

PIOTR Z. BIAŁOOKI¹, KEVSER SABANCI², M. MURAT ASLAN³

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

<https://zoobank.org/References/11BC8661-318F-4107-8D04-5A1F94DE22C7>

<https://doi.org/10.5281/zenodo.7917452>

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

² Kahramanmaraş Sutcu Imam University, Agricultural Faculty, Plant Protection Department,
Avsar Campüs, Kahramanmaraş, Turkey, e-mail: kvrsbnc@gmail.com

³ Kahramanmaraş Sutcu Imam University, Agricultural Faculty, Plant Protection Department,
Avsar Campüs, Kahramanmaraş, Turkey, e-mail: aslan@ksu.edu.tr

Abstract: A new species of *Otiorhynchus* GERMAR, 1822 of the subgenus *Pterygodontus* BIAŁOOKI, 2015 from Turkey is described. *O. halimeae* sp. n. is only the second species of the subgenus with distinctly raised elytral vestiture. It differs from *Otiorhynchus trichopterus* BIAŁOOKI, 2015 in disparate female terminalia (male of *O. halimeae* unknown); raised elytral scales strikingly shorter and much less protruding; distinctly smaller body; pronotal disc covered with flat but nevertheless well-developed tubercles; elytral declivity distinctly overhanging; and lack of elytral recumbent broad scales.

Key words: Coleoptera, taxonomy, new species, *Otiorhynchus*, Turkey.

INTRODUCTION

The subgenus *Pterygodontus* BIAŁOOKI, 2015 until now comprised seven species (ALONSO-ZARAZAGA *et al.*, 2017) previously placed in the subgenus *Podonebistus* REITTER, 1912. The majority of them occur in Turkey. All are dendrophilous species living in forest zone at low and moderate altitudes. Recently another species of this group was discovered in Turkey which is described below.

MATERIAL AND METHODS

This new species was discovered on 21.04.2022 in Kahramanmaraş Province, Onikisubat/Demrek neighborhood. The single specimen was detected in the root part of *Helleborus vesicarius* AUCHER ex BOISS. The width of the rostrum is defined as the pterygial span, i.e. the distance between the outer margins of pterygia. “Pterygia projecting” means

“pterygia extending from the outline of the 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 by Syncroscopy. Body length was measured from the anterior margin of the eyes to the elytral apex. Rostrum length was measured from anterior margins of eyes to the anterior part of epistome. The genitalia are stored in a microvial with glycerine pinned under a card bearing the specimen.

RESULTS

Subfamily Entiminae

Tribe Otiorhynchini

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

Subgenus *Pterygodontus* BIAŁOŁKI, 2015 (type species *Otiorhynchus bleusei* FAUST, 1889)

***Otiorhynchus (Pterygodontus) halimeae* sp.n.**

<https://zoobank.org/NomenclaturalActs/EAAB30CF-EDE5-44C6-A2B0-6E1E6B628FD9>

(Figs. 1–8)

Material examined: holotype female dissected: [right funicle with club missing; right meso- and metalegs separately glued (specimen damaged by thick pin)]: 21.04.2022 S Turkey, Kahramanmaraş prov., Demrek N Yenice kale, 37° 37' 28.456"N, 36° 38' 32.543"E, 1187 m, leg. K. Sabancı [preserved in the collection of the Kahramanmaraş Sutcu Imam University, Agricultural Faculty, Plant Protection Department, Kahramanmaraş, Turkey].

Diagnosis. The new species is best diagnosed by all femora unarmed; short arched semierect elytral scales; fairly broadly rounded basal part of elytra and distinctly overhanging declivity resulting in the broadly rounded apex; whole pronotum tuberculate (Fig. 1); spermatheca with long slender cornu, and relatively slender corpus; eyes evidently reduced, their diameter shorter than temples; and peculiar female abdominal terminalia.

This is, apart from *O. trichopterus*, the second *Pterygodontus* with clearly raised elytral vestiture. *O. trichopterus* shares with *O. halimeae* the unarmed femora, and the weakly projecting pterygia. *O. halimeae* differs from *O. trichopterus* in the much smaller body; raised elytral scales very short, distinctly shorter than interstitial distance, less than semierect (Fig. 3); pronotal disc covered with flat yet well-developed tubercles, and with the irregular small impunctate area; elytral declivity distinctly overhanging (Fig. 3); striae punctures larger, as a result interstices much narrower than striae; elytra devoid of broad recumbent scales. Despite several shared characters, the two species are far distant systematically in the subgenus *Pterygodontus*.

Description (holotype female).

Body size 5.0 mm, black, femora black, tibiae in part (distally) dark brown; tarsi and funicle dark red-brown; vestiture reduced, bright brown (Fig. 1).

Rostrum long and slender 1.3 × longer than broad; basal one thirds tapering; mesal third to pterygia subparallel-sided; pterygia fairly large, weakly projecting (Fig. 2);

anterior part of dorsal wall of rostrum about 0.4 pterygial span, somewhat declivous; epistome crescentic, unclearly defined posteriorly, only epistomal angles well keeled;

hind part of dorsal wall of rostrum distinctly diverging backward, at narrowest place slightly

less than 0.75 interocular distance; lateral margins fairly sharply delimited; median keel narrow yet well developed; surface microsculptured, punctures small and sparse; vestiture consisting of short recumbent moderately sparse fairly dark brown narrow elongate scales; head fairly small and narrow (Fig. 2), together with basal part of rostrum forming common cone; eyes small, evidently reduced, ca. 0.6 interocular distance, nearly completely flat.

Antennae long and slender; scape distally well clubbed, microsculptured, covered with sparse almost semierect scales; first funicle segment $2.95 \times$ longer than wide, apically somewhat clubbed; second segment similarly shaped $3.05 \times$ longer than wide, indistinctly longer than first; segments 3-7 ca. $1.7 \times$ longer than wide, roughly twice as short as second segment; club strongly elongate $2.9 \times$ longer than broad, apically narrowly pointed.

Prothorax indistinctly transverse (Fig. 1), moderately evenly rounded laterally, widest in middle; longitudinally fairly strongly evenly convex; disc covered with flat yet well developed moderately large deeply impressed tubercles, each with fairly large puncture bearing a short dark brown weakly visible narrow elongate scale.

Elytra $1.5 \times$ longer than broad, laterally weakly rounded, nearly regularly oval, broadest in middle (Fig. 1); longitudinally very weakly convex, nearly flat, base moderately convex, declivity strongly convex, distinctly overhanging; striae weakly yet clearly impressed consisting of large punctures, interspaces much shorter than punctures diameter, flat, devoid of tubercle; interstices much narrower than striae with single row of small weakly convex fairly irregularly shaped tubercles bearing fairly long nearly semierect bright somewhat arched narrow elongate scale forming single rows along interstices; whole surface smooth, devoid of any conspicuous sculpture, shiny.

Legs long and slender; all femora fairly weakly clavate and unarmed; fore tibiae covered with small moderately dense tubercles and well raised fairly long setae; mucro well developed on all legs; tibial spurs 1-1-2 bright brown, very short but fairly well visible; tarsi fairly slender, second segment subisodiametric, third bilobed segment relatively small nevertheless strikingly broader than preceding tarsite; onychium slender, its projecting portion subequally long as preceding segment.

Underside with mesoventral process narrow; first ventrite coarsely transversally irregularly wrinkled; last ventrite ca. $1.75 \times$ broader than long, flat covered with large and dense punctures strongly decreasing distally.

Ovipositor consisting of relatively short distinctly converging gonocoxites (Fig. 4); styli not developed; spermatheca (Fig. 5) with long slender well arched cornu; 8th sternite fairly strongly transverse with relatively long spiculum ventrale; single transverse pigmented shield situated behind 8th sternite.

Ecology. The only known specimen was detected 21.04.20022 while feeding on the roots of *Helleborus vesicarius* AUCHER ex. BOISS. (Figs. 6, 7) close to degraded forest at altitude 1187 m (Fig. 8). This is very surprising since all hitherto known species of *Pterygodontus* are dendrophilous. Thus further observations are necessary to corroborate this unexpected habit of *O. halimeae*.

Distribution. *O. halimeae* sp. n. is exclusively known from the locus typicus in Kahramanmaraş province in south Turkey.

Etymology. The new species is named in honour of the mother of the third author, Halime Aslan.

ACKNOWLEDGMENTS

The authors wish to thank Zehra Sena Gözübenli and Mustafa Açıkgöz (both Kahramanmaraş Sutcu Imam University, Turkey) for their assistance during the field work. We are greatly indebted to Marek Wanat (Wroclaw University, Poland) for the opportunity to take photographs. Thanks are also due to Christoph Germann (Naturhistorisches Museum Basel, Switzerland) for his constructive remarks on the manuscript.

REFERENCES

- ALONSO-ZARAZAGA M.A., BARRIOS H., BOROVEC R., BOUCHARD P., CALDARA R., COLONNELLI E., GÜLTEKIN L., HLAVÁČ P., KOROTYAEV B., LYAL C.H.C., MACHADO A., MEREGALLI M., PIEROTTI H., REN L., SÁNCHEZ-RUIZ M., SFORZI A., SILFVERBERG H., SKUHROVEC J., TRÝZNA M., VELÁZQUEZ DE CASTRO A.J., YUNAKOV N.N. 2017. Cooperative Catalogue of Palearctic Coleoptera Curculionidea. *Monografías electrónicas de la Sociedad Entomológica Aragonesa* 8: 729 pp.
- BIALOOKI P.Z. 2015. Descriptions of new taxa in *Otiorhynchus* GERMAR, 1822 (Coleoptera: Curculionidae: Entiminae: Otiorhynchini). *Polish Journal of Entomology* 84: 85–99.
- REITTER E. 1912. Übersicht der Untergattungen und Artengruppen des Genus *Otiorhynchus* GERM. (Bestimmungstabelle nr. 66). *Wiener Entomologische Zeitung* 31: 45–67.



Fig. 1. *O. halimeae*, habitus.



Fig. 2. *O. halimeae*, profile.



Fig. 3. *O. halimeae*, head with rostrum.



Fig. 4. *O. halimeae*, spermatheca.



Fig. 5. *O. halimeae*, abdominal terminalia.



Fig. 6. *Helleborus vesicarius*.



Fig. 7. *O. halimeae* on roots of *Helleborus vesicarius*.



Fig. 8. General view of locus typicus of *O. halimeae*.

Accepted: 4 April 2023; published: 10 May 2023

Licensed under a Creative Commons Attribution License <http://creativecommons.org/licenses/by/4.0/>