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A new species of *Trogoderma* from Honduras (Coleoptera, Dermestidae, Megatominae)

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A b s t r a c t : *Trogoderma aritae* nov.sp. from Honduras is described, illustrated and compared with similar species. A list of *Trogoderma* species known from Central America is given.

K e y w o r d s : Taxonomy, new species, Coleoptera, Dermestidae, *Trogoderma*, Honduras.

Introduction

The dermestid genus *Trogoderma* DEJEAN, 1821 currently contains 163 species and subspecies distributed worldwide (HÁVA 2018, 2019, 2020), From Central America 10 species have been recorded (BEAL 1954, 1960, 1964, HÁVA 2015, SILVESTRE HERNÁNDEZ 2015, HAGSTRUM & SUBRAMANYAM 2009, DÍAZ 2018, BAHA 2019, GARCÍA-OCHAETA & HÁVA 2019, OIRSA 2020). As a result of Gabriela Arita's research on the inventory of insects associated with the southern pine beetle (*Dendroctonus frontalis* ZIMMERMAN) in Honduras, the following new species of *Trogoderma* was collected.

Material and Methods

We measure total body length as a distance from anterior margin of pronotum to the posterior margion of elytra.

The label data of the material examined are cited verbatim, including possible errors.

Studied material is deposited in the Universidad del Valle de Guatemala Collection of Arthropods (UVGC), Guatemala. Type specimen of the species here described is provided with a red, printed label with the following text: "HOLOTYPE *Trogoderma aritae* nov.sp. Háva & García-Ochaeta det. 2021".

Systematics

Family D e r m e s t i d a e

Subfamily M e g a t o m i n a e

Tribe M e g a t o m i n i

Genus *Trogoderma* DEJEAN, 1821

T y p e s p e c i e s : *Anthrenus elongatulus* FABRICIUS, 1801

R e c o g n i t i o n . Body subparallel to ovate, moderately to strongly convex, with recumbent to erect setation. Head with median ocellus. Antennae with 11 antennomeres, antennal club with 3-9 antennomeres. Antennal cavity closed. Prosternum forming a "collar" under which moutparts fit when head is retracted. Anterior tibiae without spines along shaft. Aedeagus with variable Y-shaped apodeme at its base.

Trogoderma aritae nov.sp. (figs 1-5)

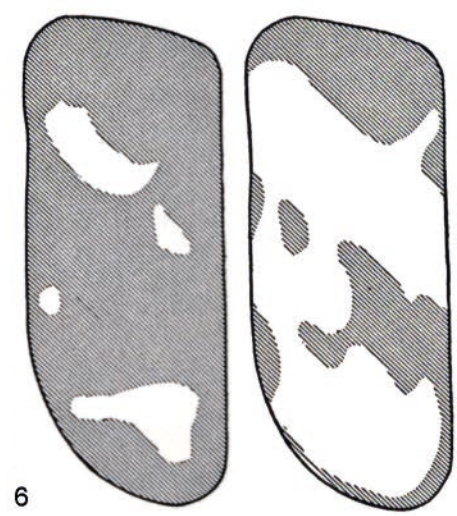
T y p e m a t e r i a l : Holotype (♀): Honduras, La Paz, San Pedro de Tutule, La Chanchera, 14.xi.2020, 14°14´4.997´´N 87°51´19.745´´W 1419 msnm, on tree Pinus oocarpa, coll. Gabriela Arita. Holotype missing anterior legs.

D e s c r i p t i o n : Female: Body measurements (in mm): Total body length – 2.75. Head: maximum width across eyes – 0.30. Pronotum: maximum width – 1.33. Elytra: maximum width – 1.44. Small and oval (fig 1) species, with conspicuous colour patterns. Black and orange on dorsal surfaces and black on ventral surfaces (figs 1-3); legs paler, light brown; scape, pedicel and antennomeres light brown.

Head coarsely puncturated with long yellow setation. Palpi entirely yellowish-brown; setation on mentum dense. Eyes small, not overlapping lateral margin of head from dorsal view. Ocellus on front present. Antennae (fig. 5) composed of 11 antennomeres, antennal club of 6 antennomeres. Pronotum coarsely puncturated alike head with short yellow setation; lateral and anterior margins continuous, regularly rounded, posterior margin conspicuously bisinuate, anterior angles not visible from above. Mesonotum heavily sclerotized; scutellum very small, triangular, finely puncturated alike pronotum and head, without setation. Metanotum robust, more weakly sclerotized as mesonotum. Meso-metasternum black with short yellow setation. Mesosternal process coarsely puncturated, long. Elytra coarsely puncturated; black with one transverse, orange band and orange apical spot (figs 1-3) covered by white setation. Elytral epipleuron entirely black with white setation. Legs brown with short white and yellow setation; tibiae without thorns. Abdominal ventrites with short yellow setation (fig. 4). First visible abdominal ventrite with distinct oblique discal striae and robust, heavily sclerotized median tubercle. Pygidium brown with short, yellow setation.

Male unknown.

Figs 1-5: *Trogoderma aritae* sp. nov.: (**1**) habitus, dorsal aspect; (**2**) habitus, lateral aspect; (**3**) apical part of elytra; (**4**) habitus; ventral aspect; (**5**) antenna of female.



Figs 6-7: Elytrae: (**6**) *T. grassmani* (according to BEAL 1954); (**7**) *T. okumurai* (according to BEAL 1964).

Fig. 8: Locality of *Trogoderma aritae* nov.sp.: Honduras, La Paz, San Pedro de Tutule, La Chanchera, with the tree *Pinus oocarpa* SCHIEDE ex SCHLECTENDAHL, 1838 (Pinaceae), (photo by Gabriela Arita).

D i f f e r e n t i a l d i a g n o s i s : The Central America contains following countries: Belize, Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica and Panama. The genus *Trogoderma* recorded in Central America includes 10 species (see table 1), nine species were introduced within stored products or other comodities. The new species is similar to *T. beali* MROCZKOWSKI, 1968 (Costa Rica), but differs from it by the bicolorous elytral cuticle (*beali* – elytral cuticle is only black). Other similar species as *T. grassmani* BEAL, 1954 (Mexico, U.S.A) and *T. okumurai* BEAL, 1964 (U.S.A) differ from the new species by the structure of antennae and elytral colour patterns (figs 6-7).

E t y m o l o g y . The species epither is patronymic. The new species is named after the collector of the new species Gabriela Arita (Honduras).

Table 1: *Trogoderma* species recorded in Central America. Abbreviations: BLZ – Belize, GUA – Guatemala, HND – Honduras, SLV – El Salvador, CRI – Costa Rica, PAN – Panama, NIC – Nicaragua, * – record from literature, i – introduced or intercepted at ports of entry.

Species/countries	BLZ	GUA	HND	SLV	CRI	PAN	NIC
T. aritae nov.sp.			*				
T. beali MROCZKOWSKI, 1968					*		
T. glabrum (HERBST, 1783)		*i				*i	
T. granarium EVERTS, 1898 = *khapra* ARROW, 1917 = *afrum* PRIESNER, 1951	*i	*i	*i		*i	*i	*i
T. inclusum LECONTE, 1854		*i					
T. ornatum (SAY, 1825)						*i	
T. quinquefasciatum JACQUELIN DU VAL, 1859		*i	*i				

Species/countries	BLZ	GUA	HND	SLV	CRI	PAN	NIC
= *megatomoides* REITTER, 1881							
T. serraticorne (FABRICIUS, 1792) = *anthrenoides* SHARP, 1902		*i	*i		*i	*i	*i
T. simplex JAYNE, 1882		*i		*i			
T. sinistrum FALL, 1926		*i					
T. variabile BALLION, 1878 = *parabile* BEAL, 1954		*i					
T. versicolor (CREUTZER, 1799)		*i					

Correction

In the OIRSA (2020) a table of synonyms for *Trogoderma granarium* is given. However, this table is partially erroneous because it contains many valid species. Correct synonyms for *T. granarium* are only four: *T. quinquefasciata* LEESBERG, 1906, *T. khapra* ARROW, 1917, *T. koningsbergeri* PIC, 1933 and *T. afrum* PRIESNER, 1951 (HÁVA 2015, 2020).

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