

## New records of katydids and crickets (Orthoptera: Tettigoniidae, Gryllidae) from Kunashir Island, Kuril Islands

## Новые находки кузнечиков и сверчков (Orthoptera: Tettigoniidae, Gryllidae) на острове Кунашир, Курильские острова

V.V. Dubatolov<sup>\*,\*\*</sup>, V.K. Zinchenko<sup>\*</sup>

В.В. Дубатов<sup>\*,\*\*</sup>, В.К. Зинченко<sup>\*</sup>

\* Institute of Systematics and Ecology of Animals, Siberian Branch of Russian Academy of Sciences, Frunze Str. 11, Novosibirsk 630091 Russia; Federal State Institution «Kurilsky State Nature Reserve», Zarechnaya Str. 5, Sakhalinskaya Oblast, Yuzhno-Kurilsk 694500 Russia. E-mail: vvdubat@mail.ru.

\*\* Институт систематики и экологии животных СО РАН, ул. Фрунзе 11, Новосибирск 630091 Россия; ФГБУ «Курильский государственный природный заповедник», ул. Заречная 5, Сахалинская область, Южно-Курильск 694500 Россия.

\*\* Federal State Institution «Zapovednoe Priamurye», Yubileynaya Str. 8, Khabarovskii Krai, Bychikha 680502 Russia.

\*\* ФГУ «Заповедное Приамурье», ул. Юбилейная 8, Хабаровский край, Бычиха 680502 Россия.

**Key words:** Katydids, Tettigoniidae, Gryllidae, *Phaneroptera falcata*, *Ruspolia jezoensis*, *Oecanthus longicaudus*, Kunashir, new records.

**Ключевые слова:** кузнечики, пластинокрылы, трубачики, Tettigoniidae, Gryllidae, *Phaneroptera falcata*, *Ruspolia jezoensis*, *Oecanthus longicaudus*, Кунашир, новые находки.

**Abstract.** Five species of long-horned Orthoptera, *Phaneroptera falcata* (Poda, 1761), *Euconocephalus varius* sensu Tan, 2011, *Ruspolia jezoensis* (Matsumura et Shiraki, 1908) (Tettigoniidae), and *Oecanthus longicaudus* Matsumura, 1904, and *Teleogryllus infernalis* (Saussure, 1877) (Gryllidae), are recorded from Kunashir for the first time.

**Резюме.** Для Кунашира впервые указываются пять видов длинноусых прямокрылых: *Phaneroptera falcata* (Poda, 1761), *Euconocephalus varius* sensu Tan, 2011, *Ruspolia jezoensis* (Matsumura et Shiraki, 1908) (Tettigoniidae) и *Oecanthus longicaudus* Matsumura, 1904 и *Teleogryllus infernalis* (Saussure, 1877) (Gryllidae).

## Introduction

The long-horned Orthoptera (Ensifera) are well studied in the Kunashir Island. Twelve species were recorded from this island, namely: *Kuwayamaea sapporensis* Matsumura et Shiraki, 1908, *Conocephalus* (*Amurocephalus*) *chinensis* (Redtenbacher, 1891), *Eobiana japonica* (Bolivar, 1890) (Tettigoniidae), *Diestrammena kurilensis* Storozhenko, 1990 (Rhaphidiopteridae), *Velarifectorius micado* (Saussure, 1877), *Loxoblemmus arietulus* Saussure, 1877, *Pteronemobius jezoensis* (Shiraki, 1911), *P. nitidus* (Bolivar, 1901), *Dianemobius fascipes* (Walker, 1869), *Caconemobius sazanami* (Furukawa, 1970) (Gryllidae), *Myrmecophilus sapporensis* (Matsumura, 1904) (Myrmecophilidae), *Gryllotalpa orientalis* Burmeister, 1838 (Gryllotalpidae) [Storozhenko, 2004]. However, during late summer and autumn expeditions to Kunashir in 2023–2025, five more Ensifera species have been found on this island. Katydids and crickets

were collected from two main localities in Russia, Sakhalinskaya Oblast, Kunashir Island: 1 — Danilovskii kordon (ranger station) (43°57'17" N, 145°35'34" E), western side of Kunashir, a meadow, with the neighbouring slope covered by oak forest while mixed forest is located about one km away; 2 — Andreevskii kordon (ranger station) (43°53'17" N, 145°37'29" E), eastern side of Kunashir, a meadow, with mainly alder forest on the neighbouring slope and mixed forest apart on the plateau; 3 — Ivanovskii kordon (ranger station) (43°50'22" N, 145°24'40" E), south-western side of Kunashir, Ivanovskii cape, a meadow at an oak forest edge on a gentle slope.

The present work is registered in ZooBank (www.zoobank.org) under urn:lsid:zoobank.org:pub:D8ADC9B1-1FD7-490F-A152-4CB77953D5FB

### Tettigoniidae: Phaneropterinae

*Phaneroptera falcata* (Poda, 1761)

Sickle-bearing bush-cricket,

Пластинокрыл обыкновенный

**Material.** *Danilovskii kordon*: 43°57'17" N, 145°35'34" E, by light, Dubatolov, Zinchenko leg., 30–31.VIII.2024 — 1♂, 31.VIII–1.IX.2024 — 4♂♂, 2–3.IX.2024 — 4♂♂, 5–6.IX.2024 — 2♂♂, 8–9.IX.2024 — 1♂, 10–11.IX.2024 — 6♂♂, 12–13.IX.2024 — 1♀, 30–31.VII.2025 — 1♂, 2–3.VIII.2025 — 6♂♂, 3♀♀, 6–7.VIII.2025 — 1♂, 7–8.VIII.2025 — 1♂, 16–18.VIII.2025 — 2♂♂ (Dubatolov, Zinchenko), idem, meadow, at daytime, 7.IX.2024, Dubatolov, Zinchenko — 2♀♀, 2.VIII.2025 — 1♂, 1♀ (larva), (Dubatolov, Zinchenko); the same locality, net sweeping at early night: 10.VIII.2025 — 1♂ (Zinchenko); Ivanovskii cape, Ivanovskii kordon (=ranger station), 43°50'17–25" N 145°24'31–39" E: 1.IX.2025 — 4♂♂, 3♀♀, 2.IX.2025 — 1♀, 5.IX.2025 — 3♀♀ (Dubatolov).

**Distribution.** Russia: southern and middle parts of the European Russia, south-eastern part of West Siberia, Transbai-

kalia, southern parts of Amurskaya Oblast' and Khabarovskii Krai, Primorskii Krai, Southern Kuril Islands: Kunashir (new record in this paper!); Europe, the Caucasus, Transcaucasia, North Iran, Kazakhstan, Middle Asia, Mongolia, China, Korea, Japan [Storozhenko, 2004].

**Remarks.** These bush-crickets were caught mainly by light and net sweeping through meadow herbs. They appeared in late July, and were common during August and the first half of September.

The species is easily identified by an oval tympanal apparatus on the fore tibia.

### Conocephalinae

*Eoconocephalus varius* (Walker, 1869)

*Eoconocephalus varius* (Walker, 1869): Tan, 2011

Figs 1, 3.

**Material.** *Andreevskii kordon*: 43°53'17" N, 145°37'29" E, by light, 10.XI.2023, Dubatolov leg. — 1♂.

**Distribution.** Russia: southern Sakhalin [Vertyanin, 2017], southern Kuril Islands: Kunashir (new record), Iturup (new record); Japan (Hokkaido, Honshu, Shikoku, Kyushu) [Murai, Ito, 2011], China, Bangladesh, Singapore, Indonesia (Jawa) [Eades et al., 2025].

**Remarks.** This curious katydid flew to light at late dusk. The specimen from Iturup is registered by photo from a car hood on a road XI.2023 made by unknown tourist.

Species of the genus *Eoconocephalus* H.H. Karny, 1907 can be easily identified according to a number of papers [Murai, Ito, 2011; Tan, 2011; Vertyanin, 2017]. However, *Eoconocephalus varius* sensu Tan, 2011 in these works does not seem conspecific to the type of *Eoconocephalus varius* (Walker, 1869), depicted recently by Eades et al. [2025]. Since a revision of the genus is still missing and the proper name for *Eoconocephalus varius* sensu Tan, 2011 is not established, we have to use for the our specimens the name *Eoconocephalus varius* sensu Tan, 2011.

### *Ruspolia dubius* (Redtenbacher, 1891)

Сомнительный конусоголов

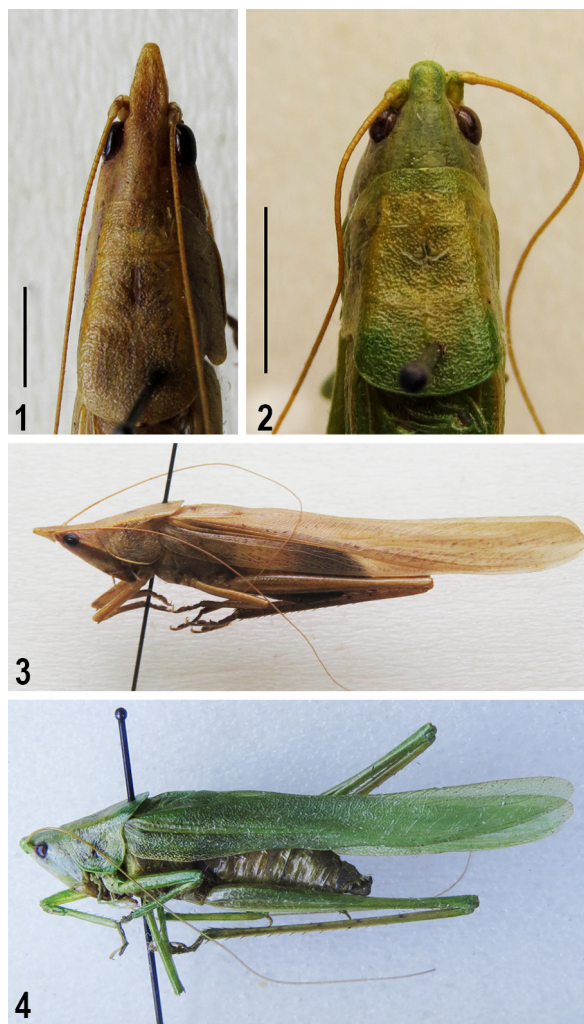
Figs 2, 4.

*Conocephalus dubius* Redtenbacher, 1891;

= *Conocephalus jezoensis* Matsumura, Shiraki, 1908: Storozhenko, 2004: 85; Kim, Puskás, 2012: 6; Zhi et al., 2012: 455.

**Material.** *Danilovskii kordon*: 43°57'17" N, 145°35'34" E, by light, Dubatolov, Zinchenko leg., 31.VIII–2.IX.2024 — 2♂♂, 2–3.IX.2024 — 1♀, 3–4.IX.2024 — 1♀, 5–6.IX.2024 — 1♂, 2♀♀, 6–7.IX.2024 — 1♂, 1♀, 7–8.IX.2024 — 1♂, 8–9.IX.2024 — 1♂, 1♀, 10–11.IX.2024 — 3♂♂, 11–12.IX.2024 — 1♂, 12–13.IX.2024 — 2♂♂, 15–16.VIII 2025 — 1♂, 1♀, 16–18.VIII 2025 — 1♂, 1♀, 21–25.VIII 2025 — 2♂♂, 4♀♀, 26–27.VIII 2025 — 3♂♂, 2♀♀, ibidem, VIII.2024, M. Ragimov leg. — 1♀; ibidem, net sweeping at early night: 12.VIII 2025 — 5♂♂, 6♀♀, 14.VIII 2025 — 4♂♂, 3♀♀ (Zinchenko); 3 km NE from Danilovskii Kordon, near spotlight house ruins, 43°58'22" N, 145°36'03" E, 30.VIII.2024, Dubatolov leg. — 1♀; between Danilovskii Kordon and spotlight house ruins, meadow, at daytime, 9.IX.2024, Dubatolov, Zinchenko leg. — 1♀; Yuzhno-Kuril'sk, the Nature Reserve administration territory, by light, 18–19.VIII 2025 — 1♀ (Dubatolov); Ivanovskii cape, Ivanovskii kordon (=ranger station), 43°50'22" N, 145°24'40" E, by light: 1.IX 2025 — 1♀, 7.IX 2025 — 1♀ (Dubatolov); ibidem, 43°50'17–25" N, 145°24'31–39" E at day time: 1.IX 2025 — 1♂, 2.IX 2025 — 1♂, 2♀♀, 3.IX 2025 — 1♀, 5.IX 2025 — 1♀ (Dubatolov); ibidem, at bait trap, 5.IX 2025 — 1♀ (Dubatolov).

**Distribution.** Russia: southern parts of Amurskaya Oblast' and Khabarovskii Krai, Primorskii Krai, Southern Kuril Is-



Figs 1–4. External appearance of newly registered species of Conocephalinae from Kunashir Island: *Eoconocephalus varius* (Walker) (1, 3) and *Ruspolia dubius* (Redtenbacher) (2, 4). 1, 2 — head and thorax, dorsally; 3, 4 — general view, laterally. Scale bars 5 mm.

Рис. 1–4. Внешний вид впервые отмеченных для Кунашира видов Коноцефалинае: *Eoconocephalus varius* (Walker) (1, 3) и *Ruspolia dubius* (Redtenbacher) (2, 4). 1, 2 — голова и спинка, сверху; 3, 4 — общий вид, сбоку. Масштаб: 5 мм.

lands: Kunashir (new record); North-Eastern China, Korea, Japan (Hokkaido, Honshu) [Storozhenko, 2004].

**Remarks.** Formerly considered as eastern populations of the West Palearctic *Ruspolia nitidula* (Scopoli, 1786) [Sergeev, 1986; Storozhenko, 1986]. As in the case of two previous species, these katydids were caught mainly by light, and only one was caught by net sweeping through meadow herbs. It is also a common species during second and third decades of August and the first part of September.

Unlike the previous species, the rostrum in *Ruspolia* is not so prominent and rounded (Fig. 2).

### Gryllidae: Oecanthinae

*Oecanthus longicaudus* Matsumura, 1904

Восточный трубочник

**Material.** *Danilovskii kordon*: meadow, at daytime, 43°57' N, 145°35' E, Dubatolov, Zinchenko leg., 1.IX.2024 — 1♂, 11.IX.2024 — 1♂, 2♀♀, 12.IX.2024 — 1♀; ibidem, net sweeping at early night: 12.VIII

2025 — 1♂, 14.VIII 2025 — 2♂♂, larvae: 2♂♂, 1♀, 21–24.VIII 2025 — 3♂♂, 2♀♀, (Zinchenko).

**Distribution.** Russia: southern parts of Amurskaya Oblast' and Khabarovskii Krai, Primorskii Krai, Southern Kuril Islands: Kunashir (new record!); China (including Taiwan), Korea, Japan [Storozhenko, 2004].

**Remarks.** All crickets were caught by net sweeping through meadow herbs near the ranger station during daytime in the first part of September.

#### Gryllinae

*Teleogryllus (Macroteleogryllus) infernalis* (Saussure, 1877)  
(Чёрный сверчок)

Fig. 5.

**Material.** *Danilovskii kordon*: 43°57'17" N, 145°35'34" E, low grass meadow, at early evening, 25.VIII 2025 — 1♀ (larva) (Dubatolov).

**Distribution.** Russia: southern parts of Amurskaya Oblast' and Khabarovskii Krai, Primorskii Krai, Southern Kuril Islands: Kunashir (new record!); China, Korea, Japan [Storozhenko, 2004]. In Japan, the species is known north to Hokkaido [Murai, Ito, 2011].

It has lesser light pattern on head (Fig. 5) than another species from Hokkaido, *T. emma* (Ohmachi et Matsuura, 1951) [Murai, Ito, 2011].

## Acknowledgements

The authors thank Mr. Aleksandr A. Kisleiko (Director of the Nature Reserve «Kurilskii»), Mrs. Elena V. Linnik (Scientific Vice Director of the Nature Reserve «Kurilskii») for a possibility to study insects in the Nature Reserve, and to Elena Linnik for a photo of *Euconocephalus varius* from Iturup. Special thanks to Mr. Mikhail Ragimov for his help during collecting in Danilovskii Kordon. The authors are also grateful to Aleksandr V. Vertyankin (Yuzhno-Sakhalinsk, Russia) for information about *Euconocephalus varius* from Sakhalin, and to Prof. M.G. Sergeev (Novosibirsk, Russia) for valuable consultations. The work was partly supported by the Project 1021051703269-9-1.6.12 «Development and Dynamics of Biological Systems in Eurasia». The material is preserved the Institute of Systematics and Ecology of Animals, Siberian Branch of the RAS, in the collection of «Siberian Zoological Museum, Novosibirsk». The authors are grateful to Dr. O.E. Kosterin (Novosibirsk, Russia) for the language correcting.



Fig. 5. *Teleogryllus infernalis* (Saussure, 1877), head dorsal-frontal view. Scale bars 1 mm.

Рис. 5. *Teleogryllus infernalis* (Saussure, 1877), голова, вид сверху-спереди. Масштаб: 1 мм.

## References

- Eades D.C., Otte D., Cigliano M.M., Braun H. 2025. Orthoptera Species File Online. Available from: <https://orthoptera.speciesfile.org>. Accessed: 2 January 2025.
- Kim T.-W., Puskás G. 2012. Check-list of North Korean Orthoptera based on the specimens deposited in the Hungarian Natural History Museum // Zootaxa. Vol.3202. No.1. P.1–27. <https://doi.org/10.11646/zootaxa.3202.1.1>
- Murai T., Ito F. 2011. [A Field Guide to the Orthoptera of Japan]. Sapporo: Hokkaidodaigakushuppankai. 449 p. [In Japanese].
- Sergeev M.G. 1986. [Patterns of distribution of Orthoptera insects in Northern Asia]. Novosibirsk: Nauka, Siberian Department. 237 p. [In Russian].
- Storozhenko S.Yu. 1986. Order Orthoptera (Saltatoria) // Opredelitel' nasekomykh Dal'nego Vostoka SSSR. T.I. Leningrad: Nauka. P.241–317. [In Russian].
- Storozhenko S.Yu. 2004. [Long-horned orthopterans (Orthoptera: Ensifera) of the Asiatic part of Russia]. Vladivostok: Dalnauka. 280 p. [In Russian].
- Tan M.K. 2011. The Copiphorini (Orthoptera: Tettigoniidae: Conocephalinae) in Singapore // Nature in Singapore. Vol.4. P.31–42.
- Vertyankin A.V. 2017. First record of the genus *Euconocephalus* Karny, 1907 (Orthoptera: Tettigoniidae, Conocephalinae) from the Russian Far East // Euroasian Entomological Journal. Vol.16. No.1. P.6–7. [In Russian]. <https://doi.org/10.15298/euroasentj.16.1.02>

Поступила в редакцию 4.5.2025