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Review of the *Olethreutes bowmanana-magadana* species group, with the description of a new species from the Amur River, Russia (Lepidoptera, Tortricidae)

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Abstract

We define and review the *Olethreutes bowmanana-magadana* species group comprised of *Olethreutes bowmanana* (McDunnough), *O. magadana* (Falkovitsh), *O. kamtshadala* (Falkovitsh), and *O. pivanica*, sp. n., the last from petrophytous sunny slopes in the Amur River. The new species differs from other species of the group by a narrow, triangular-shaped apical process from the sacculus; a round, wide, apical bulb from the cucullus; and a longer, narrow neck of the valva.

Key words: Tortricidae, *Olethreutes bowmanana*, *Olethreutes magadana*, *Olethreutes kamtshadala*, new species, Amur River, Russia, Far East

Introduction

During a study of the lepidopterous fauna of the Lower Amur Region, Russia, a new species of *Olethreutes* Hübner [1822] was discovered. The moths were collected on a petrophytous sunny slope of a terrace on the Amur River bank opposite to Komsomolsk-na-Amure city. The specimens belong to a group of closely related species including *O. magadana* (Falkovitsh 1965) and *O. kamtshadala* (Falkovitsh 1966), but they differ noticeably from both of them. A comparison of the specimens with types and additional material in the Zoological Institute (St. Petersburg, Russia) revealed that some specimens in the collection of Zoological Institute were misidentified. This finding prompted us to prepare a review of the species of this group, including the description of the new species.

Material and methods

Dissection methods follow those of Clarke (1941) and Hardwick (1950). Terminology for morphological features of wings and genitalia follow Gilligan et al. (2008).

The following depositories are abbreviated in the text:

CNCO Canadian National Collection of Insects, Arachnids, and Nematodes, Ottawa, Canada;
ISEA Siberian Zoological Museum, Institute of Systematics and Ecology of Animals, Novosibirsk, Russia;
ZISP Zoological Institute of Russian Academy of Sciences, St. Petersburg, Russia.



FIGURES 11–12. *Olethreutes pivanica*, Khabarovsk province. 11 - female genitalia; 12 - male hindwing costal margin, underside.

Distribution. *Olethreutes pivanica* is probably restricted to the Lower Amur basin and the mountains of the Region.

Etymology. The new species is named after the type locality place, Pivan.

Remarks. The new species is most similar to *O. magadana*, which was reported to occur in Chukotka, Magadan Province, Koryakia, Chita Province and Taimyr (Kuznetsov 2001). We found a few specimens labeled as *O. magadana* that were identified incorrectly by V. I. Kuznetsov in the collection of the Zoological Institute, St. Petersburg. After dissection, specimens from Chukotka were identified as *O. exaridana* (Kuznetsov 1991); a female from Kolyma was not identified, but it is not similar to the *O. magadana-kamtshadala* species group based on its genitalia. Another female from Taimyr has the genitalia similar to the new species and belongs to an uncertain species of the same complex. So, *O. magadana* Flkv. is actually known only from the Kolyma basin. All other data about distribution of *O. magadana* Flkv. in Chukotka and Kolyma were probably based on the incorrect identification. Additional specimens from Chukotka identified by Prof. V. I. Kuznetsov as *O. kamtshadala* Flkv. belong to *Cymolomia taigana* Falkovitsh, 1966. Thus, occurrence of *O. kamtshadala* Flkv. in Chukotka remains also questionable.

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