Trogoderma meccae sp. nov., a new species from California, U.S.A. (Coleoptera: Dermestidae: Megatominae: Trogodermina)

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Trogoderma meccae sp. nov., a new species from California, U.S.A. (Coleoptera: Dermestidae: Megatominae: Trogodermina)

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Taxonomy, new species, Coleoptera, Dermestidae, *Trogoderma*, California, U.S.A.

Abstract. The new species *Trogoderma meccae* sp. nov. is described, compared with similar species and illustrated. The new species is characterized by ornamental elytral patterns.

INTRODUCTION

The genus *Trogoderma* Dejean, 1821 currently contains 205 species and subspecies worldwide (Háva 2025). According to Háva & Herrmann (2021) from United States are known 24 species (including subspecies). Discovering a new species from California is very surprising and unexpected. It is unique in its coloration, which distinguishes it from all North American species, however, due to this coloration it can be confused with a species belonging to the subfamily Attageninae *Lanorus varicolor* (Jane, 1882). The new species is here described.

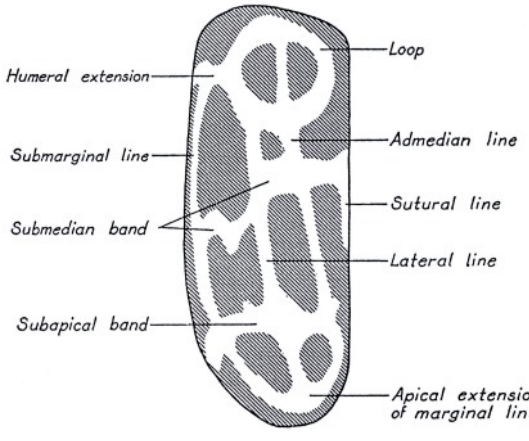
MATERIAL AND METHODS

The following abbreviations of measurements were used (in mm):
Total length (TL) - linear distance from anterior margin of pronotum to apex of elytra.
Elytral width (EW) - maximum linear transverse distance.

Mentioned material deposited in the following collection:
JHAC Jiří Háva, Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-West, Czech Republic.

Specimen of the species here designated as new species is provided with red printed label with the text as follows: HOLOTYPE *Trogoderma meccae* sp. nov. J. Háva det. 2025.

Schematic representation of generalized pattern of elytron of Nearctic *Trogoderma* as in fig. A. (according to Beal 1954).



A

RESULTS

Trogoderma meccae sp. nov.
(Figs. 1-4)

Type material. Holotype (♀): „Mecca, Cal., 18.iv.67", (JHAC).

Description. Female. Body long, oval (Fig. 1). Measurements of the body (mm): TL 2.6, EW 1.5. Head dark brown; pronotum dark brown, slightly shining, with sparse brown and white setation; elytra dark brown with large orange spots, sparse brown and white setation; antennae yellowish-brown; legs brown; ventral parts of body dark brown.

Head coarsely punctate, sparsely covered with short, white setation. Palpomeres dark brown. Eyes very large, with yellow microsetae. Ocellus present on front. Antennae yellowish-brown, with short, yellow setation; composed of 11 antennomeres (Fig. 4), antennal club with 5 antennomeres.

Pronotum slightly shining, coarsely punctate, dark brown, lateral margins of pronotum smooth, covered by white setation, discally with brown setation.

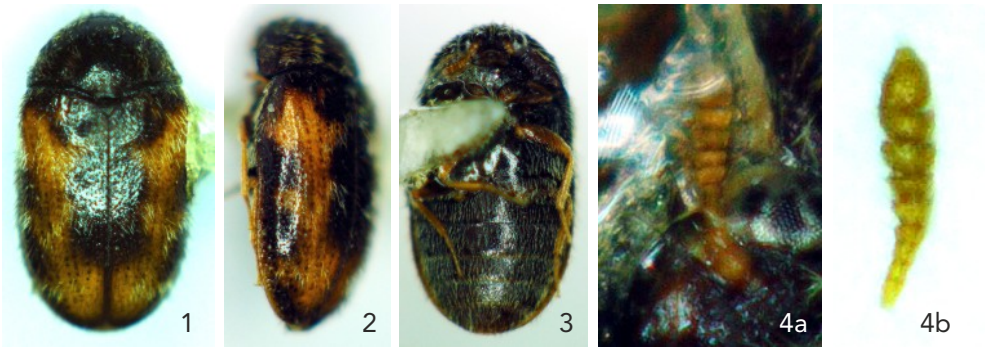
Scutellum dark brown, triangular, without setation.

Elytra slightly shining, dark brown, with large, ornamental, orange fasciae covered by white setation, without loop in anterior part, other parts covered by sparse brown setation; each elytron with small bump on humerus. Epipleuron brown, covered by white setation.

Mesosternum and metasternum dark brown, covered with white setation, finely punctate. Prosternal process short and broad.

Legs brown, covered with recumbent, white setation.

Abdominal ventrites dark brown, finely punctate, sparsely covered with recumbent white setation; ventrites II-IV with small, lateral depression. Pygidium brown with brown setation.



Figs. 1-4. *Trogoderma meccae* sp. nov.: 1- habitus, dorsal aspect; 2- habitus, lateral aspect; 3- habitus, ventral aspect; 4- antennae.

Male. Unknown.

Differential diagnosis. The new species according to Beal (1954, 1956) similar to *Trogoderma* species: *sternale* Jayne, 1882 (including ssp.) (antennal club of females composed 4 antennomeres, each elytron in anterior part with loop), *grassmani* Beal, 1954 (antennal club of females composed 4 antennomeres), *ornatum* (Say, 1825) (antennal club of females composed 4 antennomeres, each elytron in anterior part with loop) and *simplex* Jayne, 1882 (antennal club of females composed 5 or 6 antennomeres, each elytron in anterior part with

loop), but differs from them by the stucture of the antennae and characteristic elytral colour pattern. According to the structure of the antennae, the new species is also similar to *T. aritae* Háva & García-Ochaeta, 2021 described from Honduras, but differs from it by the elytral pattern and yellow antennae. Visually the new species is similar to *Lanorus varicolor* (Jane, 1882) (subfamily Attageninae) but differs from it by the structure of the antennae.

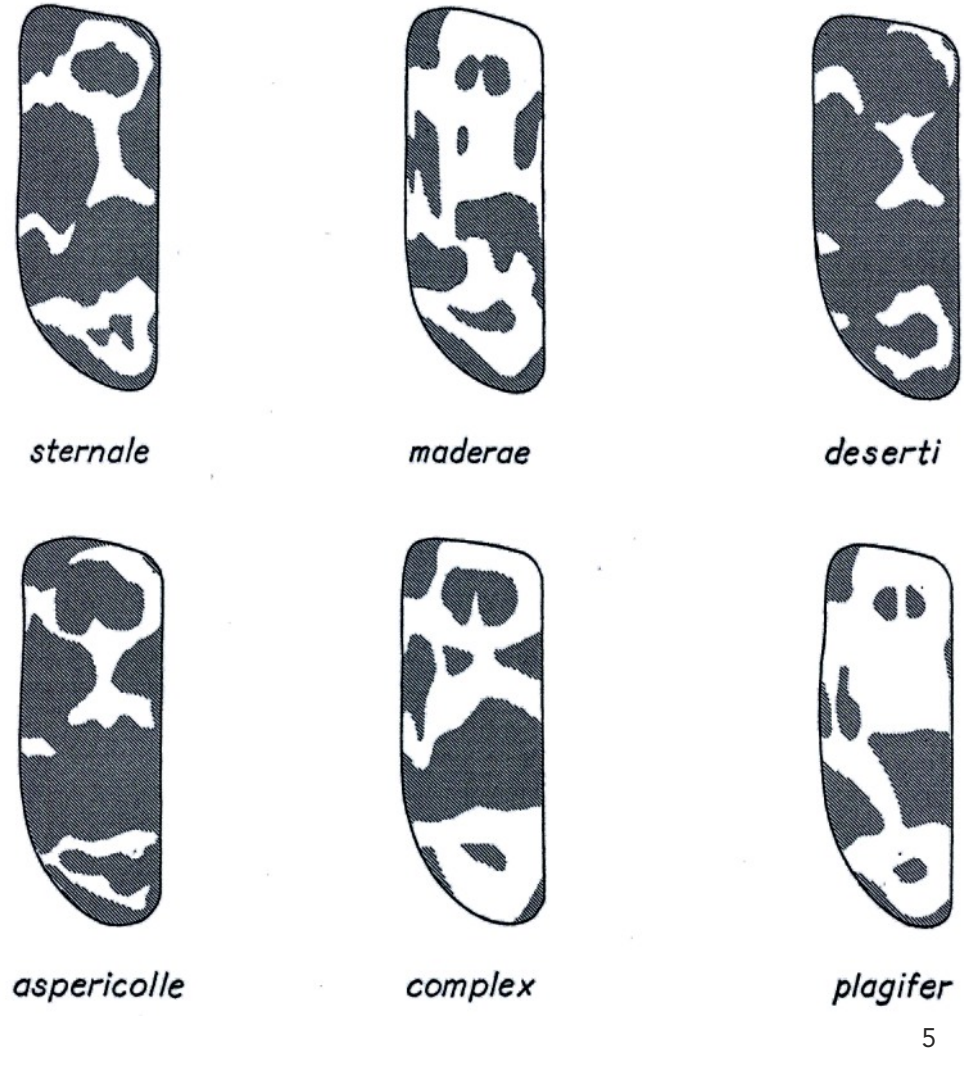


Fig. 5. Typical elytral patterns of subspecies of *Trogoderma sternale* (according to Beal, 1954).

Etymology. Toponymic, named for the city of Mecca, where the holotype was collected.

Distribution. U.S.A.: California: Riverside County.

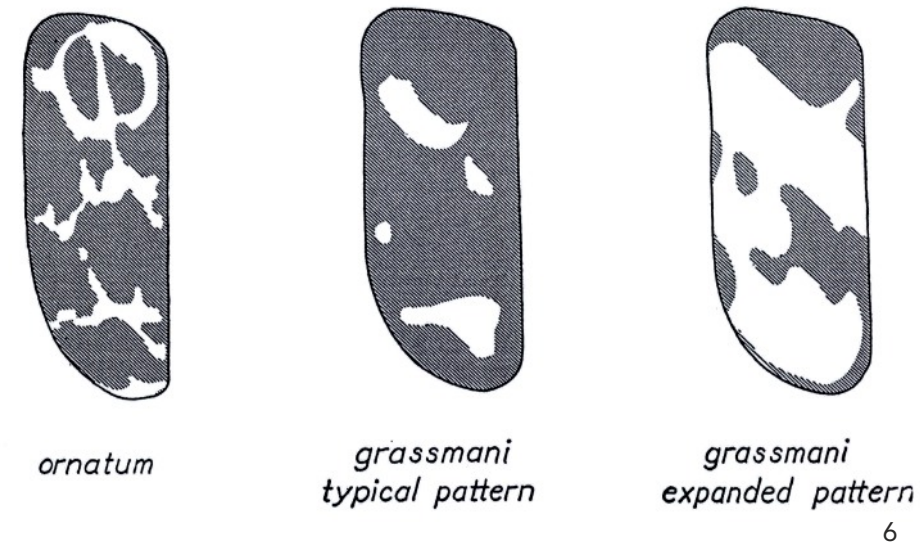


Fig. 6. Elytral patterns in species of *Trogoderma* (according to Beal, 1954).

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