

ARTIGO / ARTÍCULO / ARTICLE

Two new species of Dermestidae for French Guiana, with description of the male of *Valdesetosum atrum* Háva 2014 (Coleoptera: Dermestidae: Megatomini).Andreas Herrmann¹, Jiří Háva² & Marcin Kadej³¹ Bremervörder Straße 123, D-21682 Stade, GERMANY. e-mail: herrmann@coleopterologie.de² Department of Forest Protection and Entomology, Faculty of Forestry and Wood Sciences, Czech University of Life Sciences Kamýcká 1176, CZ-165 21, Prague 6 - Suchbát, CZECH REPUBLIC. e-mail: jh.dermestidae@volny.cz³ Department of Invertebrate Biology, Evolution and Conservation, Institute of Environmental Biology, Faculty of Biological Science, University of Wrocław, Przybyszewskiego 65, PL-51-148 Wrocław, POLAND. e-mail: marcin.kadej@uwr.edu.pl

Abstract: *Valdesetosum atrum* Háva 2014 and *Thaumaglossa anthrenoides* (Pic, 1918) (Coleoptera: Dermestidae) are recorded for the first time from French Guiana. The so far unknown male of the first one is described and illustrated.

Key words: Coleoptera, Dermestidae, Megatominae, *Valdesetosum*, Taxonomy, new records, description of male, French Guiana, Neotropical Region.

Resumen: Dos nuevas especies para la Guayana Francesa y descripción del macho de *Valdesetosum atrum* Háva 2014 (Coleoptera: Dermestidae: Megatomini). Se citan *Valdesetosum atrum* Háva 2014 y *Thaumaglossa anthrenoides* (Pic, 1918) (Coleoptera: Dermestidae) por primera vez para la Guayana Francesa. Se describe e ilustra el macho, hasta ahora desconocido, de la primera de ellas.

Palabras clave: Coleoptera, Dermestidae, Megatominae, *Valdesetosum*, Taxonomía, nuevas citas, descripción del macho, Guayana Francesa, Región Neotropical.

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Introduction

In April, 2007 the association S.E.A.G. (Société Entomologique Antilles-Guyane) was created by some experts in entomology to study the wealth of the insects of French Guiana. Since this date, the members of S.E.A.G. have sampled numerous sites as the Mountain of Horses (current since September, 2008), the Reserve of Nouragues (current since July, 2009), the Mount Itoupé (2nd higher summit of French Guiana), Saül (begun in August, 2010), the Reserve Trinité, in particular. The devices of trappings constituted by: window traps, Malaise traps, Polytraps, and traps with fermented fruits and cryldé are found every week and the sortings of purées of insects were made in the office of the S.E.A.G. Since all members of the association are entomologists, many of the specimens could be identified by the S.E.A.G. itself, but e.g. the identification of beetles belonging to the family Dermestidae down to species level in a reliable way was quite problematical, so they have sent the regarding material to the first author asking for examination. During this examination it turned out that several of the sampled dermestid species have never been recorded from this country before, and some of them are new to science at all. This paper was preceded by descriptions of several new species

recently collected in French Guiana by the S.E.A.G. (Herrmann & Háva, 2011; Herrmann et al., 2014, 2015; Háva et al., 2015).

The aim of this paper is to report the first records of *Valdesetosum atrum* Háva 2014 and *Thaumaglossa anthrenoides* (Pic, 1918) (Coleoptera: Dermestidae) from French Guiana as well as to describe the morphology of the male of *Valdesetosum atrum* Háva 2014, up to now only known by the holotype, one single female collected in Honduras and described by Háva (2014). Recently the S.E.A.G. collected in French Guiana a small series of this species, including males. Having this opportunity, the authors decided to complete the description of *V. atrum* by adding the male characteristics.

Material and methods

The specimens were stored for 5 days in a solution of 1% pepsin in hydrochloric acid to free it roughly from protein tissues and making the extremities of the body moveable. The abdomen was disconnected from the body and glued upside-down onto the same cardboard plate, just behind the beetle. Before this the genitalia was excluded and then cleaned with a fine needle in a drop of 99 percent glycerol. Afterwards it was also glued onto the plate behind the beetle, firmly embedded in a drop of a solution consisting of polyvinylpyrrolidone, aqua demineralisata and diglycerin (the liquid solution becomes permanently solid after a few minutes). Photos of body and abdomen were taken with a digital SLR camera Sony Alpha 35, connected with an objective Nikon CF N Plan Achromat 4x 160/- and extension rings; for the photos of the genitalia and antenna a Bresser Junior USB-Handmikroskop at 200x magnification was used. Because of the low depth of field all photos were taken as layered images, afterwards combined on a PC by software. Nomenclature and systematic in this paper follow Háva (2015).

Because the size of the beetles as well as of their body parts can be useful in species recognition, the following measurements were made:

- a) total length (TL) - linear distance from anterior margin of pronotum to apex of elytra.
- b) pronotal length (PL) - maximal length measured from anterior margin to posterior margin.
- c) pronotal width (PW) - maximal linear transverse distance.
- d) elytral length (EL) - linear distance from shoulder to apex of elytron.
- e) elytral width (EW) - maximal linear transverse distance.

Results

Valdesetosum atrum Háva, 2014

(Figs. 1-4)

Material examined. 4 specimens (2♂♂, 1♀, and one unsexed) labeled: "French Guiana: Saül, Point de vue du Belvédère, VPV4, 9.IX.2011 leg. S.E.A.G." The specimens are deposited in the collection of the first author.

Description of male.

Body measurements (in mm): TL 1.6; PL 0.3; PW 1.0; EL 1.1; EW 1.2. Body short and oval (almost circular). Dorsal surfaces entirely black covered by long, erect, brown setation (Fig. 1), ventral surfaces black, covered by grayish brown recumbent setation. Head shiny black, slightly broader than long, with deep and distinct punctation. Eyes large with hardly visible microsetae. Palpi and all mouthparts brown, ocellus present on front. Antennae with 11 antennomeres, antennal club consisting of 3 antennomeres, the whole antenna entirely brown (Fig. 2). Pronotum more than twice as broad as long, with sparse and fine punctuation on the shiny disk, density and deepness of the punctuation

increases towards the lateral margins, narrowed anteriorly, broadest at the apical edges, its lateral margins not visible from above; posterior and especially anterior angles somewhat rounded. Prosternal process short, broad. Elytra similar punctated as in the head, with quite strong and erected brown pubescence. Epipleuron short, entirely black with grayish brown recumbent setation. Scutellum small and subcordate with some indistinct fine punctation and very few single hairs. Visible abdominal ventrites black and covered with recumbent fine brown hairs (Fig. 4). First visible abdominal ventrite without postcoxal lines. Legs flattened, entirely brown, covered dorsally with fine bright, recumbent and sparse pubescence, ventrally with similar brown hairs as in the rest of the underside. Edges of legs with single rows of strong erect dark hairs. Genitalia with conspicuous long and thin parameres (Fig. 3).

Variation in size. TL: 1.6-1.7 mm (males), TL: 2.2 mm (female).

***Thaumaglossa anthrenoides* (Pic, 1918)**

(Fig. 5)

Material examined. "French Guiana: Camopi, Mont Saint-Marcel, (SLAM), 25.IX.2014 leg. S.E.A.G.", 1♀. The specimen is deposited in the collection of the first author.

Remarks. "SLAM" is an abbreviation of "Sea Land and Air Malaise trap".

Distribution. The species was known so far only from Brazil and Honduras (Háva 2015). New for French Guiana.

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Figs. 1-4.- *Valdesetosum atrum* Háva, 2014 (male). 1.- Habitus (dorsal aspect); 2.- Antenna; 3.- Genitalia; 4.- Abdominal ventrites.



Fig. 5.- *Thaumaglossa anthrenoides* (Pic, 1918): habitus (female, dorsal aspect).