

Eucinetidae – a new family to the fauna of Bulgaria (Coleoptera: Scirtoidea)

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Abstract. The presence of the family Eucinetidae Lacordaire, 1857, the genera *Eucinetus* Germar, 1818 and *Nycteus* Latreille, 1829, and the species *Eucinetus haemorrhoidalis* (Germar, 1818) and *Nycteus hopffgarteni* (Reitter, 1885) is recorded for the first time in the Bulgarian fauna.

Key-words: Coleoptera, Eucinetidae, *Eucinetus haemorrhoidalis*, *Nycteus hopffgarteni*, first records, Bulgaria

Introduction

The superfamily Scirtoidea (former Fossipedes) includes four families: Clambidae (incl. Calyptomeridae), Decliniidae, Eucinetidae, and Scirtidae (= Cyphonidae; Helodidae; Elodidae) (LAWRENCE & NEWTON, 1995). Except for Decliniidae, the other families are represented in the fauna of Europe, but so far only Clambidae and Scirtidae were noted to inhabit Bulgaria.

The aim of the present report is to formalize the finding of a new family of the order Coleoptera to the fauna of the country (Fig. 1).

Material

As a result of the examination of beetles collected for a research project financed by the Bulgarian Ministry of Education and Science, the presence of the family Eucinetidae hitherto not found in Bulgaria was ascertained. The find is kept in the collection of the National Museum of Natural History, Sofia. A single specimen, collected by Mr. S. Vit during his recent visit to Bulgaria, is added to the aforementioned material.

Results

The family Eucinetidae Lacordaire, 1857 comprises 8 genera and more than 40 valid species (VIT, 1999; 2000). A character, which easily discriminates the adults of

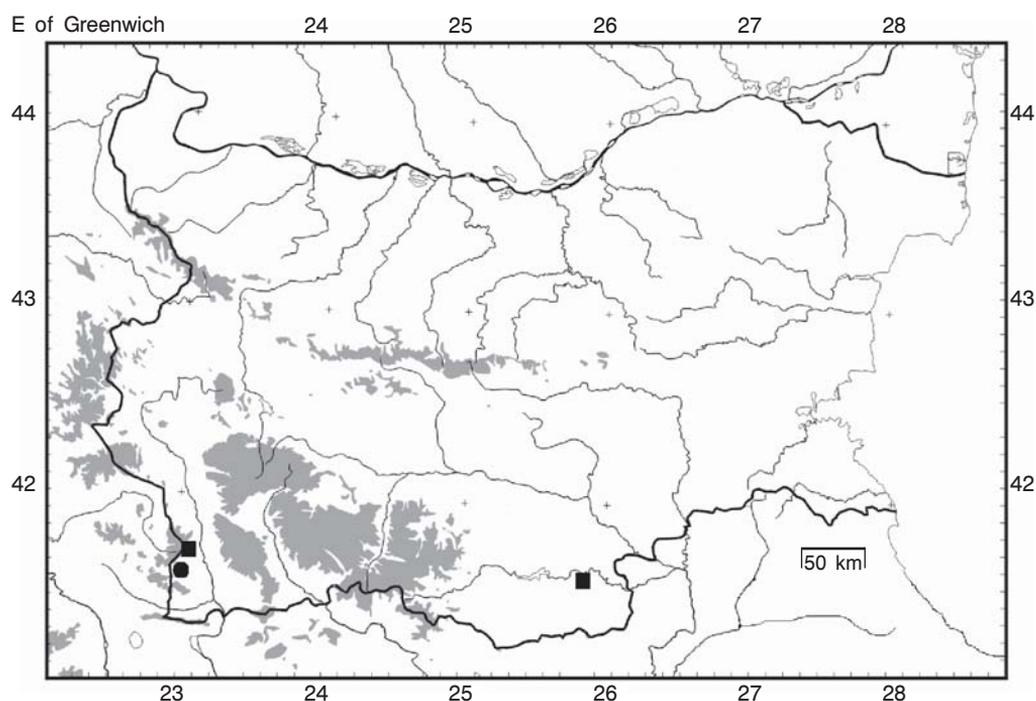


Fig. 1. Localities of *Eucinetus haemorrhoidalis* (Germar) (circle) and *Nycteus bopffgarteni* (Reitter) (squares) in Bulgaria

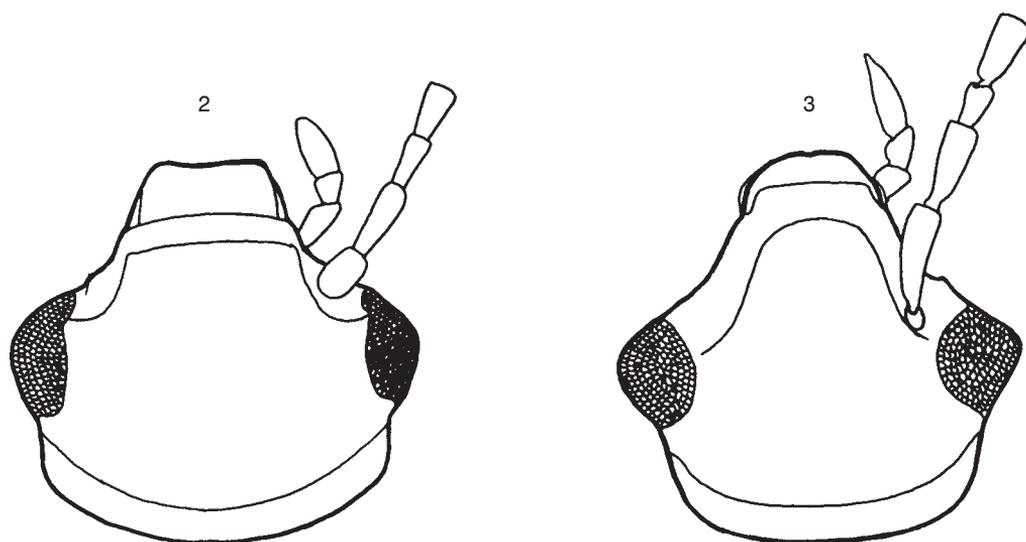
Eucinetidae from the other *Scirtoidea*, is the tarsal formula 5-5-5 (KRYZHANOVSKIJ, 1989). Because of the peculiar shape of the metacoxae, these beetles are usually called “plate-thigh beetles”. The development of the two stages, the adults and the larvae, is strongly connected with the mould fungi, as the adults could be found also under barks or in woods of decayed trees (NIKITSKY, 1989; VIT, 2000). Judging from the scant material kept in several European collections (VIT, 1985), the beetles appear to be rare in their habitats.

Eucinetus Germar, 1818

Eucinetus haemorrhoidalis (Germar, 1818)

Locality: Maleshevska Planina Mt., 660 m, 3 km E Nikudin, 04.05.-04.07.2003, 1 ex. in soil trap in Submediterranean deciduous forest (*Quercus* spp., *Fagus sylvatica*, *Juglans regia*, ect.), S. Lazarov & T. Ljubomirov leg, B. Guéorguiev det. Distribution: Holarctic.

Notes: In the Balkan Peninsula *Eucinetus haemorrhoidalis* has hitherto been cited only from North Serbia and Romanian part of Dobrogea (HORION, 1955). It is widely distributed in Europe, being also found in Turkey (VIT, 1985).



Figs 2-3. Head of *Encinetus haemorrhoidalis* (Germar) (Fig. 2) and *Nycteus* sp. (Fig. 3), re-drawn from VIT (1985), with modifications

Nycteus Latreille, 1829

Nycteus hopffgarteni (Reitter, 1885)

Localities: Eastern Rhodopes Mts., vicinities of Madzharovo, 22.04.2000, one male digging in the base of *Populus* sp., S. Vit leg. & det. Maleshevska Planina Mt., 750-770 m, 4 km W Gorna Breznitsa, 01.05.-20.06.2003, 1 ex., soil traps in Submediterranean dense forest of *Platanus orientalis*, B. Guéorguiev leg. & det. Distribution: Slovakia, Hungary, Romania, Bosnia and Herzegovina, Bulgaria (nominotypical subspecies), Italy (ssp. *prospector* Vit).

Notes: At present the genus *Nycteus* includes 12 species, limited to the warm temperate and subtropical belts of the Holarctic region (VIT, 1999). Two species, *hopffgarteni* (type locality “Banat: Franzdorf”) and *oertzeni* Reitter, 1887 (type locality “Morea, Olympia”) are known from the Balkan Peninsula (KLAUSNITZER, 1975: 35; VIT, 1985: 449, 455). According to VIT (op. cit.) the first species forms two distinct subspecies. The nominotypical one has a Southeastern European range, and on the Balkans, it has been hitherto cited only from Bosnia and Herzegovina. The subspecies *prospector* Vit, 1985, described from the Sila Mountain in Calabria, is distributed in both the northern and the southern parts of Italy (ANGELINI & POGGI, 1995). *N. oertzeni* is known from Peloponnesos (Greece) only. Both Balkan species are most probably vicariant in relation to each other.

The two genera could be distinguished easily by three main characters. The first two are the shape of clypeus and the size and shape of antennomere I (Figs. 2-3). The third distinguishing mark is the number of metatibial spurs - one in *Encinetus* and two in *Nycteus*. There are also two more or less variable characters: the color of pronotum and elytra, which in *E.*

haemorrhoidalis are bi-colored. Conversely, *N. hopffgarteni* usually has a uniform rusty-yellowish pronotum and elytra (with a somewhat darkened disc).

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Eucinetidae – едно ново семейство за фауната на България (Coleoptera: Scirtoidea)

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(Резюме)

Семейство Eucinetidae, роговете *Eucinetus* и *Nycteus*, както и видовете *E. haemorrhoidalis* (Germar) and *N. hopffgarteni* (Reitter) са съобщени за първи път от България. Представени са морфологични белези, позволяващи ефикасното различаване на таксоните. Изследването е резултат от работа по проект “Б-МУ-1101/01” финансиран от Министерството на образованието и науката (МОН).

First record of *Trechoblemus micros* (Herbst, 1784) in Bulgaria (Coleoptera: Carabidae: Trechini)

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A trip to the Rushovata peshtera Cave realised on 7th of May 2004 by Dr. Petar Beron yielded three cave-dwelling trechid species: *Trechoblemus micros* (Herbst, 1784) (2 males, 1 female), *Trechus* (*Trechus*) *austriacus* Dejean, 1831 (6 males, 10 females), and *Trechus* (*Trechus*) *irenis* Csiki, 1912 (2 males). The cave is situated in Triassic limestone (Vasilyovski Karst Region), lying close to village of Gradeshnitsa, Central Predbalkan. The beetles were found near the riverbank, in moist habitat, among a mixture of debris and remnants of plants. The genus *Trechoblemus* Ganglbauer, 1892 with *T. micros* have so far unknown on the territory of Bulgaria that is why a short diagnosis is provided here. It could be distinguished from the other representatives of the tribe Trechini in Bulgaria by the following set of characters: penultimate labial palpomere with 4 setae, eyes present, entire upper surface of body finely punctate and pubescent, and the apical stria of elytron joining stria

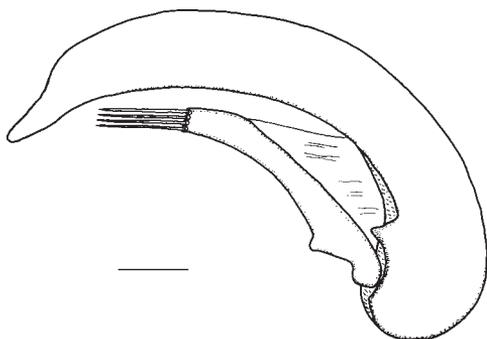


Fig. 1. *Trechoblemus micros*, lateral aspect of median lobe. Scale line = 0.1 mm

3. Median lobe: as illustrated on Fig. 1. APFELBECK (1904, Familienreihe Caraboidea, Berlin, R. Friedländer & Sohn), having at disposal material collected from Bosnia, first recorded *Trechoblemus micros* in the Balkan Peninsula. Later MATITS (1922, Spomenik srpske kraljevske akademije, 57) announced it from Serbia. A review of the species distribution in the west part of Balkans, including Slovenia, Bosnia and Herzegovina, and Serbia can be found in DROVENIK & PEKS (1999, Schwanfelder Coleopterologische Mitteilungen, Neuauflage Sonderheft, 1). The species is widespread in the whole Euro-Siberian region. Along with the other records from Asturia (Spain), Bosnia, Turkey and Adzharia (Georgia), the Bulgarian locality forms the southern border of species areal. According to CASALE & LANEYRIE (1983, Mémoires de Biospéologie, 9) the genus *Trechoblemus* includes six species: one in the

Nearctics, four in East Asia, and the Euro-Siberian *T. micros*. The genus belongs to one of the oldest phyletic lineages of tribe Trechini in the Northern Hemisphere (JEANNEL, 1928, L'Abeille, 35), showing excessively disjunctive Holarctic distribution. This lineage has its highest diversity of genera and species in East Asia and eastern part of the USA. Besides, one genus with six species, as well as two genera with three species are known from the Carpathians and the Tian Shan Range, respectively. Worth species mention is the present distribution of genus *Pseudanophthalmus* Jeannel, 1920 (= *Duvaliopsis* Jeannel, 1928), which representatives occur in two regions – the southeastern part of North America and the Carpathian Range in Europe. This type of distribution is probably a result of Eocene-Oligocene land (faunal) connections between North America and Europe (NOONAN, 1988, Memoirs of the Entomological Society of Canada, 144).