

A New Species of *Tychus* Leach, 1817 of the *Armeniacus* Species Group (Coleoptera, Staphylinidae, Pselaphinae) from Greece

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Abstract: *Tychus erimanthus* sp. n. from southern Greece (Achaia, Erimanthos Mountains) belonging to the *Tychus armeniacus* species group is described and illustrated.

Key words: Pselaphinae, *Tychus*, taxonomy, new species, southern Greece

Introduction

The genus *Tychus* Leach includes 167 species and subspecies (KURBATOV, SABELLA 2008, SABELLA *et al.* 2011a, 2011b, 2012, BESUCHET, SABELLA 2012) divided into many species groups. During a study visit of the second author at the Museum für Naturkunde, Humboldt Universität zu Berlin, a new species of *Tychus* Leach, 1817, from the Peloponnese Peninsula was found in the collection of that institution. This species is described here below.

Material and Methods

The study is based on material housed in the Museum für Naturkunde, Humboldt Universität, Berlin, Germany (MNHB).

The body length is measured from the anterior clypeal margin to the posterior margin of the last abdominal tergite. The length and width of body parts are always maximum length or width, *e.g.* the head length is measured from the anterior clypeal margin to the posterior margin of the neck; the head width is measured across the eyes, the elytral length is measured along the suture line, and the elytral width is the maximum combined width of elytra. The abdominal segments are numbered from the first visible

segment onwards, *i.e.* from the tergite 1 (IV) and sternite 1 (III). The nomenclature follows that proposed by CHANDLER (2001) for the external morphology. Dissections were made using standard techniques. The genitalia were mounted in Canada balsam on an acetate label and pinned with its specimen.

Results

Tychus erimanthus sp. n.

(Figs. 1a, b, c)

Material examined: (1 ♂): HOLOTYPE. SOUTHERN GREECE. Peloponnese. Achaia. Erimanthos Mountain, Hani Panopoulou, 600 m, 24.03.1992, J. Frisch (MNHB); (1 ♀): PARATYPE. Same data as holotype (MNHB).

Description: Body as in Fig. 1, 1.70 mm long, predominantly smooth and shiny, except elytra slightly punctate, with head, pronotum and abdomen dark brown, elytra dark reddish-brown, antennae and legs paler, maxillary palpi yellow. Head, pronotum, elytra and abdomen covered with dense, long and recumbent golden pubescence; setation on antennae, maxillary palpi and legs shorter, yellowish and suberect; tuft of dense setae present behind temples.

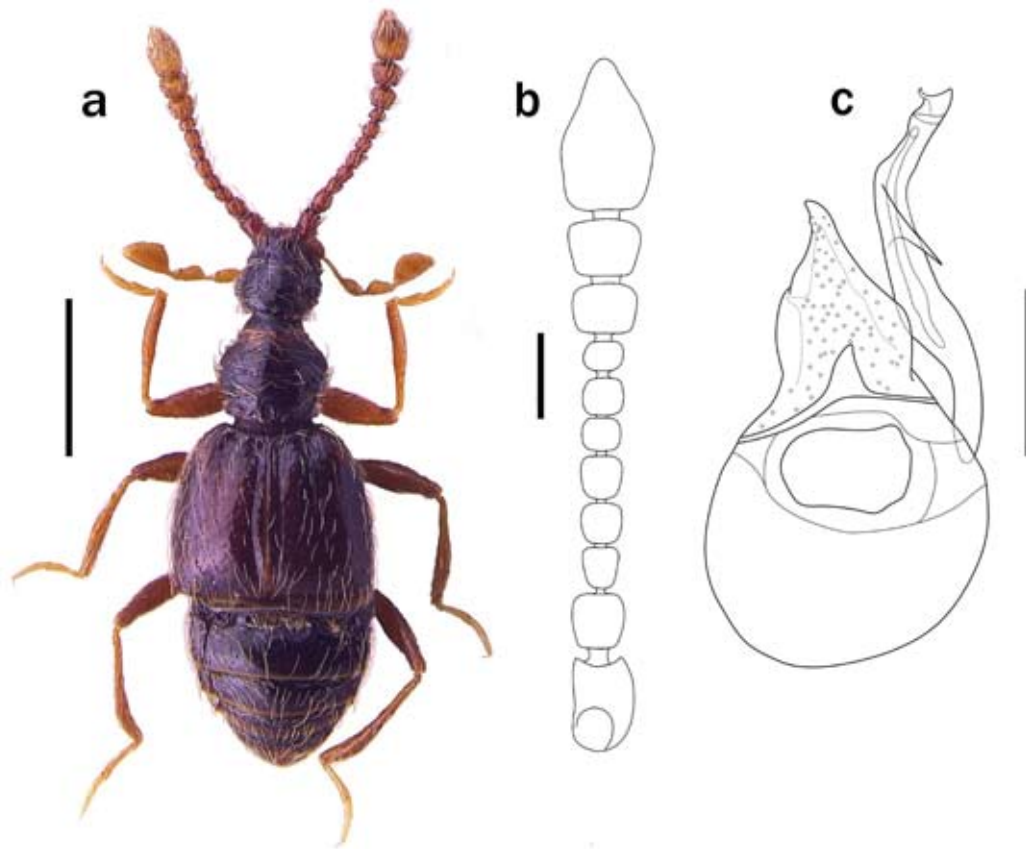


Fig. 1. *Tychus erimanthus* sp. n., holotype: a) habitus (scale – 0.5 mm); b) right antenna (scale – 0.1 mm); c) aedeagus, ventral view (scale – 0.1 mm)

Head widest across eyes and narrowest posteriorly to antennal tubercles, wider (0.29 mm) than long (0.24 mm). Antennal tubercles separated by median longitudinal sulcus. Vertex separated from frontal rostrum by slightly transverse depression. Vertexal foveae small, located close to eyes, latter not very prominent, with 20-22 facets; presence of a small tooth in front of each vertexal fovea. Tempora rounded. Last maxillary palpomere 0.15 mm long and 0.08 mm wide, with a straight lateral margin. Antennae (Fig. 1b) 0.81 mm long, antennal club three segmented, 0.31 mm long, broadened progressively from IX to XI; scape distinctly longer than wide; pedicel barely longer than wide, antennomere III barely longer than wide and narrowed at base, IV as long as wide, V slightly longer than wide, VI wider than long, VII as long as wide and slightly wider than other antennomeres of funicle, VIII shortest and distinctly wider than long, antennomere IX transverse, distinctly wider than funicular antennomeres, X transverse, wider than IX, terminal antennomere longer than wide and longer than combined length of antennomeres VIII, IX and X.

Pronotum wider than head, wider (0.35 mm) than long (0.30 mm), widest near middle, more distinctly tapered and rounded anteriorly than posteriorly.

Elytra wider (0.63 mm) than long (0.50 mm) and longer than pronotum, with barely protruding humeri, bearing two basal foveae on each elytron; sutural fovea associated with entire shallow sutural stria, discal fovea extended posteriorly in discal stria, latter slightly exceeding half of elytral length.

Abdomen with first tergite 0.20 mm long with discal carinae very short and very weakly defined, surface between discal carinae with setose basal impression exceeding 1/3 of tergal width, with pair of basolateral foveae, first paratergite with pair of ante-basal impressions, second sternite with pair of ante-basal foveae.

Male: Metaventrite with median impression extending on half of its length, posterior margin of mesotrochanters slightly angulated in middle, femora and tibiae of all legs slightly thickened, mesotibiae with small subapical spur, all abdominal sternites apparently not modified. Aedeagus (Fig. 1c) 0.35 mm long, with ventral portion of median lobe relatively long, sinuate and canaliculate, medial margin of the latter extended on apical third in a long curved spine laterally and downwards. Dorsal apophysis of median lobe shorter than ventral portion, larger at base and gradually narrowed to apex, latter directed laterally and upward.

Female: Very similar to the male, with antennomeres only slightly slender, metasternum without median impression, mesotrochanters simple and mesotibiae unarmed.

Differential diagnosis: *Tychus erimanthus* sp. n. presents all diagnostic characters of the *Tychus armeniacus* group (*i.e.* frontal lobe relatively wide, long antennae with funicular antennomeres with slightly rounded sides, eyes well developed and longer than tempora, metaventrite with a median impression, male with mesotrochanters slightly angulated in middle, mesotibiae with a small subapical spur and all abdominal sternites not modified, aedeagus with dorsal apophysis of median lobe very large and stout). Within this group, it strongly resembles *Tychus pelopeius* Besuchet & Sabella, 1999. Males of both species can be distinguished from external morphology by the shape of the legs (mesotrochanters slightly angulated in middle in *T. erimanthus* while only bearing a short spine in *T. pelopeius*, and mesotibiae with a small

subapical spur in *T. erimanthus*, unarmed in *T. pelopeius*). They can also be easily distinguished from each other by the shape of aedeagus, especially by different conformations of the apex of the dorsal apophysis of the median lobe (simple and directed laterally and upward in *T. erimanthus* sp. n., while forked and with a first short apophyses directed medially and another longer one directed laterally in *T. pelopeius*), in *T. erimanthus* the long dorsal apophyses of the ventral portion of the median lobe also originates on its apical third while it derives from its basal third in *T. pelopeius*.

Etymology: The new species is named after the mountain massif where it was collected.

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