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# *Nohoveus zigan* (H. Aspöck et al., 1980) - a new record for the Greek antlion fauna (Neuroptera: Myrmeleontidae)

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Ábrahám, L.: *Nohoveus zigan (H. Aspöck et al., 1980) - a new record for the Greek antlion fauna (Neuroptera: Myrmeleontidae).*
**Abstract:** Author reports the first occurrence of *Nohoveus zigan* (H. Aspöck et al., 1980) in Greece. Distribution, habitat, and major morphological features of the species are given.

**Keywords:** antlion, new faunistic record, Greece.

## Introduction

European antlions are the most investigated group in taxonomic and faunistic point of view (Aspöck et al. 2001). Several papers (e.g., Esben-Petersen 1918-1919, Zakharenko & Krivokhatsky 1993) and monographs (e.g., Kis et al. 1970, Aspöck et al. 1980,) described the European species. The most important summary of the European fauna is provided by Aspöck et al. (1980), who also published distribution maps of the species. Nowadays, the digital information and the database (LDL) developed and continuously updated by Oswald (2021) giving excellent tool for neuropterology research. According to this database, 40 taxa of Myrmeleontidae occur in Greece and 5 of these species have uncertain taxonomic status by various reasons.

*Neuroleon* (*Neuroleon*) *telosensis* Navás, 1929 - nomen dubium, type material apparently lost (Aspöck et al. 2001).

*Neuroleon* (*Ganussa*) *aegaeus* Willmann, 1977 - taxonomic status uncertain (Aspöck et al. 2001).

*Myrmecaelurus ghigii* Navás, 1929 and *Myrmecaelurus nematophorus* Navás, 1929 - nomen dubium, possibly conspecific with *Myrmecaelurus trigrammus* (Pallas, 1781) (Aspöck et al. 2001)

*Myrmeleon* (*Myrmeleon*) *elongatus* Olivier, 1811 - type material apparently lost, possibly conspecific with *Neuroleon nemausiensis* (Borkhausen, 1791) (Krivokhatsky 2011).

The Greek antlion fauna compared to other European countries is rich and well known at species level. *Nohoveus zigan* (H. Aspöck et al. 1980), as a new record for the Greek antlion fauna was found in the sandy delta of the Strymonas river in North Greece.

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## Material and methods

Sándor Ilniczky, colepterologist collected these specimens on his Greek expedition in 2021 and donated the voucher specimens to the Rippl-Rónai Museum. During, collecting, he used a 20-watt UV lamp.

Other species from the collected material were previously known in the Greek fauna. *Material examined:* 1 male 2 female, Greece, Amphipolis, Nea Kerdylia [Greek: Νέα Κερδύλια], N40º46,727'; E23º51,808'; 5m; 27.06.2021; Leg: S. Ilniczky.

## Results and discussion

*Nohoveus zigan* (H. Aspöck et al. 1980) is an objective replacement name for *Myrmeleon punctulatus* Steven in Fischer von Waldheim, 1849 since *Myrmeleon punctulatus* Steven in Fischer von Waldheim, 1849 is a homonym of *Myrmeleon punctulatus* Rambur, 1842 (current name: *Cueta punctulata* (Rambur, 1842).

STANGE (2004) based on ASPÖCK et al. (1980), took it into the genus *Myrmecaelurus* Costa, 1855. Later, KRIVOKHATSKY (2011) placed this species into the genus *Nohoveus* Navás, 1919, again.

Main feautres of the genus *Nohoveus* Navás, 1919: The abdomen of males is longer than the wings in rest, there are no cross-veins in the costal area of the hind wings and the male gonarcus with parameres is strongly curved in the lateral view.

*Distribution*: Mongol Eremial faunaelement. Known in Armenia, Azerbaijan, Georgia, Hungary, Serbia, Romania, Ukraine, Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan, Mongolia, Russia (ASPÖCK et al. 2001) Slovakia (CHLÁDEK & JAKEŠ 2008), Kyrgyzstan, Albania (KRIVOKHATSKY 2012, KRIVOKHATSKY et al. 2015, ), China (Xinjiang) (WANG et al. 2018). The distribution map of the species was published by ASPÖCK et al. (1980) and KRIVOKHATSKY (2011).

Data from Turkey (Agri and Konya) (ARI et al. 2007 as *Nohoandus* (sic!) *punctulatus* (Waldheim, 1822)) needs to be confirmed, because neither HÖLZEL (1972) nor ASPÖCK et al. (2001) did publish its occurrence in Turkey.

This species distributes in the Palearctic region, so its occurrence in India (KRIVOKHATSKY et al. 2015, KAUR et al. 2019) should be revised in the future. CHANDRA & SHARMA (2009) did not cite it from India in the latest checklist.

DEVETAK et al. (2019) concluded that this species is probably extinct in Serbia for more than 100 years.

The new occurrence of the species in Greece is unexpected as it has not been found in neighboring Bulgaria so far.

In Central Europe, the typical habitat of the species is the open sandy grasslands (VELLAY 1899, STEINMANN 1967, KIS et al. 1970, GEPP 2010). The habitats of the species are usually endangered by agricultural activities but the grazing livestock is favorable for the survival of the populations.

The species is also found in the Strimonas river estuary, border zone of riverside sandbanks, and seashore sandy dunes, with diverse, sparse vegetation. The population of the species is highly endangered and isolated.

The flying period of adults in Central Europe and mostly in the Palearctic, starts from mid-July and ended at mid-August (GEPP 2010, SZENTKIRÁLYI & KAZINCZY 2002).

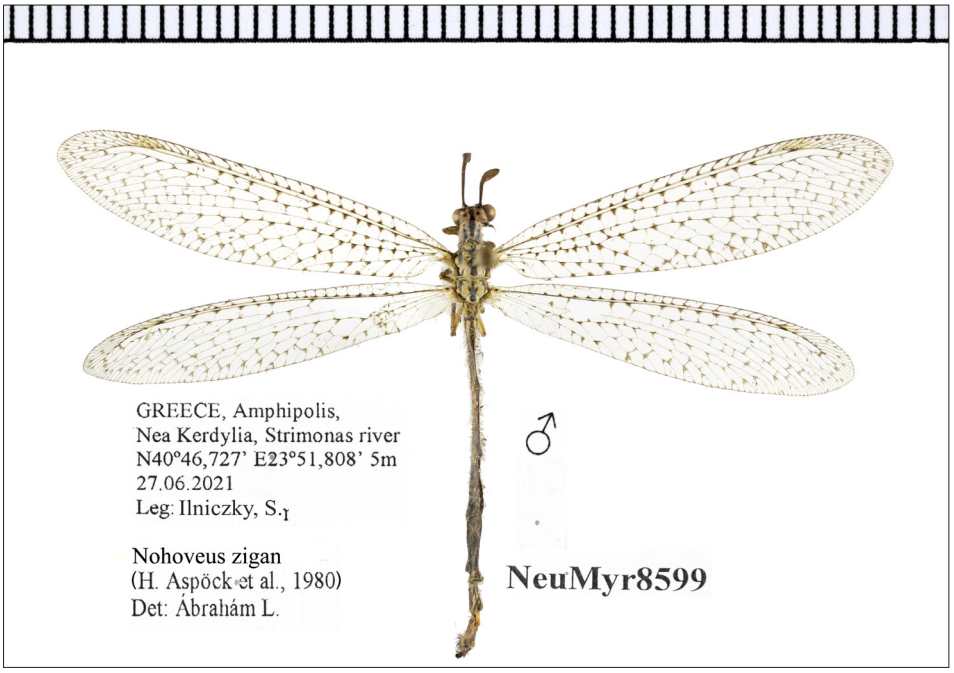


**Fig. 1: *Nohoveus zigan* (H. Aspöck et al., 1980) from Greece (scale in mm)**

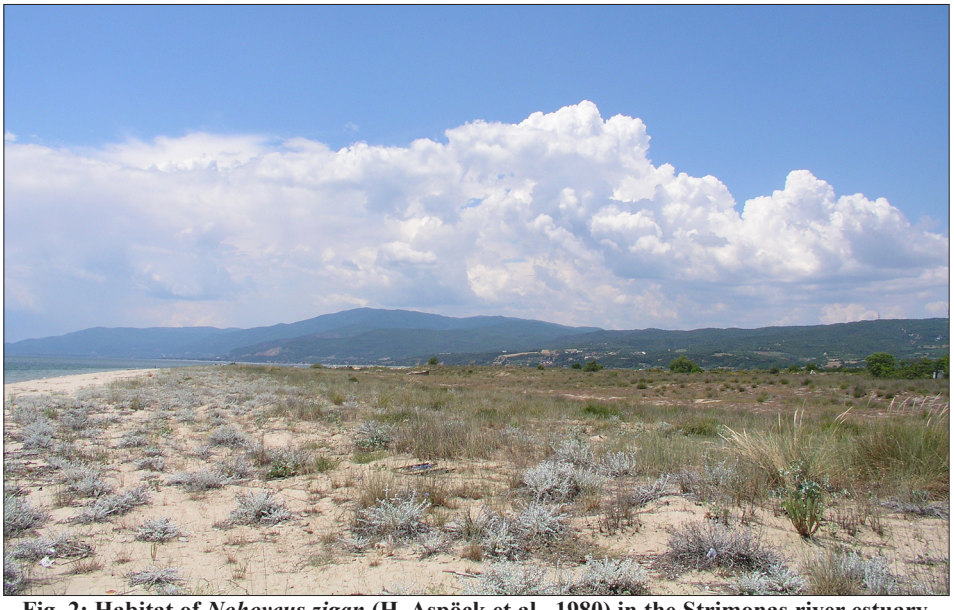

**Fig. 2: Habitat of *Nohoveus zigan* (H. Aspöck et al., 1980) in the Strimonas river estuary (Photo: S. Ilniczky)**

The smaller size of the adults and the dark spots on the fore wing at the intersection of the longitudinal and cross-veins can be easily distinguished from the larger and unspotted winged *Myrmecaelurus trigrammus*.

Its larva is pit-building in the open sandy grasslands, often co-occurring with the larva of *Myrmecaelurus trigrammus*. The larvae of the two species is distinguished in ÁBRAHÁM & PAPP (1990).

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