

***DIELOCROCE BAUDII* (GRIFFINI, 1895), A NEW NEMOPTERID FOR ANATOLIA (NEUROPTERA: NEMOPTERIDAE)**

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Abstract - *Diolocroce baudii* (Griffini, 1895) is recorded for the first time in Asia minor. The family Nemopteridae is represented in Anatolia by nine species. Of these, seven species are Eremian and two Holomediterranean faunal elements.

KEY WORDS: Insecta, Nemopteridae, Anatolia

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KLJUČNE BESEDE: Insecta, Nemopteridae, Anatolija

Introduction

Species of the family Nemopteridae are among the least known within the order Neuroptera. This family numbers about 150 species in the world and 7 species in Europe (Aspöck et. al., 2001). Nemopteridae are divided into two subfamilies (Aspöck et al., 1980). The Crocinae subfamily includes around 50 species of small size, distributed in arid and desert zones on the southern borders of the West Palaearctic and West Oriental regions and in dry areas of Neotropical, Afrotropical and Australian regions. With crepuscular nocturnal flying activity and troglobious habits, its imaginal and preimaginal biology and morphology is acceptably well known, and its taxonomy, biogeography and phylogeny have been revised. The Nemopterinae (with two European genera *Nemoptera* Latreille, 1802 and *Lertha* Navas, 1910) number almost 100 species, including some of the largest and most spectacular species within the Neuroptera, and have a distribution similar to Crocinae. The imagoes are frequently abundant, have brief seasonal emergence periods, crepuscular or diurnal flying habits, and usually extremely pronounced endemism restricted to a single habitat (Monserrat, 1996).

Many studies have been carried out on the Neuroptera fauna of Anatolia in the past (Gerstaecker, 1894; Navas, 1910, 1912; Popov, 1970; Hölzel 1968). According to these studies, four species were reported to exist in Turkey. Species of the Nemopteridae were mentioned by Hölzel (1975) and Aspöck (1980 and 1984).

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Şengonca (1981) determined seven species of the Nemopteridae in Turkey. Recent records increased this number to eight species (Aspöck et. al., 2001; Satar & Özbay 2004a and b; Satar et. al., 2004). Among these, four species are endemic in Asia minor.

The purpose of this paper is to review the existing knowledge of zoogeography of the Nemopteridae of Turkey and to present a list of all species recorded.

	Eremian	Syro Eremian	Irano Eremian	Polycentric Ponto Mediterranean
<i>Lertha ledereri</i> (Selys, 1887)	•			
<i>Lertha vartianae</i> (Aspöck, Aspöck and Hölzel, 1984)	•			
<i>Lertha extensa</i> (Oliver, 1811)			•	
<i>Lertha schmidtii</i> (Aspöck, Aspöck and Hölzel, 1984)	•			
<i>Lertha sheppardi</i> (Kirby, 1904)	•			
<i>Nemoptera coa</i> (Linnaeus, 1758)				•
<i>Nemoptera sinuata</i> Olivier, 1811				•
<i>Dielocroce baudii</i> (Griffini, 1895)		•		
<i>Dielocroce ephemera</i> (Gerstaecker, 1894)			•	

Tab. 1: Zoogeographic characteristics of the Nemopteridae species in Anatolia.

Materials and Methods

Collecting was carried out in the Karacadağ Mountain, within an altitude range of 1000 - 1981 m, within steppic vegetation. The coordinates of this area are 37° 59' N / 40° 12' E. The specimens were collected with a light trap in a rocky field and near a cave in Derik province.

Results

Dielocroce baudii (Griffini, 1895) is a new record for Anatolian fauna.

Material examined: Turkey, Diyarbakır, Karacadağ Mountain, Ovabağ, 5 ♀, and 3 ♂, 930m, 3. 8. 2003 and 7 ♀, and Mardin, Derik, 4 ♂, 1030 m, 9. 8. 2004 (A. Satar leg.).

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Fig. 1.: Male of *Dielocroce baudii* (Griffini, 1895)

Distribution: Afghanistan, Cyprus, Israel, Iraq and Saudi Arabia (Aspöck et. al., 2001).

The basic information on the distribution of species in Table 1 were compiled from the papers listed above.

Discussion

The fauna of Anatolia was influenced by the ice-age, which started 120.000 years ago and ended 10.000 years ago. Although boreal climatic conditions prevailed in the mid and northern Europe during the glacial periods, arid steppe existed in Angara (Siberia and further south). From the last glacial period to the present climatic conditions in Anatolia have changed. Thus, its boreal character turned into steppe and desert forms. As a result of this evolution, the dispersal of the Eremian and Ethiopian species started. On the other hand, the elements of the Mediterranean fauna joined the Anatolian fauna in recent times (Demirsoy, 1996 and Çıplak et. al., 1993).

A clear determination of the zoogeographic features of this region will contribute to the knowledge of the faunal structure of the Palaearctic region and to the value of



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