

***Cryptorhopalum rubromaculatum* sp. nov., a new species from French Guyana
(Coleoptera: Dermestidae: Megatomini)**

Andreas HERRMANN¹⁾, Jiří HÁVA²⁾ & Marcin KADEJ³⁾

¹⁾ Bremervörder Straße 123, D-21682 Stade, Germany
e-mail: herrmann@coleopterologie.de

²⁾ Department of Forest Protection and Entomology, Faculty of Forestry and Wood Sciences,
Czech University of Life Sciences, Kamýcká 1176, CZ-165 21, Praha 6 - Suchbátka, Czech Republic
e-mail: jh.dermestidae@volny.cz

³⁾ Department of Invertebrate Biology, Evolution and Conservation, Institute of Environmental
Biology, Faculty of Biological Science, University of Wrocław, Przybyszewskiego 63/77, PL-51-148
Wrocław, Poland
e-mail: marcin.kadej@uni.wroc.pl

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Abstract. *Cryptorhopalum rubromaculatum* sp. nov. is described, illustrated and compared with similar species. Furthermore a list of all *Cryptorhopalum* species recorded so far from French Guyana is provided.

INTRODUCTION

In April, 2007 the representatives of the Société Entomologique Antilles-Guyane (S.E.A.G.) took up the challenge to study and become known the wealth of the entomological fauna of French Guyana. Since this date, the members visited numerous sites such 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 Guyana), Saül (begun in August, 2010), the Reserve Trinité, in particular and collected multiple samples. The devices of trappings were 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 are made in the office of the S.E.A.G. Because all members of the association are professional entomologists, many of the collected specimens could be identified by S.E.A.G. itself, but e.g. the identification of beetles belonging to the family Dermestidae down to the species level in a reliable way is quite problematical, so they have sent the material to the first author with request for examination. During this examination it turns out, that a number of the sampled dermestid species have never been recorded from French Guyana before, and some of them are new to science at all.

The genus *Cryptorhopalum* Guérin-Méneville, 1838 contains about 150 valid species or subspecies worldwide (Beal 1985, Blackwelder 1945, Háva 2003, 2009, 2015a,b); most of them occur in the Neotropical and Nearctic Regions (Kadej & Háva 2013), four descriptions concern fossil species (Háva & Prokop 2004). From French Guyana only eleven species have been recorded so far (Herrmann & Háva 2011, Háva & Herrmann 2013). Herein, we

record and describe another new species of *Cryptorhopalum* which has been detected in that country.

MATERIAL AND METHODS

The following measurements were made:

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

The specimen of the described species is provided with a red, printed label showing the following text: „HOLOTYPUS, *Cryptorhopalum rubromaculatum* sp. n., Herrmann, Háva & Kadej det. 2015”.

RESULTS

Cryptorhopalum rubromaculatum sp. nov.

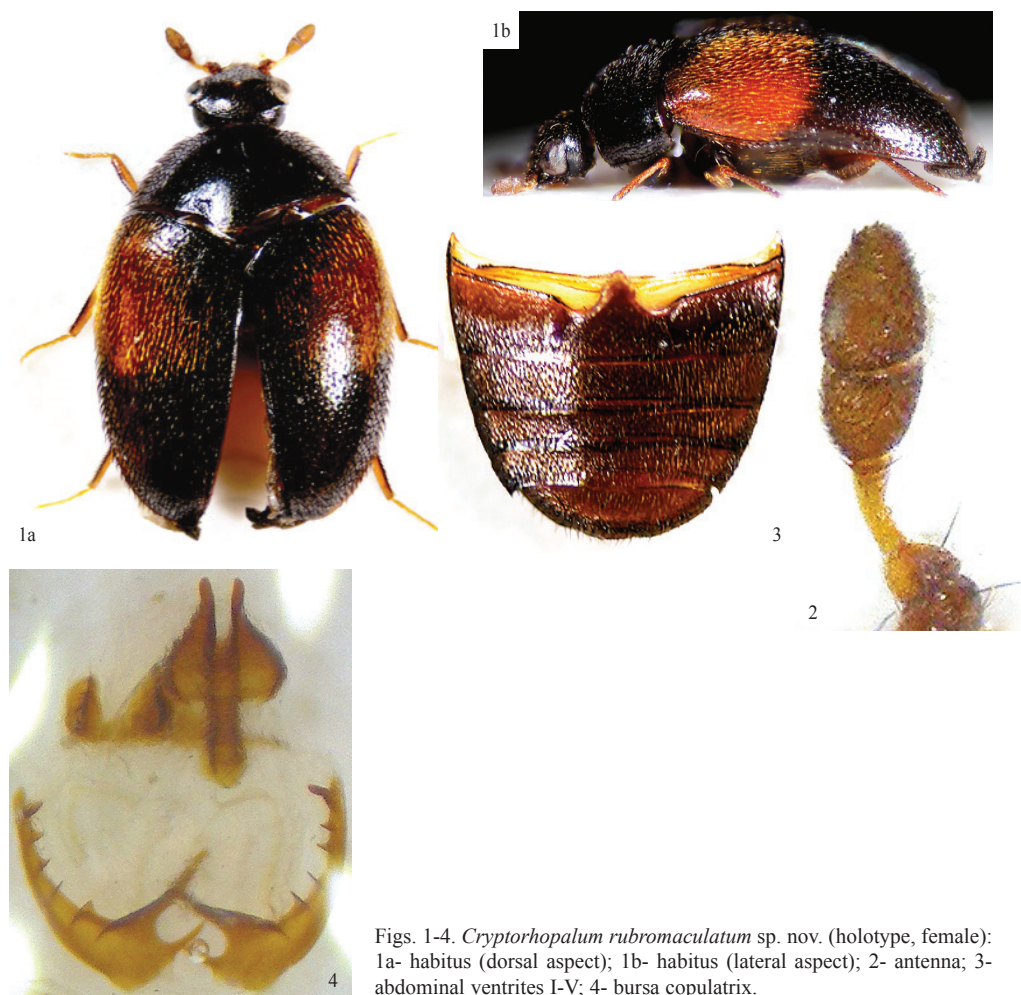
(Figs. 1-4)

Type material. Holotype (♀): „French Guyana: Camopi, Mont St-Marcel, PVP (f), 26.IX.2014 leg. S. E. A. G. The specimen is deposited in the collection of the first author. Remark: “PVP (f)” is an abbreviation of “polytrap lumineux avec rampe LED 7,2w, 20000K”.

Description. Cuticle of dorsal surface of body entirely black except a big red elytral spot; small, short oval (Fig. 1a,b). Body measurements (in mm): TL 2.5, PL 0.6, PW 1.4, EL 2.0, EW 1.8. Head shiny black, coarsely and not very densely punctate, sparsely covered with short decumbent brown setae. Palpi brown. Eyes large with extremely short, erect and hardly visible microsetae. Ocellus present on front. Antenna with 11 antennomeres, entirely light brown, the whole club as well as the first two antennomeres of the shaft brown. Club densely covered with short setae which makes it look dull, roughly as long as the rest of antenna, consisting of two longish oval antennomeres; the last one is slightly longer than the previous segment (Fig. 2). Pronotum shiny black with fine and sparse punctation, the density of the punctation increases towards margins, covered sparsely with somewhat suberect, strong dark setae. Pronotal lateral margins smooth, untoothed, not visible from above altogether. Scutellum shiny black and triangular, without pubescence and without distinct punctures. Elytra black except a big red macula in the anterior part, this macula reaches the lateral margins and also covers the humeral bump, only the suture and the area around the scutellum remains black. The red part of the elytra is covered with bright, short and suberect setation whereas the black part is covered with the same kind of strong dark hairs as in the pronotum. Punctation on elytra as that on head, sparse and quite coarse. 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.

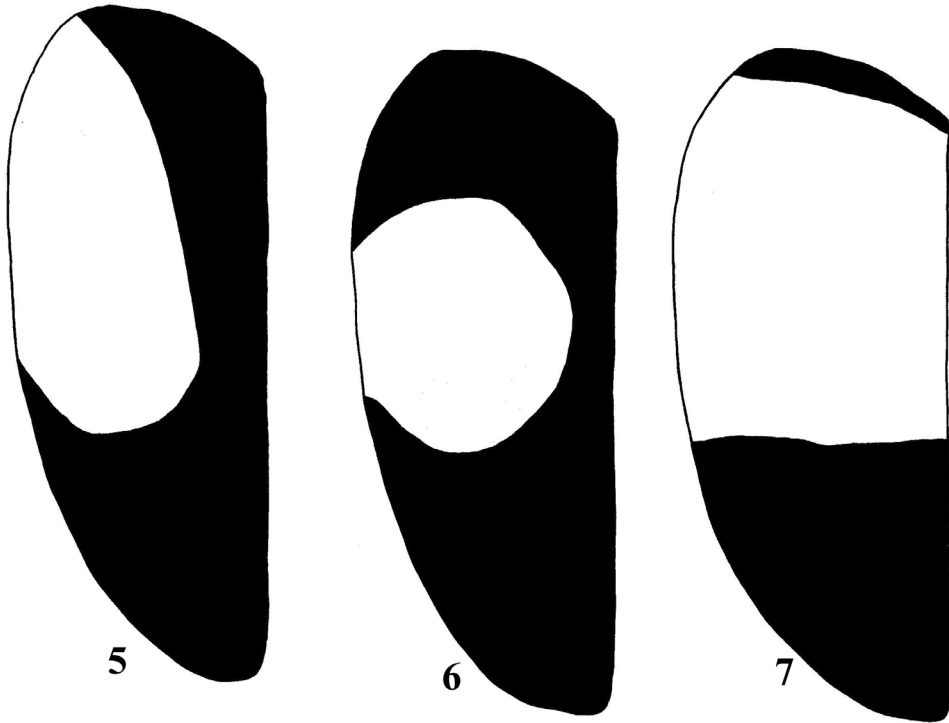
Mesosternum black, covered with recumbent pubescence, the hairs are much finer than those of elytra. Abdominal ventrites I-V brown, very densely and coarsely punctuate, covered with recumbent brown setation (Fig. 3). Bursa copulatrix as shown in Fig. 4.

Male unknown.



Figs. 1-4. *Cryptorhopalum rubromaculatum* sp. nov. (holotype, female): 1a- habitus (dorsal aspect); 1b- habitus (lateral aspect); 2- antenna; 3- abdominal ventrites I-V; 4- bursa copulatrix.

Differential diagnosis. The new species resembles very much the species *Cryptorhopalum bicolor* Sharp, 1902 (Honduras, Nicaragua, Panama), *Cryptorhopalum sharpi* Háva, 2015 (Ecuador) and *C. divisum* Sharp, 1902 (Costa Rica, Nicaragua, Panama), but differs from them by the colour pattern of elytral fasciae.



Figs. 5-7. Elytral patterns: 5- *Cryptorhopalum sharpi* Háva, 2015; 6- *C. bicolor* Sharp, 1902; 7- *C. divisum* Sharp, 1902.

Etymology. The name regards to the red maculated elytra.

LIST OF CRYPTORHOPALUM RECORDED FROM FRENCH GUYANA

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

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REFERENCES

- BEAL R. S. 1985: A taxonomic revision of the Nearctic species of *Cryptorhopalum* (Dermestidae: Coleoptera). *Transactions of the American Entomological Society* 111: 171-221.
- BLACKWELDER R. E. 1945: Checklist of the Coleopterous insects of Mexico, Central America the West Indies, and South America. Part 3. *Smithsonian Institution United States National Museum* 185: iii-iv + 343-550.
- HÁVA J. 2007: Contribution to the species of *Cryptorhopalum* (Coleoptera: Dermestidae) described by David Sharp from the Neotropical region - Part 1. *Entomological Problems* 37: 83-86.
- HÁVA J. 2009: Contribution to the species of *Cryptorhopalum* (Coleoptera: Dermestidae) described by David Sharp from the Neotropical region - Part 2. *Baltic Journal of Coleopterology* 9: 129-133.
- HÁVA J. 2015a. *World Catalogue of Insects. Volume 13. Dermestidae (Coleoptera)*. Leiden/Boston: Brill, xxvi + 419 pp.
- HÁVA J. 2015b: *Cryptorhopalum sharpi* sp. nov., a new species from Ecuador (Coleoptera: Dermestidae: Megatominae). *Arquivos Entomológicos* 13: 213-214.
- HÁVA J. & HERRMANN A. 2013: New Faunistic Records of Dermestidae. Part 9 - Genus *Cryptorhopalum* Guérin-Méneville, 1838 (Insecta: Coleoptera). *Genus* 24: 303-308.
- HÁVA J. & PROKOP J. 2004: New fossil dermestid-beetles (Coleoptera: Dermestidae) from the Dominican amber, with an appendix listing known fossil species of this family. *Acta Societatis Zoologicae Bohemicae* 68: 173-182.
- HERRMANN A. & HÁVA J. 2011: Contribution to knowledge of the genus *Cryptorhopalum* Guérin-Méneville, 1838 (Coleoptera: Dermestidae: Megatomini) from French Guyana. *Studies and Reports, Taxonomical Series*: 7: 147-152.
- KADEJ M. & HÁVA J. 2013: Key to species of the genus *Cryptorhopalum* (Coleoptera: Dermestidae) occurring in the Greater Antilles with description of six new species from Hispaniola. *Zoological Studies* 52: 5.

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