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FIRST RECORD OF NOCTUID MOTH *CALLOPISTRIA AETHIOPS* BUTLER, 1878 (LEPIDOPTERA: NOCTUIDAE) FROM SOUTHERN PRIMORYE AS AN EXAMPLE OF THE EAST ASIAN SPECIES PENETRATING IN RUSSIAN FAUNA

V. V. Dubatolov^{1,2)}

1) Federal State Institution "Zapovednoe Primurye", Yubileinaya street, 8, Bychikha village, Khabarovskii Krai, 680502, Russia. 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.

Summary. An East Asian-Oriental noctuid species *Callopistria aethiops* Butler, 1878 is recorded from Russia for the first time. The trend of invasions of the southern Macroheterocera species into the Russian Far East has existed at least during last century but is noticeably increased during last 20 years.

Key words: Lepidoptera, Noctuidae, fauna, new record, invasion, Primorskii Krai, Russia.

В. В. Дубатолов. Первая находка совки *Callopistria aethiops* Butler, 1878 (Lepidoptera: Noctuidae) в Южном Приморье как пример внедрения восточноазиатских видов в фауну России // Дальневосточный энтомолог. 2021. N 429. С. 8-11.

Резюме. Восточноазиатско-ориентальная совка *Callopistria aethiops* Butler, 1878 впервые найдена в России. Показано, что тенденция проникновения южных видов макрочешуекрылых на Дальний Восток России отмечена, по крайней мере, в течение ста лет, но наиболее ярко она выражена в последние два десятилетия.

INTRODUCTION

During an excursion to Vitjaz Bay (Khasan District in Primorskii Krai) in September 2020, a new for Russian fauna noctuid moth was collected among other 73 late summer and autumn Macroheterocera species. Such new records were often made after typhoons coming from more southern regions (Moltrecht, 1929; Lisetskii, 1970; Dubatolov, 1982; Efetov, 1986; Dubatolov & Yakovlev, 2013; Beljaev & Velyaev, 2016; Spitsyn & Spitsyna, 2021; etc.). It allows me to discuss the invasions of the southern species into the Russian Far East.

NEW RECORD

Family Noctuidae Latreille, 1809

Subfamily Eriopinae Herrich-Schäffer, [1851]

***Callopistria aethiops* Butler, 1878**

Fig. 1

Callopistria aethiops Butler, 1878: 200. Type locality: Yokohama [Japan].

MATERIAL EXAMINED. **Russia:** Primorskii Krai, Khasan District, Gamov Peninsula, Vitjaz Bay, the Vostochnyi Cottage, 42°36.95' N, 131°11.2' E, by light, 7–8.IX 2020, 1♂, leg. V.V. Dubatolov (deposited in Siberian Zoological Museum of the Institute of Systematics and Ecology of Animals, Novosibirsk).

DISTRIBUTION. The species occurs in Japan (Honshu, Shikoku, Kyushu, Tsushima, Yakushima, Amamioshima, Okinawa, Ishigakijima, Iriomotejima) (Yeda, 2011); Korea from North to Ulleungdo Is. (Lim *et al.*, 2013), China including Hong Kong (Kendrick, 2017) and Taiwan, Thailand (Kononenko & Pinratana, 2013), Nepal and India (from Kashmir and Sikkim southwards to Nilgiris) (Kononenko *et al.*, 1998; Yen & Wu, 2009). The record from Vitjaz Bay is the first in Russia.

REMARKS. The specimen from Russia has typical *Callopistria* wing pattern (Fig. 1), and is characterized by a darker triangular spot on the middle part of the forewing costal margin.

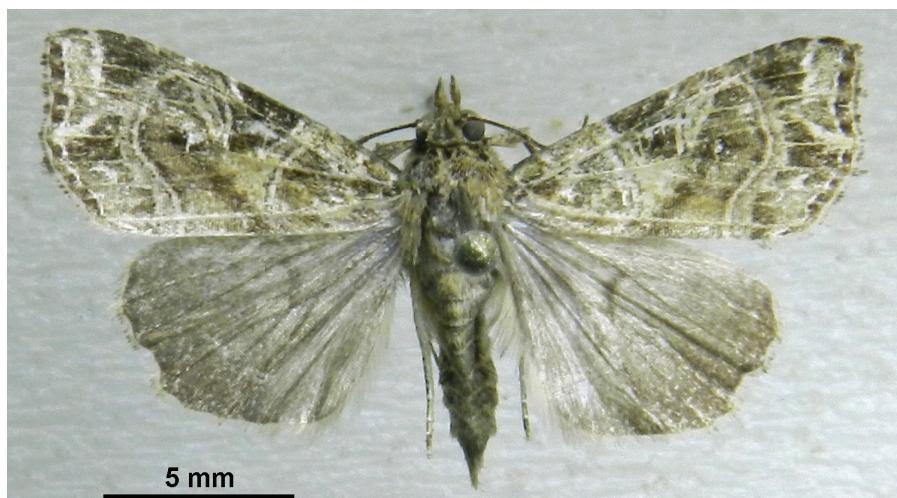


Fig. 1. *Callopistria aethiops* Butler, 1878, male from Gamov Peninsula, Russia.

DISCUSSION

During last 20 years, several Macroheterocera species were newly recorded from southern regions of Primorskii Krai in the Russian Far East, such as *Apocheima cinerarius* (Erschoff, 1874) (Beljaev & Ponomarenko, 2005), *Idaea triselata* (Prout, 1922), *Thinopteryx crocoptera* (Kollar, 1844) (Beljaev, 2013) from Geometridae, *Acosmeryx naga* (Moore, 1857) (Beljaev, 2003), *Acherontia styx* (Westwood, 1847) (Dubatolov & Yakovlev, 2013), *Ambulyx tobii* (Inoue, 1976) (Koshkin & Bezburodov, 2013), *Parum colligata* (Walker, 1856) (Koshkin & Kostyunin, 2017), *Psilogramma increta* (Walker, 1865) (Spityn & Spitsyna, 2021) from Sphingidae, *Rhyzoba yanagitai* Nakao, Fukuda et Hayashi, 2016 (Beljaev & Velyaev, 2016)

(Nolidae), *Artena dotata* (Fabricius, 1794) (Lisetskii, 1970), *Bertula spacoalis* (Walker, 1859) (Erebidae), *Orthosia aoyamensis* (Matsumura, 1926), *Euplexidia angusta* Yoshimoto, 1987 (Noctuidae) (Koshkin *et al.*, 2021), etc. Such new records were often (but not all!) made after typhoons coming from more southern regions. However, this is not a trend of last years only. For example, *Clanis undulosa* Moore, 1879, which is now widely distributed in Southern Primorye, was firstly observed in Russia in Furugel'm Is. in 1975 by A. Velizhanin (materials deposited in Siberian Zoological Museum of the Institute of Systematics and Ecology of Animals, Novosibirsk); in 1976–1979 it occupied the whole continental territory of Khasan District in Primorskii Krai and during last 10 years reached Ussuriisk District and Khabarovsk as well (Koshkin *et al.*, 2015). Some other Oriental species were recorded from Southern Primorye in the beginning of XX century, like *Erebus macrops* (Linnaeus, 1768) from Erebidae (Moltrecht, 1929) and *Cephanodes hylas* (Linnaeus, 1771) from Sphingidae (Efetov, 1986), and in the second part of XX century, like *Macroglossum bombylans* (Boisduval, 1875) in 1957 (Tshistjakov, 1984), *Theretra oldenlandiae* (Fabricius, 1775) in 1965 (Lisetskii, 1970), *Macroglossum saga* Butler, 1878 in 1968 (Dubatolov, 1982) from Sphingidae, and some colourful noctuids, like *Metopta rectifasciata* (Ménétriès, 1863) (Kononenko, 1990), *Spirama helicina* (Hübner, [1831]), *Ischjya manlia* (Cramer, 1776), *Eudocima falonia* (Linnaeus, 1763), *Ophiusa tirhaca* (Cramer, 1777), *Serrodes campana* Guenée, 1852, *Artena dotata* (Fabricius, 1794), etc. (Kononenko, 2010). So, the trend of southern species penetrating into the Russian Far East has existed at least during last century but is noticeably increased during last 20 years.

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REFERENCES

- Beljaev, E.A. 2003. *Acosmeryx naga* Moore (Lepidoptera, Sphingidae) – new species of hawkmoths for the fauna of Russia. *Far Eastern Entomologist*, 131: 6–8.
- Beljaev, E.A. 2013. Features of the fauna of geometrid moths (Lepidoptera: Geometridae) on islands of the Peter the Great Gulf. *A.I. Kurentsov's Annual Memorial Meetings*, 24: 71–100. [In Russian]
- Beljaev, E.A. & Ponomarenko, M.G. 2005. New lepidopterological finds (Lepidoptera: Gelechiidae, Tortricidae, Geometridae) in south of Russian Far East. *Far Eastern Entomologist*, 155: 1–11.
- Beljaev, E.A. & Velyaev, O.A. 2016. First records of subtropical noctuid moth *Risoba yanagitai* Nakao, Fukuda et Hayashi, 2016 (Lepidoptera: Nolidae, Risobinae) from Russia and Korea. *Far Eastern Entomologist*, 325: 13–17.
- Butler, A.G. 1878. XXIV. – Descriptions of new species of Heterocera from Japan. – Part II. Noctuidae. *Annals and Magazine of Natural History*, (5) 1(3): 192–204.
- Dubatolov, V.V. 1982. On a specific composition of hawk moths (Lepidoptera, Sphingidae) of the Soviet Far East. P. 87–76. In: *Beneficial and pest insects of Siberia. Series "Fauna of Siberia"*. Nauka, Novosibirsk. [In Russian]
- Dubatolov, V.V. & Yakovlev, R.V. 2013. Discovery of *Acherontia styx* Westwood (Lepidoptera, Sphingidae) from Southern Primorye. *Amurian zoological journal*, 5(1): 39–40. [In Russian]

- Efetov, K.A. 1986. *Cephanodes hylas* (L.) (Lepidoptera, Sphingidae) on the territory of the USSR. *Vestnik Zoologii*, 3: 45. [In Russian]
- Kendrick, R.C. 2017. *Hong Kong Moths. Fern moths found in Hong Kong. Noctuoidea: Noctuidae, Eriopinae*. Available from: <http://hkmoths.ihostfull.com/noc/eri/eropinae.html> (accessed 7 April 2021).
- Kononenko, V.S. 2010. *Noctuidae Sibiricae. Vol. 2: Micronoctuidae, Noctuidae: Rivulinae – Agaristinae (Lepidoptera)*. Sorø: Entomological Press. 475 pp.
- Kononenko, V.S., Han, S.B. & Ronkay, L. 1998. *Illustrated Catalogue of Noctuidae in Korea (Lepidoptera)*. Insects of Korea. Series 3. 509 pp.
- Kononenko, V.S. & Pinratana, A. 2013. *Moth of Thailand. Vol. 3, Part 2. Noctuoidea. An illustrated Catalogue of Erebidae, Nolidae, Euteliidae and Noctuidae (Insecta, Lepidoptera) in Thailand*. Brothers of St. Gabriel in Thailand, Bangkok. 625 pp.
- Koshkin, E.S. & Bezborodov, V.G. 2013. First records of hawkmoth *Ambulyx tobii* (Inoue, 1976) (Lepidoptera, Sphingidae) from the southern part of Primorsky Krai, Russia. *Euroasian Entomological Journal*, 12(4): 415–419. [In Russian]
- Koshkin, E.S., Bezborodov, V.G., Voronkov, A.A., Korshunov, A.V., Kostyunin, A.E. & Prokopenko, K.M. 2015. Distribution of the hawk moth *Clanis undulosa* Moore, 1879 and *Ambulyx tobii* (Inoue, 1976) in Russia. *Far Eastern Entomologist*, 302: 14–17.
- Koshkin, E.S. & Kostyunin, A.E. 2017. Paper-mulberry hawk-moth *Parum colligata* (Walker, 1856) (Lepidoptera, Sphingidae), a new species for the fauna of Russia. *Far Eastern Entomologist*, 344: 18–20. DOI: <https://doi.org/10.25221/fee.344.4>
- Koshkin, E.S., Benedek, B. & Golovizin, V.A. 2021. New for the Russian fauna species of the families Erebidae and Noctuidae (Lepidoptera). *Far Eastern Entomologist*, 427: 25–28. DOI: <https://doi.org/10.25221/fee.427.3>
- Lim, J.-S., Park, Sh.-Y., Lim, J.-O. & Lee, B.-W. 2013. A faunistic study of insects from Is. Ulleungdo and its nearby islands in South Korea. *Journal of Asia-Pacific Biodiversity*, 6(1): 93–121.
- Lisetskii, A.S. 1970. New for the USSR species of Lepidoptera from Khasanskii Raion of Primorskii Krai]. *Materials of Kharkov Department of Geographical Society of Ukraine*, 7: 119–120. [In Russian]
- Moltrecht, A. 1929. Ueber die geographische Verbreitung der Macrolepidopteren des Ussuri- und Amur-Gebietes. *Zapiski Vladivostokskogo Otdela Gosudarstvennogo Russkogo Geographicheskogo Obshchestva (Obshchestva Izucheniya Amurskogo Kraya)*, 3(20/2): 5–70. [In Russian]
- Spitsyn, V.M. & Spitsyna, E.A. 2021. First record of the hawk moths genus *Psilogramma* Rothschild et Jordan, 1903 (Lepidoptera: Sphingidae) for the fauna of Russia. *Far Eastern Entomologist*, 426: 19–21. DOI: <https://doi.org/10.25221/fee.426.3>
- Tshitjakov, Yu.A. 1984. Occurrence of Macroheterocera moths from superfamilies Bombycoidea, Notodontoidea and some Noctuoidea in main forest formations of Southern Primorye. P. 80–99. In: *Fauna and ecology of Invertebrates of the Far East (pests and entomophags)*. Vladivostok. [In Russian]