

**Description of two new species of the genus *Cryptorhopalum* from French Guiana
(Coleoptera: Dermestidae: Megatomini)**

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Abstract. *Cryptorhopalum decoratum* sp. nov. and *Cryptorhopalum pellitum* sp. nov. are described, illustrated and compared with other species of the genus occurring in French Guiana. A list of all *Cryptorhopalum* species recorded so far from French Guiana is provided.

INTRODUCTION

In April, 2007 the association S.E.A.G. (Société Entomologique Antilles-Guyane) was created by entomological friends to study and become known the wealth of the entomological fauna of French Guiana. Since that date, the members have to sample 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 of: window traps, Malaise traps, Polytraps, and traps with fermented fruits and cryldé are found every week and the sortings of purées of insects are made in the office of the S.E.A.G.

Since all members of the association are entomological specialists, many of the specimens could be identified by S.E.A.G. themselves, but e.g. the identification of beetles belonging to the family Dermestidae down to species level in a reliable way is quite problematical. They have thus sent the regarding material to the first author and asked for the examination. During the examination, it turned out that a number of the sampled dermestid species have never been recorded from this country before, and some of them are new to science at all.

The genus *Cryptorhopalum* Guérin-Ménéville, 1838 contains roundabout 150 valid

species and/or subspecies worldwide (Beal 1985, Blackwelder 1945, Háva 2007, 2009, 2014, 2015a,b, Mroczkowski 1968). Most of them occur in the Neotropical and Nearctic regions (Kadej & Háva 2013), four descriptions concern fossil species (Háva & Prokop 2004); from French Guiana so far twelve species have been recorded (Herrmann & Háva 2011, Háva & Herrmann 2013, Herrmann, Háva & Kadej 2016). In the present paper the authors record and describe another two new species of *Cryptorhopalum* which have been detected in that country.

MATERIAL AND METHODS

The following measurements were made:

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

The specimens of the described species are provided with a red, printed label showing the following text: „HOLOTYPUS [respectively PARATYPUS], *Cryptorhopalum decoratum* [respectively *Cryptorhopalum pellitum*] sp. n., Herrmann, Háva & Kadej det. 2017”.

RESULTS

Cryptorhopalum decoratum sp. nov.

(Figs. 1-4)

Type material. Holotype (♂): „French Guiana: Nouragues, Inselberg Petit Plateau, (D7), 30.IX.2010 leg. S. E. A. G. Paratype (1 ♀): „French Guiana: Saül, Point de vue du Belvédère, 3°1'22"N, 53°12'34"O, (FIT), 09.IX.2010 leg. S. E. A. G. Both specimens are deposited in the collection of the first author.

Description. Cuticle of dorsal surface of body entirely reddish brown; robust, longish oval (Fig. 1). Body measurements (in mm): TL 2.8, PL 0.7, PW 1.7, EL 2.1, EW 1.9. Head also brown, coarsely and quite densely punctate, sparsely covered with decumbent yellow brown hairs. Palpi light brown. Eyes large with extremely short, erect and hardly visible microsetae. Ocellus distinctly present on front. Antenna 11-segmented, the big club as well as the first two segments of the shaft dark brown. Club densely covered with short pubescence, which makes it look dull, one and a half as long as the rest of antenna, consisting of two longish oval segments; the last one is slightly longer than the previous segment (Fig. 2). Pronotum reddish brown, shiny, distinctly but sparsely punctate, with recumbent sparse dark pubescence, at the lateral sides and apical margin long yellow-brown hairs intermixed. Pronotal lateral margins smooth, untoothed, not visible from above altogether. Scutellum small, dark brown and nearly triangular, with a few single brown hairs and without distinct puncture. Colour, main pubescence and punctuation of the elytra as in the pronotum, the

intermixed yellow-brown hairs forming pattern located in anterior part and resembling a wine cup or chalice (Fig. 4). There are some additional yellow-brown hairs covering indistinctly the small bumps of the shoulders. Epipleura not visible from above. Legs and tarsi light brown, sparsely covered with short light brown hairs. Tibiae slightly longer than tarsi, with a row of short strong brown setae at their edges each. Mesosternum and femora brown, covered quite densely with yellow-brown recumbent pubescence, the hairs are somewhat finer than those of elytra. Ventrites I-V light brown, coarsely punctate, covered densely with recumbent yellow hairs (Fig. 3).

Female. Habitually similar to male, but with a slightly smaller antennal club. Size of the paratype (in mm): TL 3.0, PL 0.7, PW 1.8, EL 2.3, EW 1.9.

Remark. The genitalia of the holotype, the half of its right hind tarsus and the right antenna are missing.

Differential diagnosis. The new species differs from all other known *Cryptorhopalum* species in the golden respectively yellow brown hairs forming at the anterior part of the elytra a spot resembling distinctly a wine cup or chalice (Fig. 4).

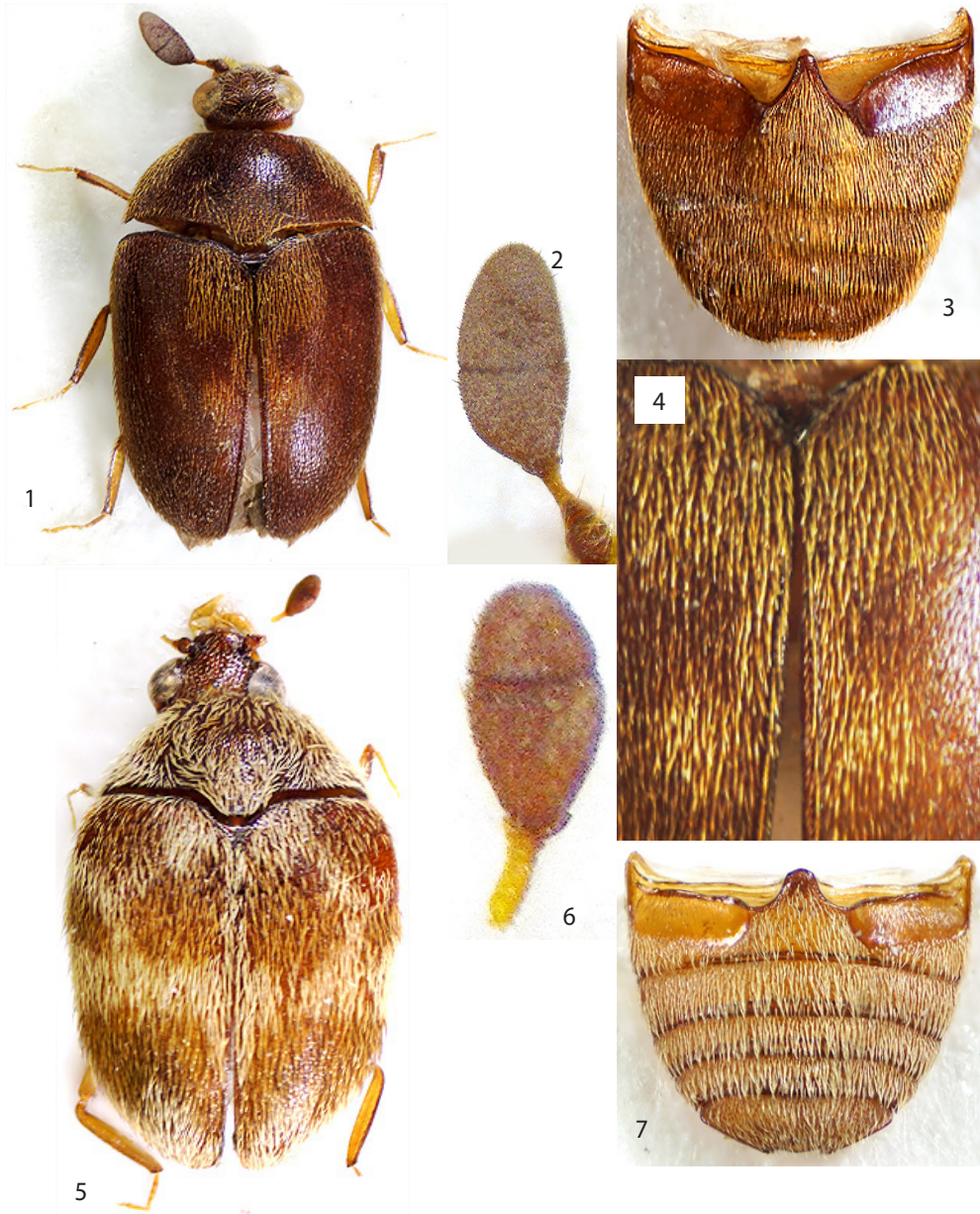
Etymology. The species name is derived from the Latin word “decoratus” (which means decorated) and refers to the distinct chalice-like macula on the elytra.

Cryptorhopalum pellitum sp. nov.

(Figs. 5-7)

Type material. Holotype (♀): „French Guiana: Saül, (FIT) VPV2, 3°37'22"N, 53°12'34"O, 30.III.2011 leg. S. E. A. G; 1 paratype (female) with the same data as the holotype. Remark: “FIT” is an abbreviation of “Flight Interception Trap”, and “VPV2” concerns an internal identification number of the trap. Both specimens are deposited in the collection of the first author.

Description. Cuticle of dorsal surface of body entirely brown; robust, short oval (Fig. 5). Body measurements (in mm): TL 2.3, PL 0.6, PW 1.3, EL 1.8, EW 1.6. Head shiny brown, coarsely and densely punctate, nearly naked. Palpi light brown. Eyes large with extremely short, erect and hardly visible microsetae. Ocellus distinctly present on front. Antenna most likely 11-segmented (hard to say since the antenna is disconnected), the club as well as the first two segments of the shaft darkened. Club densely covered with short pubescence which makes it look dull, roughly as long as the rest of antenna, consisting of two longish oval segments; the last segment is slightly shorter than the previous one (Fig. 6). Pronotum broadest at the hind edges, narrowed towards the front; brown, shiny, very coarsely and densely punctate, covered with recumbent long light brown hairs. Pronotal lateral margins smooth, untoothed, not visible from above altogether. Scutellum small, dark brown to black and nearly triangular, with a few single brown hairs and without distinct puncture. Color and punctuation of the elytra as in the pronotum, the main pubescence consisting of quite long recumbent brown hairs intermixed with light brown hairs forming three fasciae; the first fascia is jagged and located in the anterior third of the elytra, it touches the scutellum; the second fascia is located transversally in the middle of the elytra; the third fasciae covers the apex. The first two fasciae touches each other in the middle and also cover the suture.



Figs. 1-7. *Cryptorhopalum decoratum* sp. nov. (holotype, male): 1 - habitus (dorsal aspect); 2- antenna; 3- ventrites I-V; 4- close up of the anterior part of the elytra; *Cryptorhopalum pellitum* sp. nov. (holotype, female): 5- habitus (dorsal aspect); 6- antenna; 7- ventrites I-V.

Shoulders with a small and indistinct bump. Epipleura not visible from above. Legs and tarsi light brown, sparsely covered with short light brown hairs. Tibiae slightly longer than the tarsi, with a row of short strong brown setae at their edges each. Mesosternum and femora brown, covered quite densely with light brown recumbent pubescence, the hairs are somewhat finer than those of the elytra. Ventrites I-V light brown, coarsely punctuate, covered quite densely with recumbent thin light brown hairs (Fig. 7).

Male. Unknown.

Remark. The two specimens are damaged and very brittle; some legs are disconnected from the body, but still present. Both examples miss their antennae and partly the tarsi; in the case of the holotype the club of the right antenna together with a part of the shaft is glued onto the cardboard plate.

Differential diagnosis. The new species differs from all other known *Cryptorhopalum* species in the very dense pubescence in combination with colour and form of the elytral fasciae.

Etymology. The species name is derived from the Latin word “pellitus” (which means covered by a fur) and refers to the dense elytral pubescence.

LIST OF CRYPTORHOPALUM RECORDED FROM FRENCH GUIANA

Cryptorhopalum brulei Herrmann et Háva, 2011
Cryptorhopalum calvum Háva, Herrmann et Kadej, 2015
Cryptorhopalum decoratum sp. nov.
Cryptorhopalum difficile Reitter, 1881
Cryptorhopalum ducale Sharp, 1902
Cryptorhopalum eximium Arrow, 1915
Cryptorhopalum orbiculosum Reitter, 1881
Cryptorhopalum pellitum sp. nov.
Cryptorhopalum quadripunctatum Guérin-Méneville, 1838
Cryptorhopalum panthera Herrmann, Háva et Kadej, 2014
Cryptorhopalum rubromaculatum Herrmann, Háva et Kadej, 2016
Cryptorhopalum sexsignatum Reitter, 1881
Cryptorhopalum stachi Mroczkowski, 1958
Cryptorhopalum viridipubens Pic, 1923

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