

MALADERA (MACROSERICA) DENTIPENIS SP. N. FROM CYPRUS
(Coleoptera: Scarabaeoidea, Sericini)

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Abstract: *Maladera (Macroserica) dentipenis* sp.n. from the western part of Cyprus is described, illustrated and compared with *Maladera (Macroserica) cerrutii* Sabatinelli, 1977, the only other species hitherto known from the island. The new species differs mainly by the dentate upper right and lower left margins of the parameres. Other important characters are given in the key.

Résumé: *Maladera (Macroserica) dentipenis* sp.n. originaire de la moitié ouest de Chypre est décrite et illustrée. Comparaison avec *Maladera cerrutii* Sabatinelli, 1977 - une autre espèce vivant sur l'île. La nouvelle espèce se distingue principalement par le bord denté supérieur droit et l'inférieur gauche des parami. D'autres caractères sont donnés dans la clé.

Introduction

The subgenus *Macroserica* Medvedev 1952 of the genus *Maladera* Mulsant and Rey, 1871 includes 25 species distributed from Greece through Cyprus and the Near East to Iran (BARAUD, 1992; AHRENS, 2006). Three species are known from continental Europe, five from the Near East, one from Cyprus and 15 from Turkey, Armenia, Irak and Iran. Material recently found in Cyprus contained five specimens (four males and one female) of the new species. So far, only *M. (M.) cerrutii* Sabatinelli (SABATINELLI, 1977) has been known from the island.

Material and methods

The following codes (after ARNETT et al., 1993) identify the collections housing the material studied (curators names are in parentheses):

JSCB – Jiří Simandl, České Budějovice, Czech Republic

MNCR - Milan Nikodým, Roztoky u Prahy, Czech Republic

NPMPC – National Museum Prague, Czech Republic (Jiří Hájek)

RSCV – Richard Sehnal, Velenice, Czech Republic

Specimens of the new species are provided with red labels: “*Maladera dentipenis* sp. nov., HOLOTYPE or PARATYPE, No. of specimen, R. Sehnal & J. Simandl det. 2007”. Exact label data are cited for the type material. Authors' remarks are in brackets.

Taxonomy

***Maladera (Macroserica) dentipenis* sp. n. (Fig.1 a-e)**

Type material. Holotype (male), labelled “Cyprus b. [borealis] (Troodos Mts.), Kampos env., 5.4.2006, J.Simandl lgt. [white label, printed]”, in RSCV, paratype no.1: female, same data as holotype (in RSCV); paratypes nos. 2-4, males, same data as holotype, in NPMPC (1 specimen.) and JSCB (2 specimens).

Description of the holotype. Head, pronotum, scutellum, elytra and ventrum uniformly reddish brown, legs chestnut brown with yellowish-brown pubescence. Tarsi chestnut brown with greenish reflexes on upper site. Claws pale brown. Antennae pale brown, flagellum yellowish brown.

Length 9,5mm width 5,3mm. Elongate, only slightly dilated posteriorly. Dorsal surface bright alutaceous, glabrous (Fig.1a).

Vertex wider than long, coarsely and densely punctate. Clypeus strong, with upturned margins and thick setae at dorsal side of anterolateral angles. Eye canthus (Fig.1b) wide, reaching one-half of eye length, sharply curved at tip. Frontal suture distinct, semicircular.

Antennae 10-segmented, with sparse, short pubescence; all club segments of equal length.

Pronotum wider than long, glossy, with entire surface evenly and deeply punctate. Margins bordered except at base. Surface glabrous except long, erect pubescence at margins.

Scutellum triangular, punctate in basal half but not at center. Punctuation does not differ from that on pronotum.

Elytra glossy, widest in posterior half, with 10 fine, slightly indicated and doubly punctate striae on each elytron. Intervals flat and punctate. Epipleuron well developed, in basal half wider, then narrowed apically, at lateral edge with short pubescence. Apex evenly rounded (Fig.1a).

Pygidium evenly convex, with sparse longer and recumbent pubescence. Punctuation even, dense, spaces between punctures glossy.

Outer margin of protibia with sharp teeth, protibial spur 0.4 mm long and with sharp tip. Metatibia with two spurs, upper spur about one-third longer than lower one. Tarsi covered with rigid setae, tips of claws bifid.

Aedeagus (Fig.1c) narrow, slender. Left paramere (Fig.1d) L-shaped, its upper right edge smooth, its inner edge irregularly but distinctly serrate. Right paramere (Fig.1e) divided into dorsal and ventral parts connected at base, dorsal part at left margin with conspicuous tooth and serration continuing toward apex. Base with low, rounded lobe.

Female (only one examined) is 10.0 mm long and differs from male by distinctly shorter antennal club.

Comparative morphometry of pronotum and elytra of both Cyprian species *M. (M.) dentipenis* sp.n. and *M. (M.) cerrutii* is given in Table 1.

Etymology: The name refers to the dentate ventral edge of the left paramere, which is diagnostic.

Differential diagnosis. *Maladera (M.) dentipenis* sp.n. resembles *M. (M.) cerrutii* Sabatinelli, from which it differs by serrate parameres and additional characters given in the key. *M. (M.) cerrutii* Sabatinelli, 1977 endemic to Cyprus, lacks serrations on the parameres and the left paramere is rectangular. Other species known from the east Mediterranean are: *M. (M.) syriaca* Petrovitz, 1969 from Israel and Syria; *M. (M.) attaliensis* Petrovitz, 1969 and *M. (M.) seleuciniensis* Petrovitz, 1969 from Turkey; *M. (M.) phoenicica* Petrovitz, 1969 from Israel and *M. (M.) graeca* Petrovitz, 1969 from Crete, (Greece). These species have both parameres long, divided into ventral and dorsal parts, and without serrations or teeth - see figures in PETROVITZ (1969) and ARGAMAN (1990). Two closely related Turkish species, *M. (M.) lyciensis* Petrovitz, 1969 and *M. (M.) vignai* Sabatinelli, 1977, have the right paramere compact, always with a dorsal lobe and a lateral fissure, and the left paramere with a double arch (PETROVITZ, 1969, ARGAMAN, 1990).

Distribution: Cyprus, Troodos Mountains.

Bionomy: The new species was found in the northern foothills of the Troodos Mountains at about 450 m elevation. The phytophagous larva develops in soil, pupating in cells under stones or logs. All beetles were collected in their pupal cells under smaller stones on a forest track (serving also as a fire-line) between younger (about 20 years old) and older (about 70 years old) stands of the pine *Pinus brutia*. The forest track was about 4 m wide, free of vegetation, with only very sparse patches of grass on its edges.

***Maladera (M.) cerrutii* Sabatinelli, 1977 (Fig.2 a-e)**

Material examined: “Zypern, 20.7.-1.8.81 /Troodos Gebirge/Platres, 1200m/ M.u.E. Arenberger“ (1 male and 1 female in MNCR, 1 female in RSCV).

Remark. This species is so far known from higher altitudes and southern slopes of Troodos Mountains.

Key to the Cyprian species of the genus *Maladera* (*Macroserica*)

- 1(2) Body surface glossy; eye canthus of equal width throughout length, with apex bent at a right angle; left paramere with a low rounded lobe, its lateral margin serrate; setae on inner side of metatibia as long as those at its apex *M. dentipenis* sp. n.
 2(1) Body surface matte; eye canthus narrowing toward apex; margins of both parameres smooth and regular; left paramere with a high, pointed lobe; setae on inner side of metatibia at the most only half as long as its apex.....*M. cerrutii* Sabatinelli

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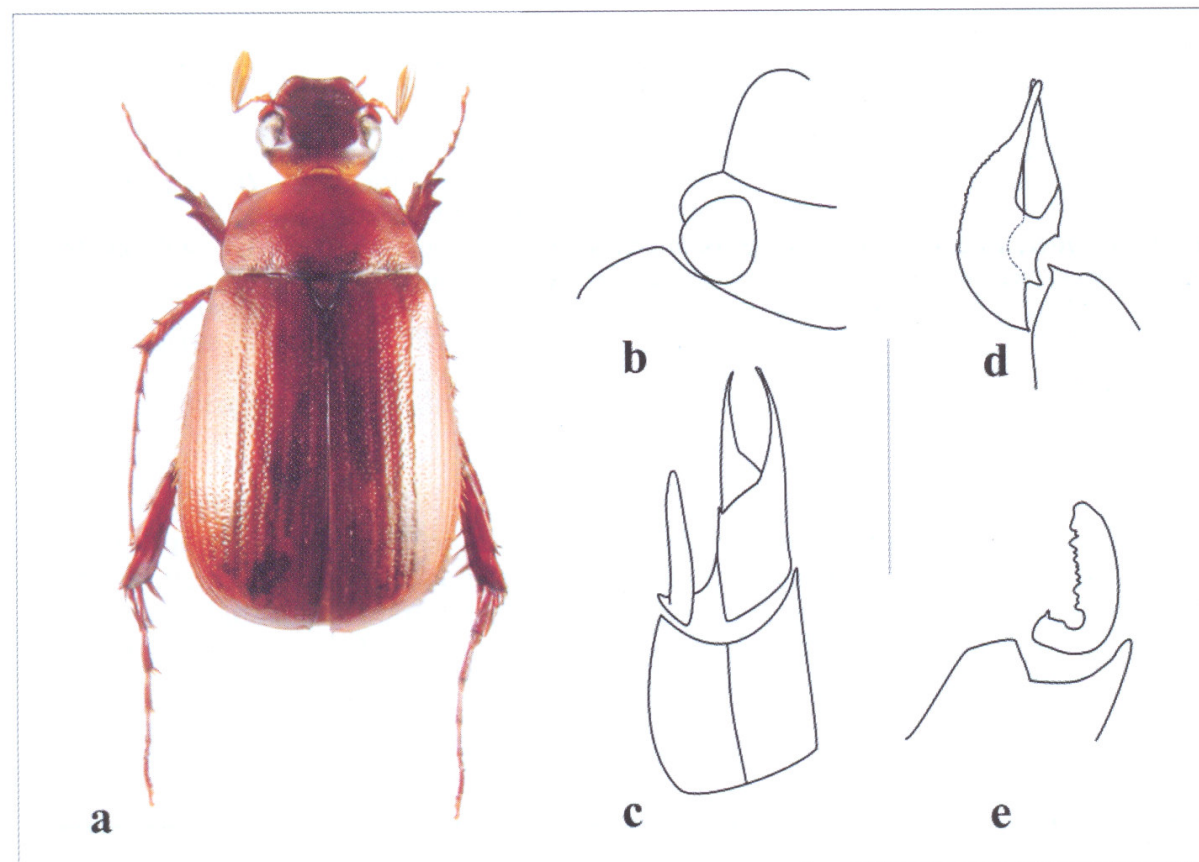
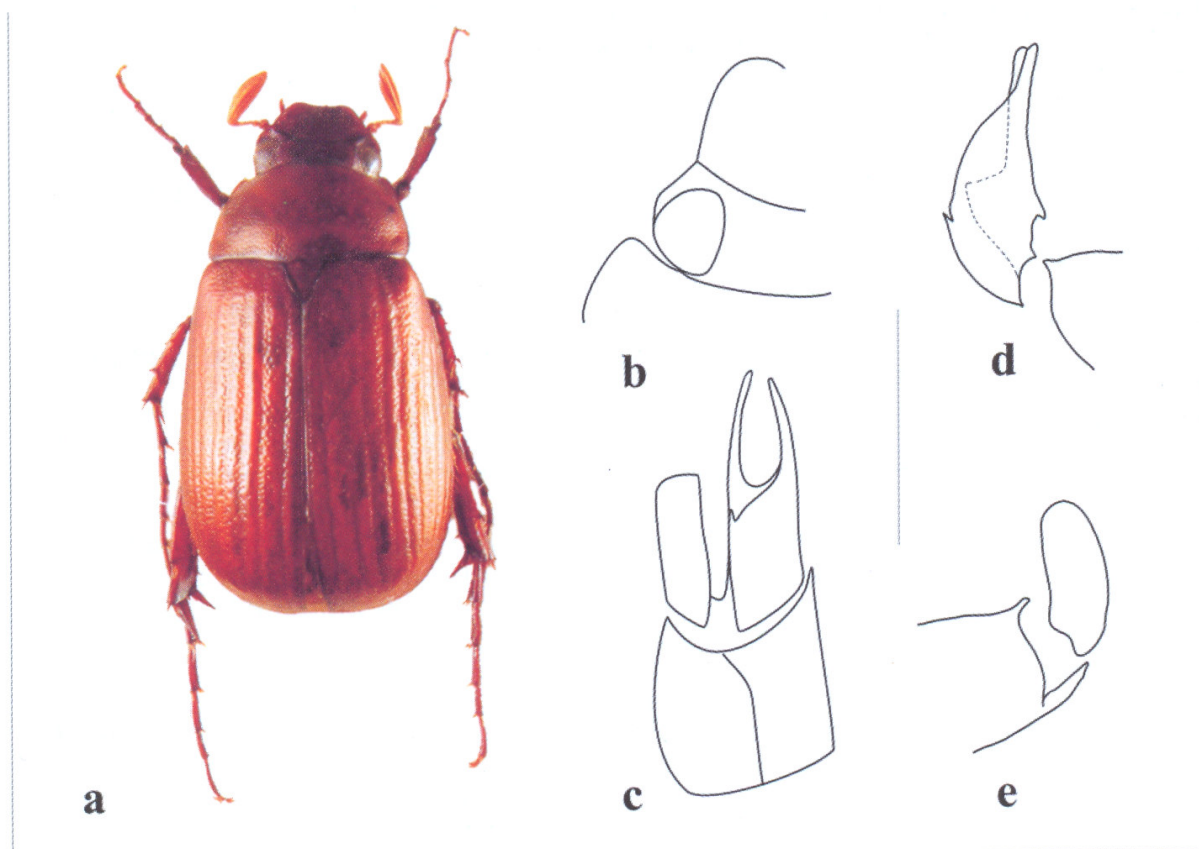


Table 1.: Morphometry of the Cyprian *Maladera* (*Macroserica*) species (4 males and 1 female of *M. (M.) dentipenis* sp.n. and 2 males and 1 female of *M. (M.) cerrutii* measured)

Species	Pronotum ♂ (length:width)	Pronotum ♀(length:width)
<i>M.cerrutii</i> :	1:2	1:1.95
<i>M.dentipenis</i> sp.n.:	1:1.76	1:2.05
	Elytra ♂(length:width) 1:1.39	Elytra ♀ (length:width)
<i>M.cerrutii</i> :	1:1.26	1:1.31
<i>M.dentipenis</i> sp.n.:		1:1.41

Text to figures

Fig.1: *M. dentipenis* sp.n.: a- habitus; b - eye canthus (dorsal view); c- aedeagus; d - left paramere (lateral view); e - right paramere (lateral view).

Fig.2: *M. cerrutii* Sabatinelli, 1977: a- habitus; b - eye canthus (dorsal view); c- aedeagus; d - left paramere (lateral view); e - right paramere (lateral view).