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NEW RECORDS OF THE NOCTIUD MOTHS (LEPIDOPTERA: EREBIDAE, NOCTUIDAE) FROM KUNASHIR ISLAND, COLLECTED IN LATE AUTUMN 2023

V. V. Dubatolov[1,2,3*)], V. K. Zinchenko[2,3)]

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

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

3) Federal State Institution "Kurilsky State Nature Reserve", Zarechnaya str., 5, Yuzhno-Kurilsk, Sakhalin Region, 694500, Russia.

Summary. Five species, *Gonitis mesogona* (Walker, 1858) (Lepidoptera: Erebidae), *Condica illecta* (Walker, 1865), *Lithophane lamda* (Fabricius, 1787), *L. ustulata* (Butler, 1878), and *Peridroma saucia* (Hübner, [1808]) (Noctuidae) are recorded from the Kuril Islands for the first time.

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

В. В. Дубатолов, В. К. Зинченко. Новые находки совок (Lepidoptera: Erebidae, Noctuidae) с острова Кунашир, собранных поздней осенью 2023 г. // Дальневосточный энтомолог. 2024. N 512. С. 24-28.

Резюме. С острова Кунашир впервые приводятся 5 видов: *Gonitis mesogona* (Walker, 1858) (Lepidoptera: Erebidae), *Condica illecta* (Walker, 1865), *Lithophane lamda* (Fabricius, 1787), *L. ustulata* (Butler, 1878) и *Peridroma saucia* (Hübner, [1808]) (Noctuidae).

INTRODUCTION

The first collections of Lepidoptera in Kunashir in the autumn period by S. Rybalkin on September 1–22, 2019, by V.V. Dubatolov and V.K. Zinchenko from September 13 to October 24, 2022 led to the discovery of many dozens of species that had not previously been recorded on the island (Rybalkin, 2020a, b; Rybalkin *et al*., 2022; Rybalkin & Beljaev, 2023; Dubatolov *et al*., 2023; Beljaev *et al.*, 2023). In 2023, the work of V.V. Dubatolov and V.K. Zinchenko was continued in late autumn, in the second half of October and November. It should be noted that the last days of November and the first half of December in Kunashir are the late autumn rather than winter season, with temperature fluctuating around zero and snow often falls. The first small night frosts in 2022 were noted on the night of October 25/26, and even later in 2023: short-term, down to –2 ºC at the beginning and middle of the night of November 8/9, then since November 11 the temperature dropped to zero

and down to –2-3 ºC almost nightly. Such minor frosts did not lead to the cessation of the flight of moths, so that the whole complex of late-autumn moths appeared only on November 18–22, before the main snowfall on the night of November 24/25.

In the second half of October and November 2023, the authors collected insects mainly at the Andreevsky Cordon of the Kuril Nature Reserve near the mouth of the Andreevka River. Lepidoptera were collected under the light of a DRV-160 W lamp on the wall of the Cordon house from a gasoline electric generator. In addition, in the vicinity of the Cordon, collection was carried out using light traps with 12 V LED lamps powered by a 44 A/h battery. We also caught moths using Cahors bait with sugar on gauze ties, as well as in mash in 5 and 1.5 liter bottles. Lepidoptera were caught using the same methods at the Kaldernyi Cordon in the caldera of the Golovnina Volcano from October 30 to November 1. At the latest, in the last days of November, the capture of nocturnal Lepidoptera was carried out mainly in the evening twilight and at the beginning of the night in the forest by the light of a flashlight, as well as during the daytime.

Two main places were studied:

1) Andreevskii Cordon (=ranger station) (43°53'16" N, 145°37'29" E), eastern side of Kunashir, a meadow near mainly alder forest on the neighbouring slope and mixed forest apart on the plateau; light trapping was not rich but Cahors bait trapping was also successful; some species were caught in forest with a net at night time;

2) Caldera of the Golovnina Volcano (43°51'30" N, 145°31' E), central part of southern Kunashir, a *Sasa* meadow with scarce trees of oaks, alders, birches, elms, rowans, dwarf pines; collecting by light at Cordon Kaldernyi (another ranger station) (43°51'31" N, 145°30'47" E), as well as light trapping on a big oak at 43°51'30" N, 145°30'54" E and bait collecting (Cahors vine with sugar) between the Cordon Kaldernyi and 43°51'27" N, 145°30'59" E.

NEW RECORDS

Family Erebidae

***Gonitis mesogona* (Walker, 1858)**
Fig. 1

MATERIAL. **Russia**: Kunashir Island, Andreevskii Cordon env., 18–19.IX 2022, 1♀.

DISTRIBUTION. Russia (Primorskii krai). – China, Korea, Japan, Taiwan, SE Asia, Sri Lanka, India, Nepal, Pakistan (Kononenko, 2010).

REMARKS. In Kunashir, as in Primorskii krai of Russia, this is a migrant species. It was caught in a Cahors bait trap in mixed forest in middle November.

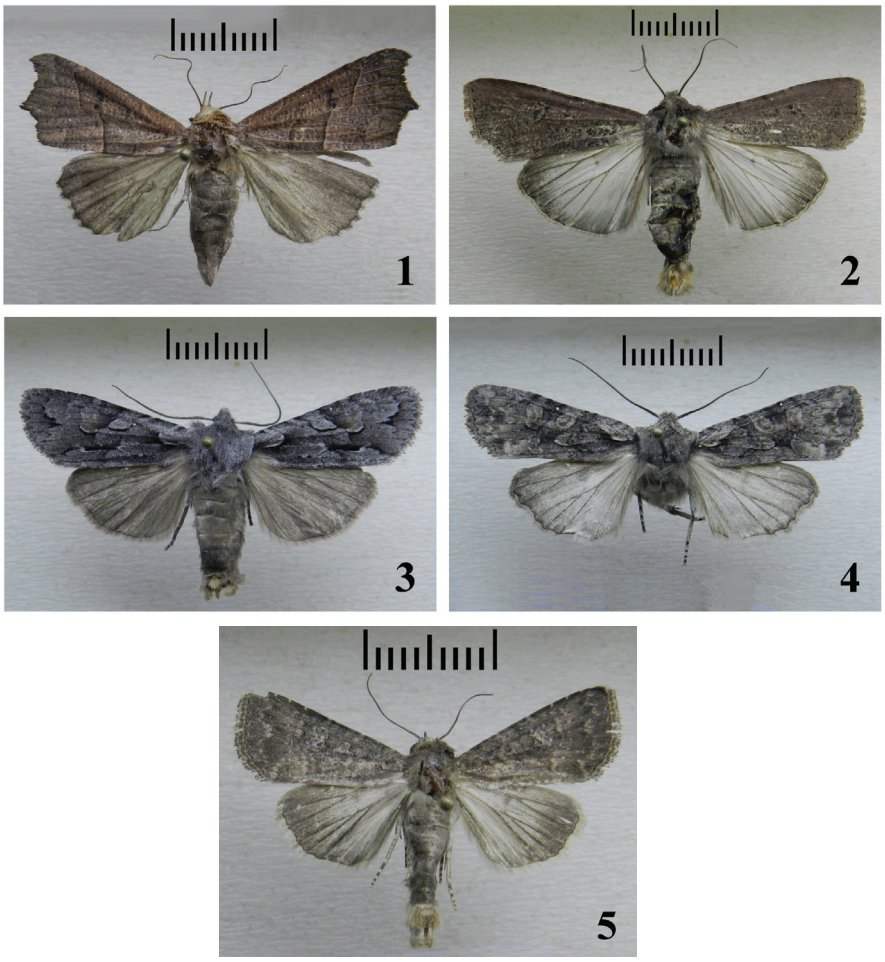
Family Noctuidae

***Condica illecta* (Walker, 1865)**
Fig. 5

MATERIAL. **Russia**: Kunashir Island, Andreevskii Cordon, by light, 20.X–7.XI 2023, 4♂, 1♀, 1 visual observation; Andreevskii Cordon env., bait traps, 3.XI 2023, 2 ♀; same locality, 10.XI 2023, 1♂.

DISTRIBUTION. A widely distributed South Asian and Oriental species: Russia (Primorskii krai). – China, Korea, Japan (Okinawa, Ryukyu, Tokara Isles), Middle East (Saudi Arabia, Yemen, Arabian Emirates, Oman), Pakistan, India, Sri Lanka, Nepal, Thailand, Vietnam, Malaysia, Indonesia, Philippines, Oceania, Australia (Kononenko, 2016).

REMARKS. Firstly observed in Kunashir. Moths were collected by light and also by bait traps with Cahors vine in alder forest on the slope, during dark evening in late October – early November.



Figs 1–5. Noctuids from Kunashir Island, Andreevskii kordon, dorsal view. 1 – *Gonitis mesogona* (Walker, 1858), ♀; 2 – *Peridroma saucia* (Hübner, [1808]), ♂; 3 – *Lithophane lamda* (Fabricius, 1787), ♂; 4 – *Lithophane ustulata* (Butler, 1878), ♂; 5 – *Condica illecta* (Walker, 1865), ♂.

***Lithophane lamda* (Fabricius, 1787)**
Fig. 3

MATERIAL. **Russia**: Kunashir Island, Andreevskii Cordon env., 26.X 2023, 1♂.

DISTRIBUTION. Russia (European part; West Siberia, Altai, Sayan and Baikal areas, Transbaikalia, Amurskaya oblast, Khabarovskii krai, Sakhalin, Magadanskaya oblast). – Europe (in mountains), Korea, Japan (Hokkaido) (Kononenko, 2010).

REMARKS. Firstly recorded from Kunashir. It was caught by bait traps with Cahors vine in alder forest on slope, during dark evening in late October.

***Lithophane ustulata* (Butler, 1878)**
Fig. 4

MATERIAL. **Russia**: Kunashir Island, Andreevskii Cordon, bait traps, 23.X, 3.XI, 7.XI, 18.XI 2023, 3♂, 2♀; caldera of the Golovnina Volcano, Kaldernyi Cordon env., on oak, bait trap, 31.X-1.XI 2023, 2♂.

DISTRIBUTION. Russia (Amurskaya oblast: Zeiskii Nature Reserve; Khabarovskii krai: Bolshekhekhtsyrskii Nature Reserve; Primorskii krai). – China, Korea, Japan (Kononenko, 2003; Dubatolov & Dolgikh, 2009, 2010; Dubatolov *et al*., 2014; Kononenko, 2016).

REMARKS. Firstly recorded from Kunashir. Inhabits oak forests and forests with oaks, because the caterpillar eats its leaves (Kononenko, 2016). In Kunashir, the species was caught only in bait traps with Cahors vine in late October – early November.

***Peridroma saucia* (Hübner, [1808])**
Fig. 2

MATERIAL. **Russia**: Kunashir Island, Andreevskii Cordon env., bait traps, 23.X.2023, 1♂.

DISTRIBUTION. Nearly cosmopolitan species, distributed mostly in the troipical and subtropical areas. Russia (European part to South Urals, Crimea, the Caucasus; also reported from Sakhalin: Kholmsk, 14.X.2017 (Titova, 2018)). – Europe (in northern regions as a migrant), Africa, Middle East, Pakistan, India, Nepal, South-Eastern Asia, China, Korea (Cheju-do), Taiwan, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima), Philippines, Indonesia, Australia, New Zealand, Central and South America (Kononenko *et al*., 1998).

REMARKS. Firstly recorded from Kuril Islands. In Kunashir, as in Sakhalin also, this is a migrant species. It was caught in bait traps with Cahors vine in Late October.

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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