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Tosevskiana machackovae sp. nov. from Greece (Coleoptera: Melolonthidae)

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Abstract. *Tosevskiana machackovae* sp. nov. collected in the Sithonia peninsula (Greece: Chalkidiki) is described. The new species seems to be closely related to *T. inexpectata* Pavičević, 1985 and *Tosevskiana sithoniensis* (Král, 1998).

Taxonomy, new species, key, Coleoptera, Scarabaoidea, Melolonthidae, *Tosevskiana* Palaearctic region

INTRODUCTION

The palaearctic genus *Tosevskiana* Pavičević, 1985 is known from south-eastern Macedonia, Stojakovo (type locality), western Macedonia, Mavrovo – *T. inexpectata* Pavičević, 1985 and Greece, Chalkidiki, central Sithonia peninsula, E coast: Vourvourou (type locality), Sarti – *T. sithoniensis* (Král, 1998). A new species with markedly tridentate protibia, discovered in Greek Macedonia (Chalkidiki, S Sithonia peninsula: Kalamítsion – type locality) is described in the present paper. The genus *Tosevskiana* has been described by Pavičević (1985) based on the species *T. inexpectata*. In the study by Montreuil (2003) the genus is removed from Pachydeminae (Coleoptera: Melolonhidae) and classified to Melolonthinae (Coleoptera: Melolonthidae: Rhizotrogini) and the species *Amphimallon sithoniense* Král, 1998 is removed from the genus *Amphimallon* Berthold, 1827 and classified to *Tosevskiana* Pavičević, 1985.

MATERIAL AND METHODS

Acronyms used in text (afetr Arnett et al 1993, curators names are in parenthases):

DKCC – Denis Keith collection, Chartres, France;
DKCP – David Král collection, Charles University at Prague, Czech Republic;
JPCV – Jaromír Pumr collection, Voděrady, Czech Republic;
MNCP – Milan Nikodým collection, Roztoky u Prahy, Czech Republic;
MNHN – Muséum national d'Histoire naturelle, Paris, France (Olivier Montreuil);
RSCB – Richard Sehnal collection, Bezno, Czech Republic.

Specimens of the newly described species are provided with one red label: "Tosevskiana machackovae sp. nov., HOLOTYPUS or PARATYPUS with No. of specimen, R. Sehnal det. 2004". Exact label data are cited for the type material. Authors' remarks and complementations are found in square brackets, preceding data within quotation are printed.

Tosevskiana machackovae sp. nov.
(Figs 2, 4, 6, 8, 10)

TYPE MATERIAL. **Holotype**: male, labelled: "Greece: Chalkidiki, S Sithonia, Kalamítsion, 30.VI.1993, J. Habarta"; **paratypes**: Nos 1–60 (all males), labelled "Greece: Chalkidiki, S Sithonia, 5.–13.VI.2003, J. Pumr". Holotype and paratype: Nos 1–46, 54–60 (deposited in RSCV); paratypes Nos 49–50 (deposited in DKCP); paratypes Nos 51–52 (deposited in MNCP); paratypes Nos 47–48 (deposited in DKCC); paratype 53 (deposited in MNHN); paratypes Nos 45–46 (deposited in JPMC).

DESCRIPTION OF HOLOTYPE. Body length 17.1 mm. Elongate, only inconspicuously dilated posteriad (Fig. 2). Dorsal surface remarkably alutaceous (Fig. 2); colour dark reddish brown, head (except for clypeus), anterior and lateral clypeal margins, narrow margin around whole pronotum and elytral suture dark blackish brown to black; sides of pronotum with pale brown longitudinal strip (Fig. 2). Ventral surface alutaceous, head appendages and extremities pale brown, external protibial teeth blackish apically. Setation pale brown, nearly whitish ventrally.

Head (Fig. 4). Labrum distinctly bilobed, laterally with several long setae (Fig. 6). Clypeus bare; surface deeply, simply and regularly punctate, punctures separated by more than twice their diameter and chagrined. Frontoclypeal suture present. Frons bare with remarkably developed, medially distinctly notched transversal ridge; posteriorly with more rough punctation as in clypeus but rather, irregularly spaced, confluent punctures. Eye canthus bearing with long setae. Angle between lateral margin of clypeus and canthus obtuse. Antenna (Fig. 4) with nine antennomeres; antenomere 2 trapezoidal and longer than antennomere 3, antennomeres 3 and 4 almost oblong, antennomeres 5 and 6 transversal; club trimerous, considerably long (length of club: length of shaft ratio = 2.9 : 1.0). Antennal club totally densely punctate, without smooth areas.

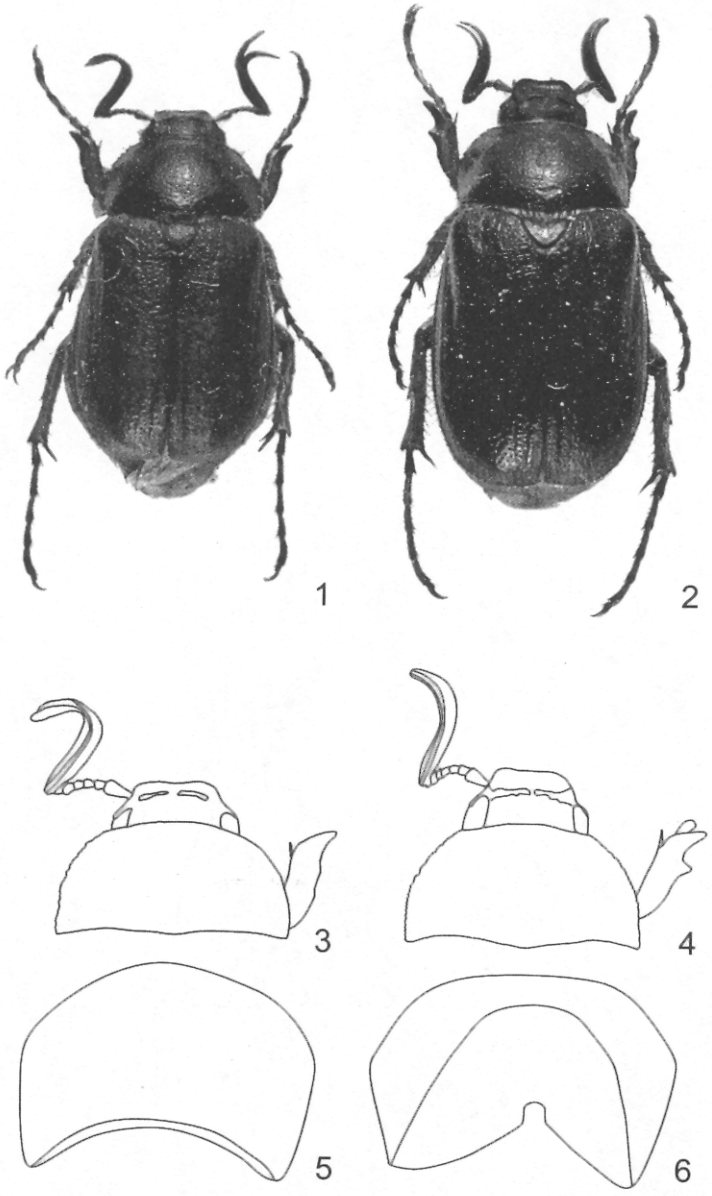
Pronotum transversal, widest approximately at middle, moderately narrowed anteriorly, each side with two shallow rounded depressions; all around rimmed; anterior margin almost straight, anterior corner broadly obtuse-angled with rounded apex, side broadly rounded, posterior corner obtuse-angled with rounded apex; lateral margin moderately serrate, each of 17–22 notches bearing very long, posterolaterad curved seta; surface bare except for row of sparse, short, erect setae in anterior rim and group of several recumbent setae medially near basal margin; punctation rather irregular, simple, consisting of coarse punctures, with microsculpture.

Scutellum triangulate, apical margin rounded. Surface finely, irregularly punctured, punctures chagrined, each with short seta.

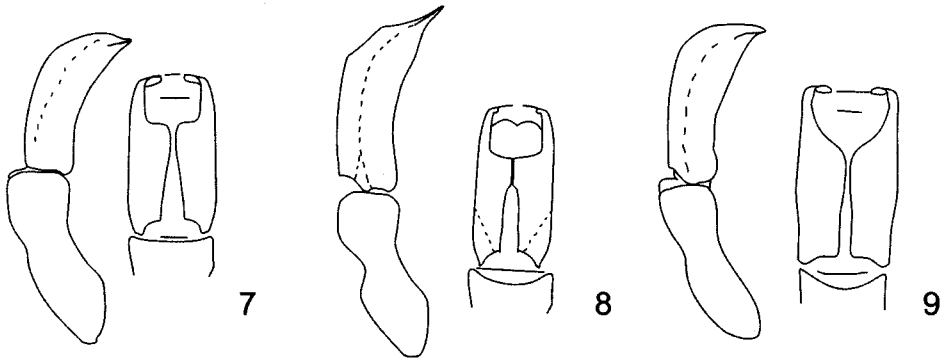
Elytron absent from humeral denticle; striae indicated by rows of densely (to confluent) and somewhat irregularly spaced punctures; intervals 1, 3, 5 and 7 only inconspicuously convex, intervals 2, 4 and 6 flat, interval 2 distinctly wider than the others discally; finely, sparsely and shortly setaceous, finely and long setae only on humeral parts, short, semierect setae apically; punctation coarse, irregular, often confluent; external margin with row of unequal, laterad or lateroposteriad oriented setae being shorter than in marginal row of pronotum;

Ventral surface of thorax completely covered with very dense, long, semierect to recumbent setation. All femora densely, irregularly punctate, with long semierect setation. Protibia tridentate, basal tooth subobsolete; terminal calcar inserting against emargination between apical and medial dens. Claws regularly curved, with perpendicular basal tooth (Fig. 4).

Propygidium roughly crumpling; punctures chagrined, medium in size; pygidium except for basal margin rimmed, apically with several long setae arising from rim, punctation fine, superficial to subobsolete. Ventrites 2–5 with transversal row of semierect, long seate.
Aedeagus as in Fig. 8.



Figs 1–6. 1, 2 – habitus, dorsal aspect. 1 – *Tosevskiana sithoniensis* (Král) (paratype No. 5), 2 – *T. machackovae* sp. nov. (holotype); 3, 4 – forebody (head with left antenna, pronotum, right protibia and scutellum), dorsal aspect; 5, 6 – labrum, dorsal aspect. 3, 5 – *T. sithoniensis*; 4, 6 – *T. machackovae* sp. nov.



Figs 7–9. Aedeagus (right lateral aspect) and parameres (dorsal aspect). 7 – *Tosevskiana sithoniensis* (Král); 8 – *T. machackovae* sp. nov.; 9 – *T. inexpectata* Pavičević, adopted from Montreuil (2003).

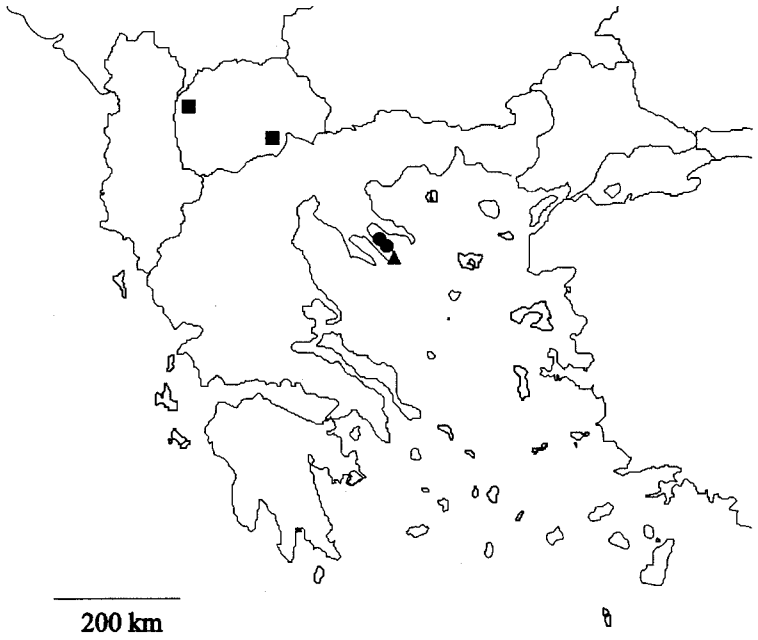


Fig. 10. Distribution map of *Tosevskiana* Pavičević species: triangle – *Tosevskiana machackovae* sp. nov., circle – *T. sithoniensis* (Král), square – *T. inexpectata* Pavičević.

Tab. 1. Characters separating *Tosevskiana* Pavičević species from each other

	T. inexpectata	*T. sithoniensis*	*T. machackovae* sp. nov.
body length	13.0–14.5 mm	13.2–16.0 mm	13.9–17.8 mm
head	not studied	shiny (Fig. 1)	alutaceous (Fig. 2)
clypeus	not studied	shiny (Fig. 1); punctation consisted from regularly spaced, coarse and fine punctures (Fig. 3)	alutaceous and chagrined (Fig. 2); punctation consisted from irregularly spaced coarse puntation (Fig. 4)
antennal club	last three antennomeres strongly curved (almost rectangular)	last three antennomeres strongly curved (almost rectangular) (Fig. 3)	last three antenomeres regularly slightly curved (Fig. 4)
terminal maxillar palpomere	not studied	short and wide	long and narrow
protibia	unidentate	tridentate; basal and medial teeth subobsolete, apical distinctly prominent, acute apically (Fig. 3)	tridentate; basal tooth subobsolete, medial and apical teeth prominent and regularly rounted apically (Fig. 4)
pronotum	disc setaceous	disc glabrous; shiny; lateral margins finely dentate, with long fine setae	disc glabrous; alutaceous; dentes of lateral margins coarse and dense with long and strong setae
elytron	yellow-brown	setation consisting of short erected setae with intermixed very long semierected setae in anterior third and other surface with short setae; uniformly lightly reddish brown	setation consisting of long erected setae in basal part only and apical shorter, semierected setation; brown, margins and suture darker to blackish brown
scutellum	not studied	shiny, anterior third without punctation otherwise with irregular, simple punctures with short setae in each puncture	alutoceous, fine, irregularly punctured, chagrined with short setae in each puncture
pygidium	almost alutaceous, irregularly, finely and flatly punctate	finely and scarcely punctate, chagrined	coarsely wrinkled and strongly punctate, chagrined

VARIABILITY. Body length 13.9–17.8 mm; paratypes Nos 35 and 40 with entirely yellowish-brown elytron.

Female unknown.

DIFFERENTIAL DIAGNOSIS. *Tosevskiana machackovae* sp. n. is classified in genus *Tosevskiana* Pavičević, 1985. The genus comprises species with the following complex of diagnostic characters: pronotum at least in anterior rim setaceous, elytral intervals shiny or alutaceous, odd intervals (1, 3, 5, 7) flat or only hardly convex; basal dens of protibia subobsolete or entirely absent; terminal calcar of protibia inserting against emargination between apical and medial dents. The new species can be distinguished from all so far known species of the genus mainly by totally alutaceous dorsal surface and characters mentioned in the Tab. 1.

DISTRIBUTION. The southernmost part of the Sithonia peninsula (Greece: Chalkidiki) (Fig. 10).

NAME DERIVATION. Matronymic, named in honour of Mrs Marie Machačková (CZ, Bezno, † 2001), my best teacher at primary school.

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