

РОССИЙСКАЯ АКАДЕМИЯ НАУК
Южный Научный Центр

RUSSIAN ACADEMY OF SCIENCES
Southern Scientific Centre

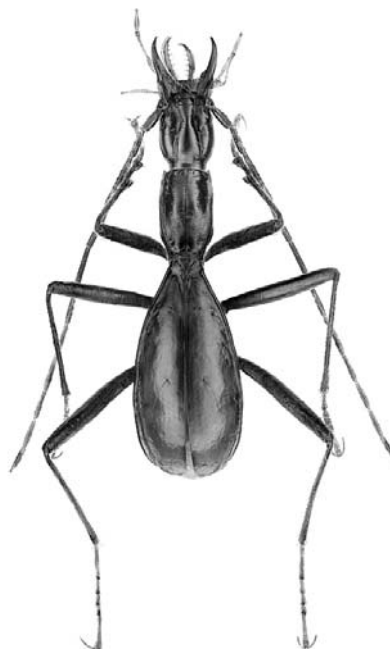


Кавказский Энтомологический Бюллетень

CAUCASIAN ENTOMOLOGICAL BULLETIN

Том 6. Вып. 1

Vol. 6. No. 1



Ростов-на-Дону
2010

***Paracoptochirus singularis* (Harold, 1868)
(Coleoptera: Scarabaeoidea: Aphodiidae), the first record for Levant**

***Paracoptochirus singularis* (Harold, 1868)
(Coleoptera: Scarabaeoidea: Aphodiidae) – первая находка из
Леванта**

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Key words: Coleoptera, Scarabaeoidea, new record, geographic distribution, biology, Israel.

Ключевые слова: Coleoptera, Scarabaeoidea, новая находка, распространение, биология, Израиль.

Abstract. *Paracoptochirus singularis* (Harold, 1868), an Aphodiini known from Eastern Thrace and South-Eastern Romania, is recorded for the first time from Israel, Levant. A detailed geographic distribution of the species is given and hypotheses on its biology are advanced.

Резюме. *Paracoptochirus singularis* (Harold, 1868), представитель Aphodiini, известный из Восточной Фракии и Юго-Восточной Румынии, впервые указан для Израиля, Левант. Приведены подробные сведения о распространении вида и предложены гипотезы о его биологии.

Introduction

The Aphodiini genus *Paracoptochirus* Balthasar, 1963 includes four species distributed in South-Eastern Europe and Turkey [M. Dellacasa, G. Dellacasa, 2006]. Three of them seem to be strictly endemic and are known only by the type series: *P. kozanensis* Pittino, 2001, described on a single female from Greek Macedonia [Pittino, 2001]; *P. petrovitzi* Branco et Baraud, 1988, described on a male and a female from Eastern Turkey [Branco, Baraud, 1988]; *P. vignai* Carpaneto, Piattella, 1990, described on a single female from Greek Macedonia [Carpaneto, Piattella, 1990].

The fourth species, *P. singularis* (Harold, 1868), type species of the genus, is the subject of this note.

Abbreviations of collections

HNHM – Termesztudományi Múzeum Allattára, Budapest (Hungary);

MNHN – Muséum National d'Histoire Naturelle, Paris (France);

TAUI – National Collection of Insects at the Tel-Aviv University, Tel-Aviv (Israel);

ZMHB – Museum für Naturkunde der Humboldt-Universität zu Berlin, Berlin (Germany).

Paracoptochirus singularis (Harold, 1868)

Coptochirus singularis Harold, 1868: 396.

Paracoptochirus singularis: Balthasar, 1963: 277.

Coptochirus haemonius Reitter, 1903: 176; Schmidt, 1922: 369 (as junior synonym of *P. singularis*).

Type locality. “Constantinople” (Western Istanbul, European Turkey). According to Dellacasa et al. [2001], in the second half of the nineteenth century with “Constantinople” designated the town and surrounding area on the western side of Bosphorus, therefore in nowadays European Turkey (Eastern Thrace).

Type material. Lectotype, a male, designated by Branco and Baraud [1988], in ZMHB; a paralectotype male, untraceable, probably lost.

Type labelling. 1st, red, printed in black: “Type”; 2nd, white, printed in black: “26059”; 3rd, white, handwritten in black: “furvus / N / Constant. Krisdrn.”; 4th, white, handwritten in black: “singularis / Harold / Constantinople”; 5th, white, printed in black: “Zool. Mus. / Berlin”; 6th, red, handwritten in black: “Paracoptochirus / singularis (Harold, 1869) / Lectotypus (♂). Dés. / T. Branco & J. Baraud, 1985”; 7th, printed and handwritten in black: “Paracoptochirus / singularis (Har.) / Vidit / Pittino, 1996”; 8th, white, printed and handwritten in black: “Paracoptochirus / singularis / (Harold) / Vidit / G. Dellacasa 1997”.

Material examined. 3 specimens other than the lectotype, as follow. Greece: “Thessalia / Salonichi / leg. Emge”, 1♀ (holotype of *Coptochirus haemonius*, Reitter collection, HNHM). Turkey: “Bosphore”, 1♀, (MNHN). Israel: ‘En Ya’qov”, 1.XII.2006, I. Shtirberg leg. 1 ♂ (TAUI).

Distribution. North-Western Turkey [Harold, 1868]; Greek Macedonia [Reitter, 1903]; South-Eastern Romania [Ienistea, 1982]. Herein recorded from Israel for the first time.

Remarks. *Coptochirus singularis* was described by Harold [1868] on two males, one labelled “Constantinople”, and the other “Kleinasien”. Harold clearly stated that the specimen from Constantinople was the same mentioned by Erichson [1848], in a footnote, as “*A. furvus* Nob.”, a name not accompanied by a description, a definition or even an indication, as requested by the article 12 of the International Code of Zoological Nomenclature [ICZN, 1999], hence not available. Branco and Baraud [1988], unable to trace the syntype from “Kleinasien”, designated as lectotype the male from Constantinople.

The taxon was misinterpreted by the first authors who dealt with it. Kraatz [1870] wrongly synonymized *Coptochirus singularis* with *Euparia cypria* Baudi, 1870, an Eupariinae described from Cyprus. Notwithstanding that Harold [1870] himself clarified that the synonymy concerned *Euparia cypria* and *Ataenius horticola* Harold, 1869, Marseul [1877], Reitter [1892] and d’Orbigny [1896] continued to consider *Euparia cypria* as a junior synonym of *Coptochirus singularis*, with obvious mistakes concerning the known geographic distribution of the species. Particularly, Marseul’s 1877 and d’Orbigny’s 1896

records from, respectively, Syria and Cyprus are incorrect [Ziani, 1997, for Cypriot reference] and do actually refer to *Ataenius horticola*. Also more than a century later the wrong synonymy was still producing mistakes, since Alfieri [1976] quoted *Coptochirus singularis* from Luxor, Egypt, with the note “A species sometimes considered as belonging to the genus *Euparia* Serville”.

Bertolini [1899] doubtfully recorded *C. singularis* from Italy (“incerta località”), as well as Luigioni [1929]. M. Dellacasa, G. Dellacasa (2005) and G. Dellacasa, M. Dellacasa [2006] definitively stated that Italian records of the species are wrong or, as usual, do refer to *Ataenius horticola*.

In 1903 Reitter described *Coptochirus haemonius* on a single female from Thessaloniki, Greece, presently in the Hungarian Natural History Museum, Budapest. Nineteen years later Schmidt [1922] established the synonymy between *Coptochirus haemonius* and *C. singularis*.

Balthasar [1963] showed that *singularis* had no close phylogenetic relationship with the other species of the genus *Coptochirus* – presently considered belonging to the tribe Didactyliini – and instituted for it the new genus *Paracoptochirus*.

The subsequent record of *Paracoptochirus singularis* was given by Ienistea [1982], who quoted a male from “Valul lui Traian – Distr. Constanța”, South-Eastern Romania. Unfortunately it was not possible to trace this specimen.

Moreover Ienistea (l.c.), generically included Albania in the geographic distribution of the species, with no data or bibliographic references. The datum is unlikely at least. Pittino [2001] asserted to know a fourth male from Constantinople, preserved in the Muséum National d’Histoire Naturelle, Paris. Nevertheless, the only specimen in the Paris Museum is a female labeled “Bosphore” (A. Mantilleri, personal communication).

Until now only five specimens of *Paracoptochirus singularis* were known: a male, the lectotype, from Constantinople – Istanbul; a female, holotype of *Coptochirus haemonius* Reitter, 1903, from Thessaloniki, Greek Macedonia – not Thessaly as wrongly written in the label of the Reitter’s type and in some other subsequent works; a female from the Bosphorus, that is to say Istanbul, and a male from Constanța County, south-eastern Romania. The fifth specimen, the male quoted by Harold [1868] from Turkey – virtually the paralectotype – is probably lost according to Branco and Baraud [1988].

The Israeli record represents the sixth known specimen of *P. singularis* and widely extends south-eastward the geographic distribution of the species. Ein Ya’akiv, the locality where the specimen was collected, is in Northern Israel, Galilee region, at about 500 m above sea level. Data on collecting conditions are unfortunately not available.

The specimen differs from the lectotype by the head that is shorter than that of the male from Istanbul, genae obviously protruding more from the eyes and obtusely angulate. Moreover, other differences can be observed in pronotal punctures, clearly more spaced, fine and faint on disc. Now, if these morphologic characters were constant in other specimens coming from the same area, it would be reasonable thinking of a specific differentiation of the Levantine population. But the examination of a single specimen and its comparison with the lectotype – that is to say the only other available specimen of the same sex – do

not allow to ascertain whether such differences fall within the infraspecific variability. Hence, waiting for further and desirable findings, it is preferable to assign the Israeli specimen to *P. singularis*.

Little or nothing at all is known about the biology of the *Paracoptochirus* species. The very few known specimens, their extreme rarity and absence on cattle dung allow to hypothesize for the representatives of the genus a biology strictly related to burrows of small rodents, as ascertained for one of them (*P. kozanensis*) and for one species at least (*O. balthasari* (Petrovitz, 1963)) of the closely related genus *Osmanius* Branco et Baraud, 1988 [Pittino, 2001].

Acknowledgements

Thanks to: Tristão Branco (Porto), for checking the manuscript, Vladimir Chikatunov and Leonid Friedman (Tel-Aviv University), Johannes Frisch and Joachin Willers (Berlin Museum), Antoine Mantilleri (Paris Museum) and Otto Merkl (Budapest Museum) which let me study the specimens of *P. singularis* preserved in their Institutes, Guido Sabatinelli (Amman) who first pointed out to me the peculiarity of the specimen, even if Aphodiini are not his cup of tea, and Paul Schoolmeesters (Herent), who let me consult in real time some papers of his extraordinary electronic library.

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