ANNALS OF THE UPPER SILESIAN MUSEUM IN BYTOM ENTOMOLOGY

Vol. **26 (online 005)**: 1–6

ISSN 0867-1966, eISSN 2544-039X (online)

Bytom, 15.12.2017

PIOTR Z. BIAŁOOKI¹, GEORGE KAKIOPOULOS²

A new species of *Otiorhynchus* GERMAR, 1822 subgenus *Pterygodontus* BIAŁOOKI, 2015 (Coleoptera: Curculionidae: Entiminae: Otiorhynchini) from Crete

http://zoobank.org/References/FAE2CB13-58FE-461A-8593-6F20D9DF3534 http://doi.org/10.5281/zenodo.1116624

¹ State Plant Health and Seed Inspectorate, ul. Na Stoku 48, 80-874 Gdańsk, Poland, e-mail: pbialooki@poczta.onet.pl

² Ilidos Str. 60-62, 1157 Athens, Greece e-mail: strepens@yahoo.com

Abstract: A new species of *Otiorhynchus* Germar, 1822 of the subgenus *Pterygodontus* Białooki, 2015 from Mediterranean island Crete is described. *O. casalinii* sp. n. is closely related to *O. trichopterus* Białooki, 2015 but differs from that species mainly in lack of long perpendicular setae and in more elongate, transversally stronger convex elytra. *O. trichopterus* is hereby transferred from *Podonebistus* to *Pterygodontus* (new subgeneric placement). Probably, the two species multiply parthenogenetically.

Key words: Otiorhynchus, new species, taxonomy, Greece (Crete).

INTRODUCTION

The subgenus *Pterygodontus* was created to accommodate *Podonebistus*-species displaying different genitalia of both sexes, anterior margins of scrobes not excised; last ventrite covered with microsculpture; antennal club strongly, asymmetrically annulated (BIALOOKI 2015a). Of the 30 species listed in *Podonebistus* REITTER, 1912 in MAGNANO & ALONSO-ZARAZAGA 2013 the following *Otiorhynchus* species were assigned to the subgenus *Pterygodontus* in the original description: *atticus* STIERLIN, 1887; *bleusei* FAUST, 1888 (type species); *davricus* LONA, 1931; *muglae* MAGNANO, 2005; *naldoekensis* MAGNANO, 2005; and *nefandus* FAUST, 1888. There are 21 Otiorhynchini species known from Crete till now, 12 of them being endemic to the island. As a result of intensive exploration of the island in the recent years, 5 out of these 12 endemites were described only after 2003. Below, another *Pterygodontus* species from Crete is describred. Moreover, *Otiorhynchus trichopterus* BIALOOKI, 2015 placed originally in *Podonebistus* is hereby transferred into subgenus *Pterygodontus*.

MATERIAL AND METHODS

The width of 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 may be sometimes longer. Other basic terms, "frons" in particular, were defined in BIALOOKI (2015). "Eyes/pterygia projecting" means "eyes/pterygia" extending from the outline of the head/rostrum in the dorsal view" respectively, regardless of whether the eyes are convex or nearly flat. The length of funicle segments, as well as the club, is taken without a basal condyle (except for the first segment). Multilayered photos were taken with a Leica M205C stereomicroscope with an attached JVC KYF75 digital camera and subsequently montaged using the AutoMontage software of Syncroscopy. Labels are cited verbatim; "ht" denotes holotype, while "exx." specimens.

The body length is measured, as generally accepted in Curculionoidea i.e. from the anterior margin of the eye to the elytral apex.

Acronyms: BIAL – collection of Piotr Z. Białooki, Sopot, Poland; KAKI – collection of George Kakiopoulos, Athens, Greece.

RESULTS

Subfamily: Entiminae Tribe: Otiorhynchini

Genus: *Otiorhynchus* Germar, 1822 (type species *Otiorhynchus rhacusensis* Germar, 1822) Subgenus: *Pterygodontus* Białooki, 2015 (type species *Otiorhynchus bleusei* Faust, 1888).

Otiorhynchus (Pterygodontus) casalinii sp. n.

http://zoobank.org/NomenclaturalActs/7EEA3912-FDC8-45D0-8C50-8AE722E9D883

Material examined: holotype female, dissected: 19/IV/2015, GREECE, SW Crete Island, near Aradaina village, evergreen *Quercus*, coll. No 5321, leg G. Kakiopoulos [KAKI]. Paratypes, as ht, 2 exx. [BIAL; KAKI].

Diagnosis (female). The new species (Fig. 1) is a typical representative of the subgenus *Pterygodontus* even though it has, as *trichopterus*, all femora unarmed. Moreover, the two species differ from all the other species of the subgenus in exceptionally weakly convex elytral declivity, much less than perpendicular (Fig. 2). *O. casalinii* sp. n. can be easily separated from *trichopterus* first of all by lack of long, protruding setae; elytra more elongate, transversally strongly convex, not flattened on the disk; and more slender antennae.

Description (female). Body length 5.3-6.8 mm (ht 5.3 mm); black, tibiae, tarsi and antennae (in part) red-brown to brown. Vestiture consists of greyish sparse hair-like scales and elongate (several times as long as wide) recumbent scales in part (elytral declivity and lateral wall of prothorax) condensed into minute unclear spots.

Head. Weakly transverse, moderately tapered, somewhat separated from rostrum (not forming uniform cone); frons covered with very dense, moderately large punctures and sparse, greyish, short, hair-like scales; frons fovea much larger than surrounding punctation, elongate; eyes hardly convex, large, almond-shaped, its longer diameter only slightly shorter than width of frons, slightly longer than temples.

Rostrum (Fig. 3) slightly longer than broad, its basal part subparallel-sided; pterygia large, moderately projecting; anterior part of dorsal wall (anteriad of antennal insertions) narrower than half of pterygial span, weakly divergent anteriad; epistome Y-shaped, small; hind portion of dorsal wall (between frons and antennal insertions) narrow, basally altogether unclearly delimited laterally, with well-developed, thin median keel; relatively large protuberance with puncture on its top between antennal insertions.

Antennae rather long and slender; scape straight, thin, subparallel-sided, only apical one sixth moderately swollen, covered with moderately dense, distinctly raised, light brown setae; all funicle segments elongate, covered with long, arched, rather dense setae; 2^{nd} segment ca. 1.2 × longer than first; club relatively broadly fusiform, $2.25 \times longer$ than wide, as long as four distal funicle segments combined.

Prothorax. Indistinctly wider than long, anterior margin somewhat shorter than base; moderately convex longitudinally, at sides moderately evenly arched, widest in middle; disc covered with dense uneven punctation, punctures much larger than on frons, interspaces flat, somewhat narrower than punctures diameter, shining; vestiture consisting of sparse recumbent greyish, hair-like scales and sparse elongate scales several times as long as wide on lateral walls.

Elytra 1.65 × longer than broad, moderately arched laterally, somewhat stronger tapered apically than basally, widest indistinctly before middle, basal half longitudinally hardly convex, declivity exceptionally weakly convex, strikingly less than perpendicular (Fig. 2); transversally rather strong evenly convex, not flattened; striae somewhat impressed, basally wider than interstices, in middle subequally wide; punctures large and deep, interspaces somewhat shorter than punctures diameter; interstices on disc almost flat, shining, with microscopic sparse tubercles arranged into unclear single rows, on outer interstices irregular single row of small tubercles; each interstice with unclear 1-2 rows of short, arched recumbent greyish, hair-like scales, and few recumbent greyish scales several times longer than wide, on declivity and outer interstices in part condensed into minute unclear spots.

Legs. Long and slender; all femora unarmed; tibiae covered with dense raised brown setae; dorsal margin of fore tibiae straight, only apically weakly, but clearly, curved ventrad; tarsi relatively slender, second segment subisodiametric, projecting portion of onychium subequally long as length of preceding segment.

The ventral part of the body covered with very sparse, weakly raised hair-like scales; last ventrite 1.75 × wider than long, relatively strong convex proximally; distally fairly deeply and widely impressed; interspaces of punctures with rather unclear microsculpture.

Spermatheca (Fig. 4). Female 8th sternite (Fig. 5); ovipositor moderately short, weakly sclerotized, with minute subapical styli.

The variability insignificant, although the short series is not representative enough to draw a definitive conclusion.

Ecology. All the three specimens were beaten from a single evergreen bushy oak in a semi-arid pasture (rocky soil) during the day at an altitude ca. 520 m.

Etymology. We dedicate the new species, with pleasure, to Roberto Casalini, Italy, in recognition of his contribution to the knowledge of insects of Crete.

Otiorhynchus (Pterygodontus) trichopterus BIAŁOOKI, 2015 (new subgeneric placement)

The species was originally placed in the subgenus *Podonebistus* only due to the fact, that two separate manuscripts were submitted to two various publishers. Actually *O. trichopterus*, despite peculiar appearance, displays all characters typical of the subgenus *Pterygodontus*, female genitalia in particular.

It is known only from females and probably belongs to parthenogenetic species. The same concerns closely related *O. casalinii* sp. n.

ACKNOWLEDGEMENTS

We are greatly indebted to Marek Wanat, University of Wroclaw, Poland for an opportunity to take photographs. Thanks are also due to the two anonymous referees.

REFERENCES

BIALOOKI P.Z. 2015. Descriptions of new taxa in *Otiorhynchus* GERMAR, 1822 (Coleoptera: Curculionidae: Entiminae: Otiorhynchini). *Polish Journal of Entomology* 84(2): 85–99.

BIALOOKI P.Z. 2015a. Descriptions of new taxa of Otiorhynchini and related tribes (Coleoptera: Curculionidae: Entiminae) from the Middle East and Balkans. *Israel Journal of Entomology* 44–45: 13–50.

MAGNANO L., ALONSO-ZARAZAGA M.A. 2013. Tribe Otiorhynchini Schoenherr, 1826, pp. 302–347, In: Löbl I., Smetana A. (Eds.). Catalogue of Palaearctic Coleoptera. Vol. 8. Curculionoidea II. Brill, Leiden and Boston.

REITTER E. 1912. Übersicht der Untergattungen und der Arten-Gruppen des Genus Otiorrhynchus GERM. Wiener Entomologische Zeitung 31(2): 45–67.



Fig. 1. Otiorhynchus (Pterygodontus) casalinii sp. n., female habitus.



Fig. 2. Otiorhynchus (Pterygodontus) casalinii sp. n., female, elytra profile.



Fig. 3. Otiorhynchus (Pterygodontus) casalinii sp. n., female, head.



Fig. 4. Otiorhynchus (Pterygodontus) casalinii sp. n., spermatheca.



Fig. 5. Otiorhynchus (Pterygodontus) casalinii sp. n., female 8th sternite.

Accepted: 8 December 2017; published: 15 December 2017 Licensed under a Creative Commons Attribution License http://creativecommons.org/licenses/by/4.0/