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A new species of *Trichoceble* from southern Greece (Coleoptera, Dasytidae, Rhadalinae)

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Abstract. − *Trichoceble dogueti* n. sp., collected by Serge Doguet near Aeropoli (Lakonia, southern Peloponnese), is here described and its affinities, and differences, from other species of the genus are discussed.

Résumé. − **Une nouvelle espèce de *Trichoceble* de Grèce méridionale (Coleoptera, Dasytidae, Rhadalinae)**. *Trichoceble dogueti* n. sp., collecté par Serge Doguet près d'Aeropoli (Lakonia, Péloponnèse méridional), est ici décrit et les affinités, aussi bien que les différences avec les espèces voisines, sont illustrées et commentées.

Keywords. – Peloponnese, Lakonia, taxonomy, morphology.

Specimens of *Trichoceble* Thomson, 1859, are often rare or, at least, uncommon. That explains why this description of *Trichoceble dogueti* n. sp. has been carried out on just one specimen —the holotype— which was collected by Serge Doguet near Areopoli, southern Greece, in 1995. The specimen, previously preserved in the collection of Robert Constantin, was kindly given to the author and the former is gratefully acknowledged for the courtesy. The recent publication of a comprehensive revision of the European *Trichoceble* by Liberti (2012) makes possible the description on a singleton.

This article was written in tribute to the memory of Serge Doguet, to recall the field collections we did, several years in a row, together with a group of coleopterists friends specializing in Chrysomelidae.

Materials and methods

Dissection has been carried out as described in Liberti (2005), embedding genitalia and related parts in Dimethyl Hydanthoin Formaldehyde (DMHF).

Drawings have been made by means of a calibrated grid placed on the ocular lens of a stereomicroscope. Photographs have been taken with a camera placed on the video tube of the same stereomicroscope and the multiple focus frames assembled with Helicon Focus 6.

Terms used in description can be found either in the glossary included in Cooter & Barclay (2006: 413) or in Liberti (2012). However, for easier reading, three terms are here below explained.

– Aedeagus. The assemblage of two sclerotized organs: median lobe (carrying the inner structure named internal sac) (fig. 2) and tegmen (fig. 3: here separated from median lobe) which, in family Dasytidae, is placed astride the median lobe; a drawing can be found in Liberti (2012: 200, fig. 7). The internal sac of *Trichoceble* (as well as all other Rhadalinae) includes a membranous part and a sclerotized piece (named "dorsal lever"), well visible when genitalia are embedded in a transparent medium like DMHF.

– Dorsal lever. The mobile, sclerotized spine-shaped piece inside the median lobe (of aedeagus) apical half, typical of the subfamily Rhadalinae (fig. 2: the part coloured black).

– Parameres. The two symmetrical lobes which, together, constitute the apical part (about two thirds) of tegmen.

Abbreviations. – **EL**, elytra length; **EW**, elytra width; **PL**, pronotum length; **PW**, pronotum width; **TL**, total length; /, line break (only when reporting a labelling).

TAXONOMY

Trichoceble dogueti n. sp. (fig. 1-5)

http://zoobank.org/F4E3693E-3E52-442F-BF3D-D1BD71324970

HOLOTYPUS: ♂, deposited at the Museo Civico di Storia Naturale, Milano, labelled: "Grèce, Péloponnèse / Mani, Vachos / 6 km E Areopoli / 29.V.1995 *S. Doguet*" [printed]; "Holotypus / *Trichoceble* / *dogueti* / Liberti 2017" [printed, red].

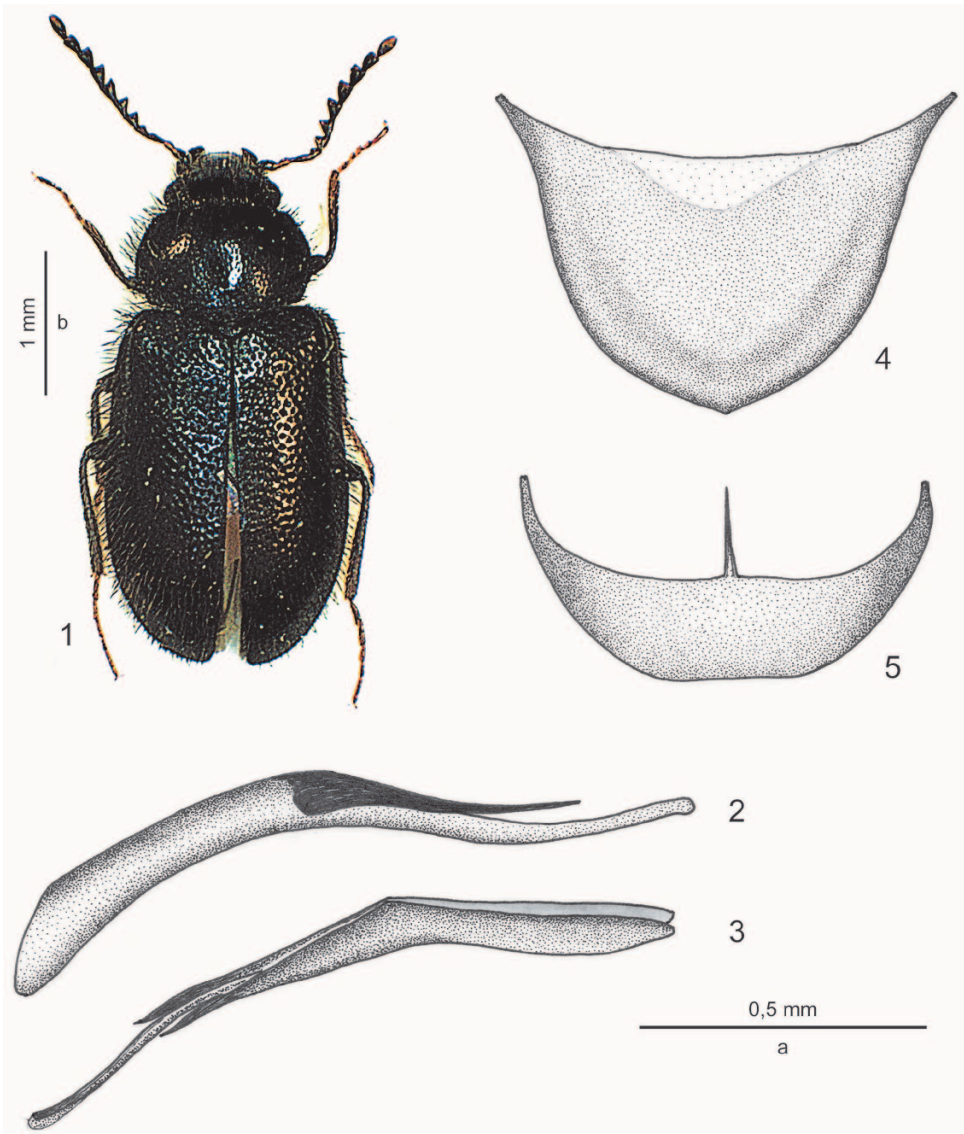

Fig. 1-5. – *Trichoceble dogueti* n. sp., holotypus. − **1**, Habitus. − **2**, Median lobe of aedeagus with dorsal lever (coloured black). − **3**, Tegmen of aedeagus (separated from median lobe for better clarity). − **4**, Last tergite (VIII). – **5**, Last sternite (VIII, 6th visible). Scale a (0.5 mm): fig. 2, 3, 4, 5; scale b (1 mm): fig. 1.

Description. – A medium sized *Trichoceble* (fig. 1), entirely dark brown with tibiae and tarsi slightly paler and antennal article 2 pale brown. Integuments rather bright, covered with long and thick pubescence with dark brown and pale brown setae mixed up on the whole dorsal surface.

Antennae serrate; article 2 very small and short; article 3 as thin as the previous one but longer, approximately sub-conical; article 4 very short, small, clearly triangular; articles 5-9 larger, triangular, with inner angle well visible, similar to each other; article 10 rather long, sub-conical with inner angle evident; article 11 sub-elliptical.

Head small, much narrower than pronotum, eyes rather small.

Pronotum very transverse (PW/PL = 1.8) with lateral sides finely granulose; its upper surface punctuated with shallow, rather sparse punctures.

Elytra short (EL/EW = 2.1) and wide, convex, slightly widened in apical half; its surface strongly punctuated, with punctures deeper and closer than on pronotum.

Median lobe of aedeagus (fig. 2) thin and sinuous, fitted with a long and rather massive (compared with the median lobe size) dorsal lever; tegmen (fig. 3) thin with parameres feebly expanded in apical half; last tergite (VIII) rather wide basally and moderately sharpened apically (fig. 4); last sternite (VIII, but 6th visible) approximately truncated apically (fig. 5).

Dimensions (in mm). – TL = 4.7; PL = 0.9; EL = 3.4; PW = 1.6; EW = 2.0.

Discussion

Further to *T. dogueti*, two additional species of *Trichoceble* live in the southern end of Taigetos mountain range: *T. oculata* Schilsky, 1896, and *T. funera* (Kiesenwetter, 1859). The main anatomic differences between them are listed in table I.

An attempt to use the determination key already proposed (Liberti, 2012: 201) for the genus *Trichoceble* brings *T. dogueti* up to the couplet 13, together with *T. oertzeni* Schilsky,

Table I. – Diagnostic characters between three species of *Trichoceble* Thomson living in southern Peloponnese.

	T. dogueti	***T. funera***	***T. oculata***
Body size and shape	Size intermediate between the other two (TL = 4.7 mm); body wider, pronotum very transverse (PW/PL = 1.8), elytra clearly widened in apical half.	Size usually slightly bigger (TL ≈ 5 mm); body narrower, pronotum less transverse (PW/PL = 1.6); elytra nearly parallel in apical half.	Size smaller (TL ≈ 4.2); body narrower, pronotum less transverse (PW/PL = 1.4); elytra only slightly widened in apical half.
Colour*	Dark brown; tibiae and tarsi paler, antennal article 2 pale brown.	Deep black including tibiae and tarsi, antennal article 2 dark brown*.	Black including tibiae and tarsi, antennal article 2 dark brown.
Eyes	Small, their diameter not exceeding their distance (measured at inner side).	Small, their diameter not exceeding their distance (measured at inner side).	Large, their diameter exceeding their distance (measured at the inner side).
Antennae	Serrate; internal edge of articles 7-8 convex.	Strongly serrate to pectinate; internal edge of articles 7-8 slightly sinuous.	Strongly serrate to pectinate; internal edge of articles 7-8 slightly sinuous.
Penultimate sternite (VII, 5th visible)	Straight on rear edge.	Clearly emarginated on rear edge.	Straight on rear edge.
Median lobe of aedeagus (inclusive of dorsal lever)	Thin and sinuous, with rounded apical tip; dorsal lever large.	Thin but not sinuous, with sharp, upwards** apical tip; dorsal lever small.	Thin but not sinuous, with long and very sharp, straight or downwards** apical tip; dorsal lever small.

* Colour may be variable in *Trichoceble*: specimens of *T. funera* are known with tibiae, tarsi and second antennal article pale yellow. Even in these specimens, however, dorsal integuments are black.

** Downwards and upwards refer to drawings reproducing median lobes of aedeagus in lateral view; see also Liberti (2012: fig. 7).

1896, and *T. kuprija* Liberti, 2012. The first is endemic of Crete, with clearly pectinate antennae, the second is endemic of Cyprus with pectinate antennae too.

Given that all black (or dark brown) *Trichoceble* look rather similar to each other, *T. dogueti* reminds *T. kikladica* Liberti, 2012, for general body shape (not colour), tegmen and median lobe (of aedeagus) structure which, in both species, shows a rounded apical tip, a large dorsal lever and a sinuous shape —although there is a marked difference in the size of both median lobe of aedeagus and dorsal lever between the two.

As far as we know, *T. dogueti* should be a species endemic of the Mani peninsula, in southern Lakonia. Unfortunately, our knowledge of the genus *Trichoceble* is rather poor. All the known species have well-developed wings, are very good fliers and are probably linked to trees and forests. That reasonably explains the wide distribution ranges of the two West-European species, namely *T. floralis floralis* (Olivier, 1790), and *T. memnonia* (Kiesenwetter, 1861), which include the whole of western and central Europe except England and Spain. On the other hand, several species are known to live on islands (Kiklades, Crete, Rhodes and Cyprus), and have ranges limited to this island.

– Naxos Island: 1 species (*T. ariannae* Liberti, 2012);
– Tinos and Andros islands: 1 species (*T. kikladica*);
– Crete: 2 species (*T. oertzeni* Schilsky, 1896, and *T. subcoerulea* Pic, 1921);
– Rhodes: 1 species (*T. torretassoi* Wittmer, 1935);
– Cyprus: 2 species (*T. kuprija* Liberti, 2012, and *T. testaceipes* Pic, 1921).

This fragmentation might be understood taking insularity into account. I have no clear cut explanations, however, why in the Taigetos area, including the Mani peninsula, two endemic species, namely *T. oculata* and *T. dogueti* n. sp., with very small ranges, would be present.

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