

First records of the rare antlion *Dendroleon pantherinus* (Fabricius, 1787) (Neuroptera: Myrmeleontidae) from Armenia

Первые находки редкого муравьиного льва *Dendroleon pantherinus* (Fabricius, 1787) (Neuroptera: Myrmeleontidae) в Армении

T.L. Ghrejyan, M.Yu. Kalashian, G.H. Karagyan, M.A. Mazmalyan
Т.Л. Креджян, М.Ю. Калашян, Г.А. Карагян, М.А. Мазмалян

Scientific Center of Zoology and Hydroecology, NAS of Armenia, P. Sevak Str. 7, Yerevan 0014 Armenia. E-mail: mkalashian1@gmail.com; tkredjyan@gmail.com; gaykaragyan@yahoo.com.

Научный центр зоологии и гидроэкологии НАН РА, ул. П. Севака 7, Ереван 0014 Армения.

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Ключевые слова: муравьиный лев, *Dendroleon pantherinus*, фауна, новые находки, Армения, оценка природоохранного статуса.

This contribution is dedicated
to the blessed memory of Dr. V.A. Krivokhatsky,
a scientist, colleague and friend

Abstract. The rare antlion *Dendroleon pantherinus* (Fabricius, 1787) is recorded from Armenia for the first time; it was found in forest regions of North-Eastern Armenia. Considering the rarity of this species, both throughout its range and in Armenia, it is proposed to include it in the next edition of the Red Book of the country.

Резюме. Для фауны Армении впервые приводится редкий вид муравьиного льва *Dendroleon pantherinus* (Fabricius, 1787). Вид найден в лесных районах Северо-восточной Армении. Учитывая его редкость как по всему ареалу, так и в Армении, предлагается включение вида в следующее издание Красной книги страны.

Introduction

Antlion *Dendroleon pantherinus* (Fabricius, 1787) (Neuroptera: Myrmeleontidae) is a rare species of the order of net-winged insects distributed in several countries of the Western Palearctic Region, namely: France, Germany, Switzerland, Italy, Austria, Czech Republic and Slovakia, Poland, Hungary, the Balkans, Ukraine, southern European Russia, including the North Caucasus, as well as in northeastern Turkey, Azerbaijan and Georgia [Aspöck et al., 2001; Krivokhatsky, 2011]. The species inhabits subtropical and temperate broad-leaved forests. During the expeditions carried out in 2021 in northeastern Armenia, several specimens of this species were found; data about these findings are given below.

The specimens are deposited in the collections of the Scientific Center of Zoology and Hydroecology of the National Academy of the Republic of Armenia in Yerevan.

Dendroleon pantherinus (Fabricius, 1787)
Figs 1, 2.

Material. Armenia, Tavush province: env. Koghb vill., «Zikatar» Environmental Center, 41.1260° N, 44.9206° E, h-1270 m a.s.l., 30.VIII.2021, M. Mazmalyan, G. Karagyan leg. — 3 spm.; Town Ijevan, 40.8652° N, 45.1334° E, h-700 m a.s.l., 27.VII.2021, M. Mazmalyan leg. — 1 spm.



Fig. 1. External appearance of antlion *Dendroleon pantherinus* from Koghb vill. environs.

Рис. 1. Внешний вид муравьиного льва *Dendroleon pantherinus* из окрестностей с. Кохб.

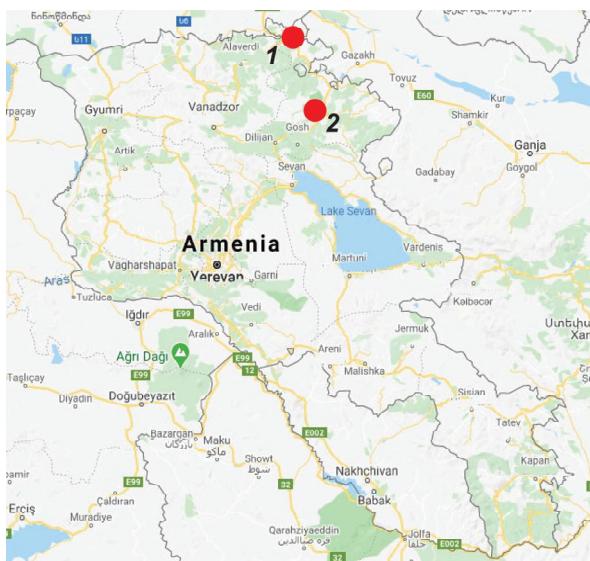
Discussion

Despite of rather extensive range, *Dendroleon pantherinus* is considered as one of the rarest species of antlions; it is known throughout the range by single sporadic finds [Devetak et al., 2010; Krivokhatsky, 2011; Colombo et al., 2013; Šumpich, 2015; Kuras, Mazalová, 2018]. This may be due to the peculiarities of the biology of the species. It lives in subtropical and temperate broad-leaved forests and, as far as is known, the larva of this antlion, unlike most species of the Myrmeleontidae family, does not build funnels in the soil, but develops in the hollows of old trees, such as oak, beech, yew, poplar, and, probably, other tree species [Brauer, 1867; Duelli, 2010; Colombo et al., 2013]. Meanwhile, traditional forestry practice provides for the removal of old and overripe trees from forests, which reduces the number of microhabitats suitable for development of the species. *Dendroleon pantherinus* is included into Red Lists and Red Books of some countries and regions: Poland (as extinct — «EX» [Dobosz, 2021]), Czech Republic [Zelení, 2005], Carpathian Region [Witkowski et al., 2003], and Krasnodarskii Krai of Russia [Krasnaya kniga..., 2007, 2017].

In Armenia, the species is also found in the forest belt of the northeastern part of the country, in buildings near the massifs of mature broad-leaved forest.

Considering the rarity of the species both throughout its range and in Armenia, it is proposed to include it in the next edition of the Red Book of the country. According to the criteria of the IUCN Red List of Threatened Species [IUCN, 2012a, b], the species is provisionally assessed as Endangered (EN). Further research is needed to clarify the conservation status of the species.

References

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- Fig. 2. Locality map of *Dendroleon pantherinus* in Armenia. 1 — env. Koghb vill.; 2 — Igjevan town. (Cartographic base — OpenStreetMap contributors).
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