

**Contribution to knowledge of the genus *Cryptorhopalum* Guérin-Ménéville, 1838
(Coleoptera: Dermestidae: Megatomini) from French Guiana**

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**Taxonomy, new species, new records, Coleoptera, Dermestidae, Megatominae, *Cryptorhopalum*,
French Guiana**

Abstract. *Cryptorhopalum brulei* sp. nov. is described, illustrated and compared with a related species *Cryptorhopalum trogodermoides* Reitter, 1881. Two species, *Cryptorhopalum quadripunctatum* Guérin-Ménéville, 1838 and *Cryptorhopalum orbiculosum* Reitter, 1881, are recorded for the first time from French Guiana.

INTRODUCTION

In April, 2007 the association S.E.A.G. (Société Entomologique Antilles-Guyane) was established by entomological friends to study and recognize the rich variety of the French Guiana entomofauna. After that, the members started visiting numerous sites such as the Mountain of Horses (since September, 2008), the Reserve of Nouragues (since July, 2009), the Mount Itoupé (2nd higher summit of French Guiana), Saül (since August, 2010) and particularly the Reserve Trinité. The trapping devices included window traps, Malaise traps, Polytrap, traps baited with fermented fruits and cryldé. They were examined every week and the insects were sorted in the office of the S.E.A.G.

All the members of the S.E.A.G. are entomological specialists and thus, many specimens could be identified by themselves, but for example, the reliable identification of beetles of the family Dermestidae down to the specific level was quite problematical and therefore, they sent the dermestid material to the first author for study. During this work, it was shown that two species have never been recorded from the country before, and a further species is even new to science.

The genus *Cryptorhopalum* Guérin-Ménéville, 1838 contains 147 known species or subspecies worldwide (Beal 1985, Blackwelder 1945, Háva 2003, 2009, 2010, Mroczkowski 1968), most of them being known from the Neotropical and Nearctic Regions; four descriptions concern fossil species (Háva & Prokop 2004). From French Guiana, two species have been still recorded. In the work presented here, the authors record three species of this genus new to the fauna of French Guiana one of them being described as new to science.

MATERIAL AND METHODS

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

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

The specimens of the species described here are provided with a red, printed label showing the following text: „HOLOTYPUS [or PARATYPUS] *Cryptorhopalum brulei* sp. n., A. Herrmann & J. Háva det. 2011”.

Abbreviations:

AHEC Andreas Herrmann, private collection, Stade, Germany;

JHAC Private entomological laboratory and collection, Jiří Háva, Prague, Czech Republic;

S.E.A.G. Société Entomologique Antilles-Guyane; French Guiana.

RESULTS

Cryptorhopalum brulei sp. nov.

(Figs. 1-3)

Type material. Holotype (♀): „French Guiana: Petite Montagne Tortue (Est), 04°19'14.1N - 052°14'27.5W, 15.vi.2010, leg. G. Lamarre”, (AHEC). Paratypes (2 ♀♀): „French Guiana: Montagne des Chevaux, RN2 PK22 ROURA, 29.v.2010 leg. S. Brulé (SEAG, AHEC)”; (1 ♀): “Guyane French NE, S of Régina, 30.xii.2006, M. Snížek lgt.”, (JHAC).

Description. Dorsal surface of body cuticle black, in the middle and the apical end of the elytra a blurred transverse fascia is slightly brownish lightened, also black on ventral surface except the abdominal segments which are brownish; small, oval (Fig. 1). Body measurements (in mm): TL 2.5, PL 0.6, PW 1.5, EL 2.0, EW 1.8.

Head dark brownish and especially at its apical end somewhat reddish brown towards the underside, coarsely punctate, sparsely covered with long, procumbent ochre hairs. Palpi light brown. Eyes large with extremely short, erected and hardly visible microsetae. Ocellus on frons present. Antennae light brown, with sparsely light brown setation, 11-segmented, the shaft slightly lighter than the club. Club as long as the rest of the antenna, consisting of two longish oval segments; the last one is somewhat smaller than the penultimate segment (Fig. 2).

Pronotum darkish brown with some lighter areas, coarsely punctate, covered sparsely with suberected, long and ochre hairs; pronotal lateral margins smooth, untoothed.

Scutellum shiny darkish brown, without pubescence and distinct punctures, small and somewhat triangular.



1-6. *Cryptorhopalum brulei* sp. n. (female): 1- habitus (dorsal aspect); 2- antenna; 3- abdominal segments; *Cryptorhopalum trogodermoides* (female): 4- habitus (dorsal aspect); 5- antenna; 6- abdominal segments

Elytra black, behind the middle and towards the apical end brownish lightened, covered sparsely by quite long, suberected ochre hairs, punctures similar to those on the pronotum, lateral margins smooth, untoothed; humeri without a distinct bump; each elytron shows three more or less transversal, very indistinct fasciae of thin, long and suberected ochre hairs. The fasciae are interrupted by some dark (hairless) areas and spots, the first one covers the anterior part of the elytra reaching almost the middle, the second fascia is also quite broad and located in the second third of the elytra, and the last one is smaller and covers the apical region (Fig. 1); epipleura not visible from above, brownish.

Legs and tarsi light brown, whilst the tarsi are somewhat lighter than the tibiae, very sparsely covered with brown hairs. Mesosternum covered sparsely with suberected, long and ochre hairs (like in the pronotum).

Abdominal sternites brown, coarsely punctuate, sparsely covered with short, recumbent light brown hairs.

Male unknown.

Variation. The paratypes have almost exactly the same size as the holotype.

Differential diagnosis. The new species differs from *Cryptorhopalum trogodermoides* Reitter, 1881 in the broader abdomen, the extended size of the anterior fascia, the presence of spots in the fasciae, the black colour of the elytra (instead of reddish brown) and the bigger size of the antennal club segments.

Etymology. Patronymic, the name is dedicated to Stephane Brulé, who is a member of the SEAG and currently explores the entomofauna of French Guiana.

Cryptorhopalum orbiculosum Reitter, 1881

Material examined: “French Guiana, Mont Itoupé, Drop Zone, 570 m, N 03°01'23” - W 053°05'44”, 31.iii.2010, leg. S. Brulé”, 4 exx., (SEAG); “French Guiana, Mont Itoupé, Drop Zone, 570 m, N 03°01'23” - W 053°05'44”, 24.iii.2010, leg. S. Brulé”, 2 exx., (SEAG).

Distribution. Species known from Antilles Isl.: St. Lucia; Colombia; Panama and Venezuela, new to French Guiana.

Cryptorhopalum quadripunctatum Guérin-Méneville, 1838

Material examined: “French Guiana, Mont Itoupé, Drop Zone, 570 m, N 03°01'23” - W 053°05'44”, 31.iii.2010, leg. S. Brulé,” 4 exx., (SEAG); “French Guiana, Mont Itoupé, Drop Zone, 570 m, N 03°01'23” - W 053°05'44”, 24.iii.2010, leg. S. Brulé”, 4 exx., (SEAG); “French Guiana, Mont Itoupé, Drop Zone, 570 m, N 03°01'23” - W 053°05'44”, 17.iii.2010, leg. S. Brulé”, 1 ex., (SEAG).

Distribution. Species known from Antilles Isl.: St. Lucia; Brazil; Guatemala; Honduras; Peru; Trinidad and Venezuela, new to French Guiana.

LIST OF *CRYPTORHOPALUM* RECORDED FROM FRENCH GUIANA

Cryptorhopalum brulei sp. nov.
Cryptorhopalum orbiculosum Reitter, 1881
Cryptorhopalum quadripunctatum Guérin-Méneville, 1838
Cryptorhopalum stachi Mroczkowski, 1958
Cryptorhopalum viridipubens Pic, 1923

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