biosoil.ru                      web-site: <http://www.biosoil.ru/fee>