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**A new species of the subgenus *Tournieria* STIERLIN, 1861  
in the genus *Otiorhynchus* GERMAR, 1822 (Coleoptera:  
Curculionidae: Entiminae: Otiorhynchini) from Crete**

<http://zoobank.org/References/E8947D0A-D216-4242-9E59-A6050BAE406B>

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**Abstract:** A new species *Otiorhynchus scabriventris* sp. n. (hitherto confused with *O. creticus* VOSS, 1948) of the subgenus *Tournieria* from the Greek island of Crete is described. It is compared with the most similar *O. vossianus* MAGNANO, 2001 (= *O. creticus* VOSS, 1948), endemic to Crete, and *O. emgei* STIERLIN, 1887 from continental Greece. *O. vossianus* is hereby transferred from the subgenus *Melasemnus* to the subgenus *Tournieria* (**new subgeneric placement**).

**Key words:** Coleoptera, taxonomy, new species, *Otiorhynchus*, Greece, Crete.

## INTRODUCTION

During entomological excursions to the Greek island of Crete in recent years, two species – members of the subgenus *Tournieria* – were caught, which were identified as *O. vossianus* MAGNANO, 2001 (= *O. creticus* VOSS, 1948). This species is now placed in the subgenus *Melasemnus* REITTER, 1912 (MAGNANO & ALONSO-ZARAZAGA 2013, ALONSO-ZARAZAGA *et al.* 2017). The only criterion for such a placement is the relative size of the profemoral teeth, small in *Melasemnus* and large in *Tournieria* (after REITTER 1912). However, this has turned out to be a wholly inadequate “definition” of these two subgenera. Based on a more comprehensive morphological analysis, both species turned out to be typical representatives of the subgenus *Tournieria* (**new subgeneric placement**). Unfortunately, it was impossible to compare the type of *O. vossianus* with the two species recently collected, since a long-drawn out inquiry in several museums, above all in Vienna where the types should be present, yielded negative results. These issues will be discussed in detail in a forthcoming paper. Despite the unavailability of the type material of *O. vossianus*, identification of this species proved quite easy thanks to the information contained in the original description. Taking all this into consideration along with the locus typicus of *O. creticus* VOSS given as the “alpine zone of Psiloritis Mts.”, it is obvious that the species occurring exclusively in the Leuka Mts. (I collected *O. vossianus* only in the Psiloritis Mts. and eastwards towards the Dikti Mts.) is an unknown species, described below, hitherto confused with *O. creticus* VOSS.

## MATERIAL AND METHODS

The width of the rostrum is defined as the pterygial span, i.e. the distance between the outer margins of the pterygia, even though the basal width of the rostrum in front of the eyes is often longer. Other basic terms, “frons” in particular, were defined in Białooki (2015). “Eyes/pterygia projecting” means “eyes/pterygia extending from the outline of the head/rostrum in the dorsal view”. The stack photos were taken with a Leica M205C stereomicroscope with an attached JVC KYF75 digital camera and subsequently montaged using the AutoMontage software of Syncrosopy. Labels are cited verbatim, “/” separates the labels of a given specimen, whereas “\” separates data concerning different specimens; “ex.” and “exx.” denote specimen and specimens respectively. Body length is measured from the anterior margins of the eyes to the elytral apex. The genitalia of dissected specimens are stored in microvials with glycerine pinned under card with the respective specimens.

Acronyms: BENE – Stanislav Benedikt, Plzeň, Czech Republic; BIAL – Piotr Białooki, Sopot, Poland; KAKI – George Kakiopoulos, Athens, Greece; MERE – Massimo Meregalli, University of Turin, Italy; USMB – Upper Silesian Museum, Bytom, Poland (curator Roland Dobosz); WANA – Marek Wanat, University of Wrocław, Poland.

## RESULTS

Subfamily Entiminae

Tribe Otiiorhynchini

Genus *Otiiorhynchus* GERMAR, 1822 (type species *Otiiorhynchus rhacusensis* GERMAR, 1822)

Subgenus *Tournieria* STIERLIN, 1861 (type species *Otiiorhynchus anadolicus* BOHEMAN, 1842)

***Otiiorhynchus (Tournieria) scabriventris* sp. n.**

<http://zoobank.org/NomenclaturalActs/61433F16-0271-41E1-9ADB-B6B88F6AB710>

(Figs. 1–2; 4–6; 8–11)

= *Otiiorhynchus creticus* auct. nec Voss 1948

*Material examined*: Holotype male dissected: 18.05.2018 Greece, W Crete W Leuka Mts. E Kallergi refuge, leg. P. Białooki [BIAL]. Paratypes: as holotype, 14 exx. \ 21.05.2018 Greece, W Crete E Leuka Mts. Mt. Kastro, leg. P. Białooki, 20 exx. \ 24-25.05.2018 Greece, W Crete, W Leuka Mts. Mt. Volakias, leg. P. Białooki, 16 exx. [BIAL; BENE; KAKI; MERE; USMB; WANA] \ Crete Omalos 31.V.2004 Januš J. LGT., 1 ex. [BENE] \ Levka Ori/ Creta/ Ot. creticus Voss Ing. J. Fremuth det. 1993/ Ot. (*Tournieria*) creticus Voss det. L. Magnano 1994/ Ot. (*Melasmaenus*) vossianus Magnano, Fremuth det., 1987 [MERE].

According to Voss (1948), the new *Otiiorhynchus* that he described as *O. creticus* had funicle segments 4-7 subisodiametric to clearly transverse. Moreover, the placement of *O. creticus* Voss in the subgenus *Melasmaenus* unequivocally implies small teeth on the fore femur. This information makes it easy to discriminate between *creticus* and the herein described *scabriventris*.

**Diagnosis.** *O. scabriventris* sp. n. (Figs. 1 and 2) is best diagnosed by the following characters: the moderately elongate dorso-ventrally flattened elytra with a relatively weakly convex declivity; narrow, weakly tapering head and rostrum, especially in the male; slender legs and antennae; fore femora each bearing a large tooth; ventral part of body coarsely sculptured; male and female terminalia.

Both *O. scabriventris* sp. n. and *O. vossianus* MAGNANO, 2001 (Fig. 3) {the latter was until now the only *Tournieria* species on Crete with elongate elytra, even though, owing to the chaos in taxonomy, it had always been placed in the subgenus *Melasemnus* (based exclusively on the small teeth of the fore femora) [**new subgeneric placement**]} are characterised by small, distinctly convex eyes; weakly projecting pterygia; very narrow, weakly tapering head; elongate elytra; slender legs. *O. scabriventris* sp. n. differs from *O. vossianus* (the characters pertinent to the latter are given in parentheses) in that the body is on average somewhat larger; fore femora with a strikingly larger tooth, somewhat resembling the subgenus *Pliadonus* (tooth small, accompanied by a few minute denticles); elytra covered throughout, including the disc, with small well-developed tubercles or at least well-developed, rasp-like punctures (elytral interstices devoid of tubercles, including the declivity); antennae more slender, all segments distinctly elongate (segments 4-7 subsodiametric to clearly transverse). The new species shares the elongate elytra and the well-developed, relatively large tooth on the mid and hind femora with *O. emgei* STERLIN, 1887. *O. scabriventris* differs from *O. emgei* STIERLIN (in parentheses the characters relating to *O. emgei*; photographs available in the on-line catalogue by GERMANN *et al.*) mainly by: elytra covered throughout with small, well-developed, fairly sharply-edged tubercles (interstices flat or covered with very weakly raised and quite indistinct tubercles) and with well-raised, long, hair-like, brown scales (long but not hair-like, yellowish-brown scales (sub)recumbent throughout, including the declivity); pronotal scales poorly visible (pronotal scales mostly fairly wide, evidently not hair-like, bright yellowish-brown, well visible); pronotal impunctate area not developed (impunctate area well developed); elytral declivity fairly weakly convex, not distinctly overhanging (declivity strongly convex, overhanging); eyes strongly convex (eyes much less convex or moderately so).

**Description.** Size range 6.5-8.3 mm (holotype 6.7 mm); body dark-brown, antennae and legs in part paler; vestiture pale brown.

**Rostrum** subsodiametric; pterygia moderately projecting; pterygial span  $1.2 \times$  wider than rostrum minimum width; scrobes deeply excised; epistome shortly crescentic, well hollowed; narrowest point of rostral dorsum  $0.6 \times$  minimum width of rostrum; dorsal keel of rostrum unclearly divergent backwards, well separated from frons, lateral margins weakly expressed; median sulcus not developed; median keel well-developed; head strongly transverse, almost subrectangular,  $1.6 \times$  wider than rostrum minimum width; eyes minute, somewhat less than  $0.5 \times$  frons, fairly strongly convex, clearly projecting, distinctly shorter than temples; frons very wide,  $1.4 \times$  wider than rostral dorsum minimum width, covered with large dense punctures, interspaces much narrower than puncture diameter; frons vestiture consisting of very short subrecumbent sparse brown setae directed to central point far behind frons fovea; the latter not larger to distinctly larger than surrounding punctures, elongate; antennae slender (Fig. 4), all segments fairly strongly elongate; scape long, apically weakly thickened; first funicle segment somewhat longer than second; club narrowly fusiform, almost  $2.8 \times$  longer than wide.

**Prothorax** weakly transverse, laterally evenly moderately rounded, widest slightly behind the middle, longitudinally weakly evenly convex; disc covered with very dense well-developed regular tubercles; vestiture consisting of short (subequally as long as tubercle diameter) weakly visible setae; impunctate area not developed; lateral walls covered with tubercles somewhat smaller and less convex and covered with well-developed microsculpture, thus matt; setae even shorter and not so well visible as those on the disc.

**Elytra** narrowly oval,  $1.4 \times$  longer than broad, distinctly flattened dorso-ventrally; weakly rounded at shoulders, widest in middle, apically subequally rounded as basally; declivity relatively weakly convex, subperpendicular; strial punctures fairly large, each with single short horizontal seta; interstices subequally wide as striae, nearly flat, only slightly microrugose, shiny with single row of minute (diameter much shorter than width of interstice) well-developed sparse tubercles; vestiture consisting of short (distinctly shorter than interstice width, clearly longer than strial setae), moderately raised, bright, well-visible setae, moderately sparse, arranged in two irregular rows.

**Legs** long and slender; fore femora (Fig. 6) with very large pointed tooth with ca 6 minute teeth along its distal margin; mid and hind femora each with well-developed, fairly small, narrowly pointed tooth; fore tibiae (Fig. 6) straight, apically slightly curved, covered with subrecumbent dense bright yellowish-pale-brown setae; spines along ventral margin large; second tarsite subsodiametric; tibial spurs well-developed 1-1-1.

**Meso- and metaventricle** as well as abdomen covered with coarse dense regular punctation devoid of transverse sculpture; apical ventricle twice as wide as long, apically broadly rounded, basally convex, subapically shallowly impressed, covered uniformly with moderately large deep punctures, interspaces shorter than puncture diameter.

**Aedeagus** (Fig. 8). Pedon  $3.6 \times$  longer than wide; weakly evenly arched (Fig. 9); parameres connate basally, distal half moderately divergent.

**Female** differs from male in head being wider stronger tapering; elytra somewhat less elongate ca  $1.35 \times$  longer than wide, declivity markedly stronger convex, slightly overhanging; last ventricle less transverse,  $1.85 \times$  wider than long.

**Ovipositor** weakly sclerotized, moderately pigmented, subparallel-sided, as long as spiculum ventrale; spermathecal cornu long, weakly arched, corpus somewhat swollen (Fig. 11), 8<sup>th</sup> sternite ca  $1.3 \times$  wider than long, apically almost semicircular with fairly short sparse hairs (Fig. 10); spiculum ventrale  $3.15 \times$  longer than sternite, caput hardly expressed.

**Ecology.** All the specimens were found under stones at high alpine altitudes above 1800 m.

**Distribution.** *Otiorynchus scabriventris* is most probably endemic to the Leuka Mountains in western Crete. East of this mountain range only *O. vossianus* was collected, which seems to suggest that these species do not occur sympatrically.

**Etymology.** The specific epithet (adjective) is derived from the Latin nouns scabritia [= roughness] and venter [= stomach] in reference to the coarsely sculptured ventral side of the body.

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Fig. 1. *O. scabriventris* male.



Fig. 2. *O. scabriventris* female.



Fig. 3. *O. vossianus* female.

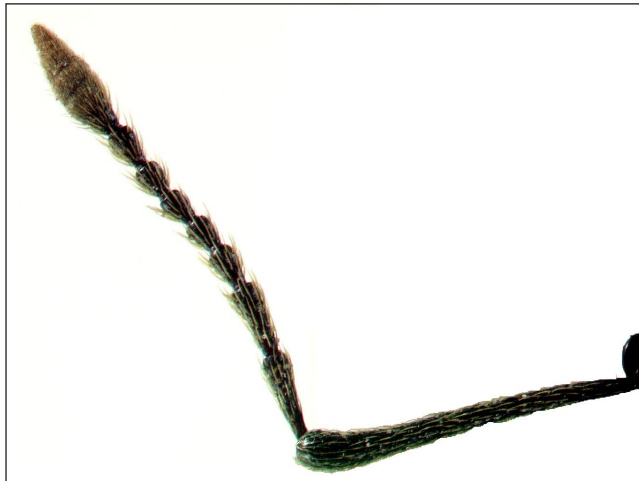


Fig. 4. *O. scabriventris* male antenna.



Fig. 5. *O. scabriventris* male elytra profile.

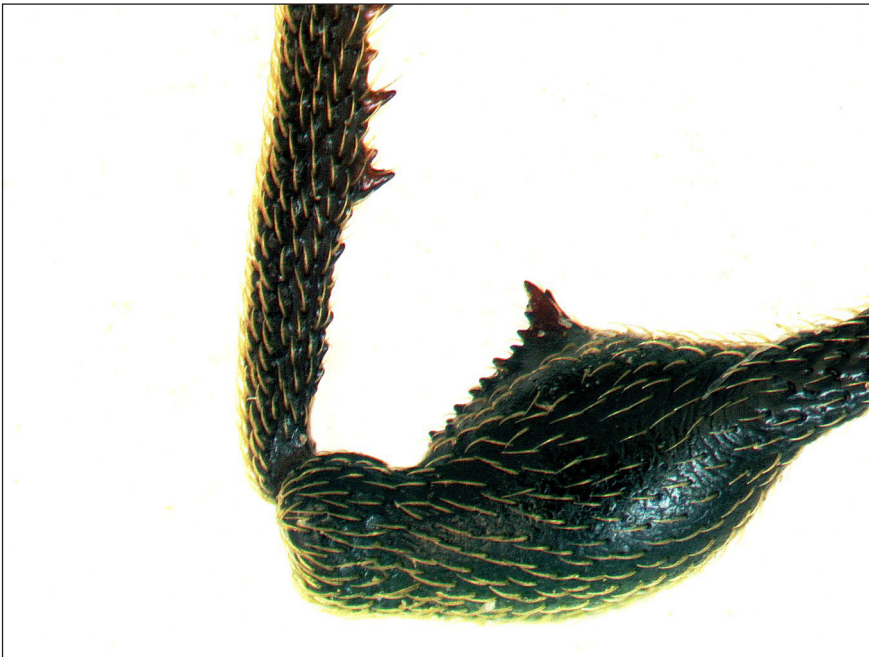


Fig. 6. *O. scabriventris* fore leg.





Fig. 7. *O. vossianus* fore leg.



Figs. 8–9. *O. scabriventris* aedeagus: 8 (left) – dorsal view; 9 (right) – profile.



Fig. 10. *O. scabriventris* female terminalia.



Fig. 11. *O. scabriventris* spermatheca.

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