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# ARTIGO / ARTÍCULO / ARTICLE

## New Dermestidae (Coleoptera: Bostrichoidea) from Peru.

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**Abstract:** The following three new taxa collected in Peru, *Caccoleptus lamarrei* **sp. nov.**, *Cryptorhopalum punctifrons* **sp. nov.**, and *Cryptorhopalum cuespani* **sp. nov.**, are described, illustrated and compared with related species.
**Key words:** Coleoptera, Dermestidae, taxonomy, new species, Peru, Neotropical Region.

**Resumen: Nuevos Dermestidae (Coleoptera: Bostrichoidea) de Perú.** Se describen e ilustran los siguientes tres taxones, *Caccoleptus lamarrei* **sp. nov.**, *Cryptorhopalum punctifrons* **sp. nov.** y *Cryptorhopalum cuespani* **sp. nov.**, y se comparan con especies próximas.
**Palabras clave:** Coleoptera, Dermestidae, taxonomía, especies nuevas, Perú, Región Neotropical.

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## Introduction

The family Dermestidae is one of the commonly known beetle families, and it currently contains about 1400 species or subspecies worldwide (Háva 2014). Around 40 of them have been recorded from Peru so far (Mroczkowski 1968, Díaz *et al.* 2008, Háva 2003, 2013, Háva & Herrmann 2007a, b). We owe to our colleague Robert Constantin, specialist in Cantharidae and Melyridae, the examination of the dermestid beetles he collected in the Huanaco region with Leonard Huaman Cuespán, helped in his regulation by the Museum of Natural History of the National University Mayor de San Marcos (MUSM), Lima (Dr. G. Lamas, L. Figueroa). Another species was submitted, via R. Constantin, by Greg Lamarre who surveyed along the Ucayaly river. Among that material, three species were detected to be new to science.

## Material and Methods

All specimens were glued onto cardboard plates, the genitalia were excluded and embedded in a mixture of polyvinylpyrrolidone, diglycerine and water. The abdomen was separated from the body and glued upside down behind the specimen on the same cardboard plate also.

Abbreviations of collections:

MUSM Museo de Historia Natural de la Universidad Nacional Mayor de San Marcos, Lima, Peru.
AHEC Private collection of Andreas Herrmann, Stade, Germany.
JHAC Jiří Háva, Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-west, Czech Republic.

The following abbreviations of measurements were used:

- 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 of the pronotum.
- pronotal width (PW) – maximum linear distance between lateral margins.
- elytral length (EL) – linear distance from shoulder to apex of elytron.
- elytral width (EW) – maximal linear transverse distance.

## Descriptions

***Caccoleptus lamarrei* sp. nov.**
(Figs. 1a-d)

**Type material.** Holotype (male) labelled: "Peru, Loreto, rio Ucayali, Jenaro, 145 km SW Iquitos, P16:terra firme. Vitre 9, 4°54'S-73°40'W, 100 m, 26.VII.2011, G. Lamarre" (MUSM). 1 Paratype (sex unknown) labelled: "Peru, Loreto, rio Nanay, Porvenir, 45 km W Iquitos, white sand forest, V2, 3°54'S-73°33'W, 100 m, 20.VI.2011, G. Lamarre" (AHEC) [The Paratype missed the whole middle left leg as well as the right elytron. No genitalia was found inside the body, so probably it got lost together with the right elytron. It probably is a male too because of the similar form of the antenna, compared with the Holotype]; 1 male: Peru, Loreto, 20 km from Ucayali on R. Calleria, Colonia Calleria, 1961, B. Malkin leg. (JHAC).

**Description.**

Male habitus as in Fig. 1a. Measurements (in mm): TL 2.8, PL 0.7, PW 1.9, EL 2.4, EW 2.2. Dorsal integument black, pubescence blackish brown and white. Ventral integument also black except the abdominal segments, pubescence darkish. Head dense and coarsely punctated, with brown integument covered by long, suberected brown hairs. Palpi light brown. Median frontal ocellus present. Eyes large with distinctly visible long microseta. Antennae light brown, 11-segmented, with 4-segmented antennal club (Fig. 1b). Pronotum with black integument and long dark pubescence; similar but less densely punctated as in the head. Recumbent white hairs are intermixed towards the lateral margins. Elytra with black integument and long suberected dark hairs. Some white recumbent hairs are intermixed and build three very indistinct transverse fasciae: two of them just before and just behind the middle, and the third near the apical part, furthermore a very blurred spot at the apex and also beneath the scutellum. Punctuation of the elytra nearly as dense as in the head, but less coarsely. Epipleuron black with white recumbent pubescence. Abdominal segments densely and coarsely punctated, light brown, with light brown recumbent pubescence (Fig. 1c). Legs light brown with short recumbent white setae, the edges of the tibiae with a row of brown spines each. Aedeagus as in Fig. 1d.

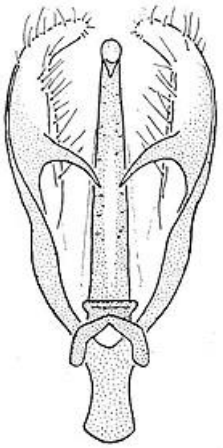
Female so far unknown.

**Differential diagnosis.**

The new species very visually similar to *C. honeymanni* Beal, 1979, but differs from it by structure of antennae and male genitalia.

**Etymology.**

Friendly dedicated to Dr. Greg Lamarre, researcher at INRA-Guyane, UMR EcoFog, at Kourou. G. Lamarre devoted his dissertation to the ecology of herbivorous insects, comparing the entomofauna of several platforms along the Amazone river near Iquitos and upstream at Jenaro-Herrera along the Ucayaly river.

| | antennae | male genitalia |
|---|---|---|
| ***Caccoleptus lamarrei* sp. nov.** |  |  |
| ***Caccoleptus honeymanni* Beal, 1979** |  |  |





**Figs. 1a-d.-** *Caccoleptus lamarrei* sp. nov. (holotypus, male).
**a.-** Habitus. **b.-** Antenna. **c.-** Abdomen. **d.-** Genitalia.

***Cryptorhopalum punctifrons* sp. nov.**
(Figs. 2a-e)

**Type material.** Holotype (female) labelled: "PERU, pr.Leonce Prado, Tingo Maria 3 km SE bosque reservado de la UNAS, 9°19'S-75°59'W, 674m, 8.IV.2013 R.Constantin & L.Huaman Cuespán" (MUSM). Paratypes (2 females) labelled with exactly the same collecting data as the Holotype (1 MUSM, 1 AHEC).

**Description.**

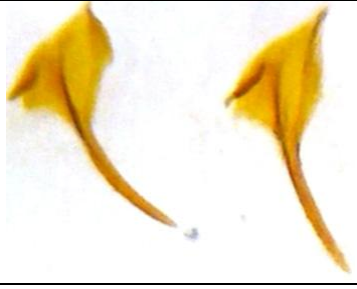
Female habitus as in Fig. 2a. Measurements (in mm): TL 3.1, PL 0.7, PW 1.7, EL 2.5, EW 2.1. Whole integument deep black with a very slight metallic shine. Head extremely dense and coarsely punctated, naked (Fig. 2d). Median frontal ocellus present. Eyes large without any visible microseta. Maxillary palpi black, labial palpi light brown. Antennae 11-segmented, with a 2-segmented antennal club, yellow brown, the whole club, the first antennomere and the dorsal half of the second black (Fig. 2b). Pronotum with sparse, recumbent dark pubescence; finely and sparsely punctated; continuously narrowed from the hind edges towards the head and conspicuously bulged in the front margin. Elytra with deep and coarse punctuation, the sparse pubescence consists of dark, bended and more or less recumbent strong hairs. The small triangular scutellum naked and without punctuation. Epipleuron black. Abdominal segments densely and coarsely punctated, deep black, with dark recumbent pubescence (Fig. 2c). Legs black to dark brown, the edges of the tibiae with a row of dark brown spines each, conspicuously bulged (Fig. 1e).
Male so far unknown.

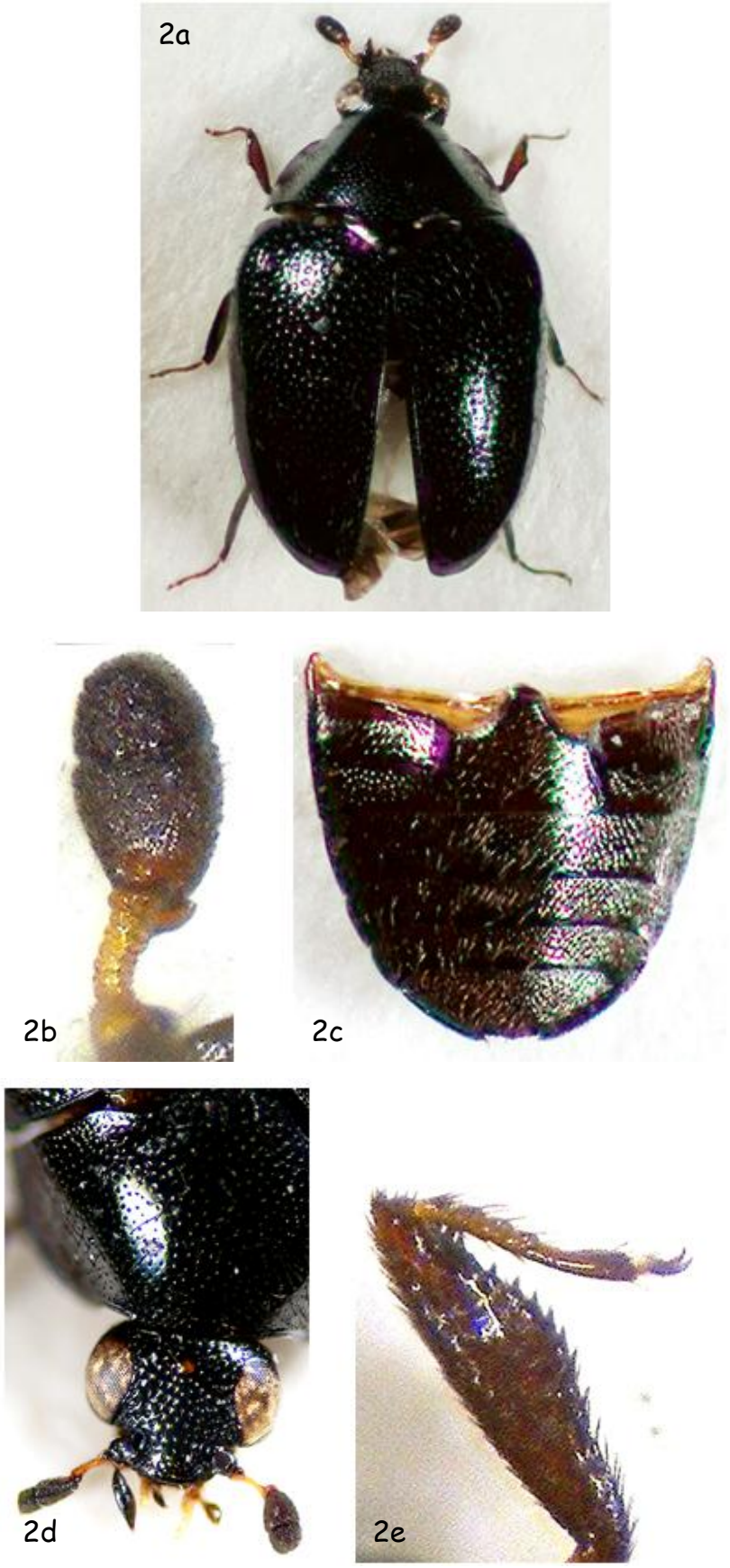
**Differential diagnosis.**

The new species resembles very much to *Cryptorhopalum nevermanni* Pic, 1936 and *Cryptorhopalum equisoleae* Sharp, 1902 because of the coarse and deep elytral punctuation in combination with the slight metallic shine of the elytrae and the conspicuous bulged front tibiae. This combination separates these three taxa from all other species known so far within *Cryptorhopalum* Guérin-Méneville, 1838. *C. punctifrons* can easily be distinguished from *C. nevermanni* as well as from *C. equisoleae* by the punctuation of frons and pronotum.

**Etymology.**

The name regards to the extremely dense and coarse punctuation on the frons of the specimen.

| | **sclerites in bursa copulatrix** | **receptaculum seminulum** |
|---|---|---|
| ***Cryptorhopalum nevermanni* Pic, 1936** |  |  |
| ***Cryptorhopalum punctifrons* sp. nov.** |  |  |




**Figs. 2a-e.** *Cryptorhopalum punctifrons* sp. nov. (holotypus, female).
**a.-** Habitus. **b.-** Antenna. **c.-** Abdomen. **d.-** Head. **e.-** Front tibia.

***Cryptorhopalum cuespani* sp. nov.**
(Figs. 3a-d)

**Type material.** Holotype (male) labelled: "PERU, region Huanuco, 40 km NE of Tingo Maria, Abra Divisoria, road to Rio Azul village, 9°12'S-75°49'W, 1600m, 11.IV.2013 R.Constantin & L.Huaman Cuespán" (MUSM). Paratypes (not sexed): 16 exx. with the same record data as the Holotype; 8 exx. labelled: "PERU, pr. Leoncio Prado, Tingo Maria 3 km SE white wall UNAS, light, 9°19'S-75°59'W, 674m, 11.IV.2013 R.Constantin & L.Huaman Cuespán"; 4 exx. labelled: "PERU, pr. Leoncio Prado, Tingo Maria 15 km sud Sta Rosa de Quesada, 9°23'S-75°58'W, 830m, 14.IV.2013 R.Constantin & L.Huaman Cuespán"; 1 ex. labelled: "PERU, region Huanuco, tunel Carpish 10 km norte flowering bushes, 9°39'S-76°03'W, 1823m, 15.IV.2013 R.Constantin & L.Huaman Cuespán". Paratypes are stored in (8 MUSM, 8 AHEC); 1 ex. labelled: "PERU, Huanuco, Tingo Maria env., 15-16.XI.2001, O. Safranek lgt." (JHAC).

**Description.**

Male habitus as in Fig. 3a. Measurements (in mm): TL 2.8, PL 0.6, PW 1.5, EL 2.3, EW 1.7. Dorsal integument black, pubescence blackish brown and white. Ventral integument also black, pubescence white. Head shiny black and coarsely punctated, covered with several white recumbent hairs. Palpi brown. Median frontal ocellus present. Eyes large with hardly visible short microseta. Antennae, 11-segmented, shaft except the first segment yellow, with a big 2-segmented light brown antennal club, the terminal segment is distinctly smaller than the preceeding and darkened towards its end (Fig. 3b). Pronotum with black integument and short brown pubescence, white recumbent hairs cover broadly the lateral margins as well a blurred spot in the middle of the apical margin, very sparsely and finely punctated. Elytra much more densely and coarsely punctated than the pronotum, with black integument and also short brown recumbent pubescence. White recumbent hairs are intermixed and build two transverse fasciae as well as a spot: the first fascia runs from the elytral margin to the suture, then follows the suture and reaches the scutellum; the second one is located in the apical fourth and interrupted at the suture; the apical spot covers the tip of the elytra. Scutellum small, triangular and without punctuation. Epipleuron black with some white recumbent hairs. Abdominal segments black, densely and coarsely punctated, with white brown recumbent pubescence (Fig. 3c). Legs brown, covered sparsely with very short and fine recumbent brown hairs, the edges of the tibiae with a row of brown spines each. Tarsi roughly as long as the tibiae. Aedeagus as in Fig. 3d.

Female habitually similar to male but, as usual in this genus, with a smaller antennal club.

**Differential diagnosis.**

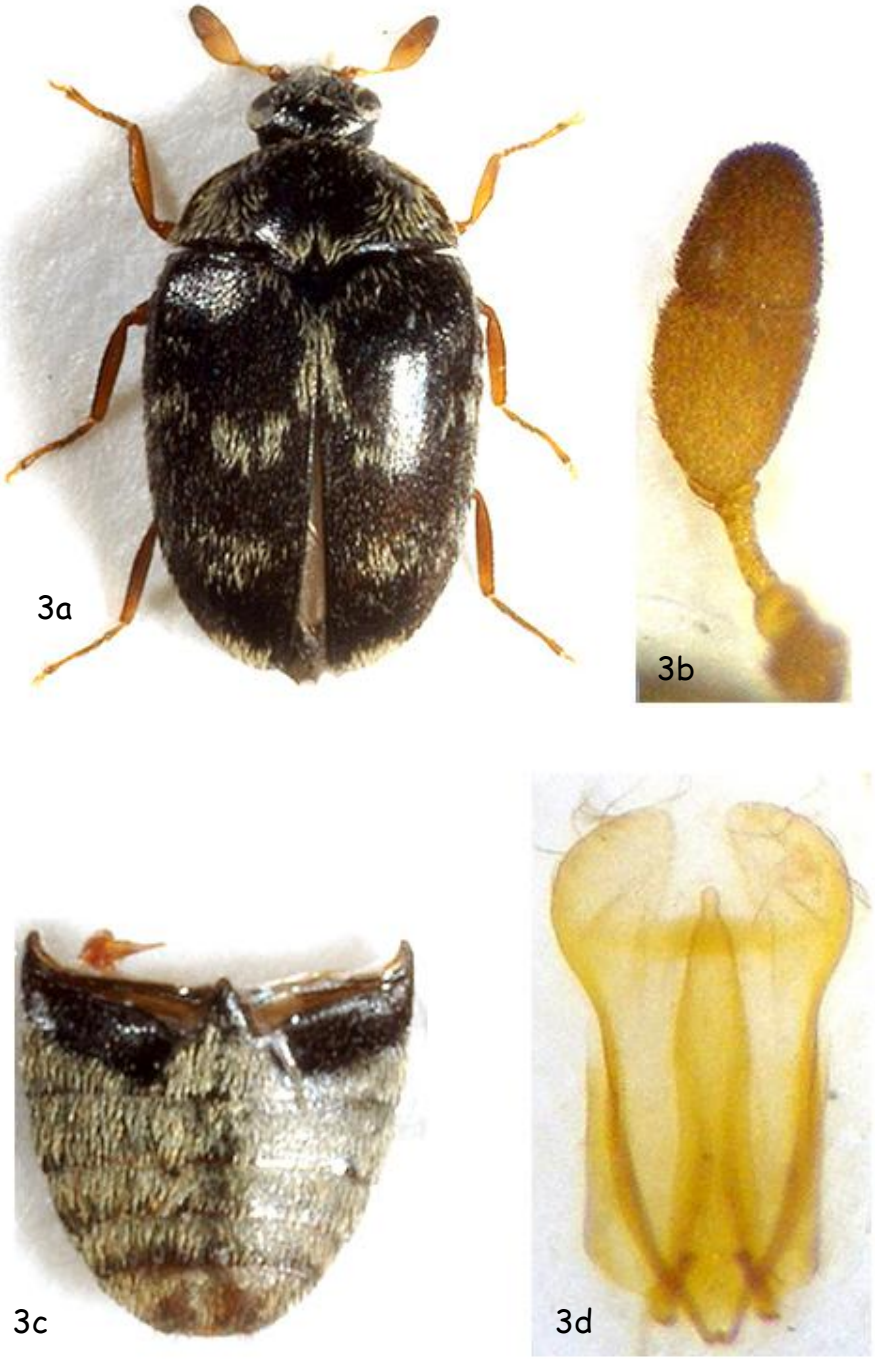
*Cryptorhopalum cuespani* differs from all other so far known *Cryptorhopalum* species by the form and arrangement of its elytral fasciae.

**Etymology.**

Friendly dedicated to Leonard Huaman Cuespán, a young entomologist at Tingo Maria, engineer in renewable natural resources and forestry, graduate of UNAS, Universidad Nacional Agraria de la Selva at Tingo Maria, specialized in Cerambycidae, and member of the research staff of the laboratory of entomology at the UNAS.

## Acknowledgements

We are deeply obliged to Dr. Robert Constantin (France) for providing the material for our investigations as also to Maxwell Barclay and Michael Geiser at the British Museum of Natural History in London for the loan of the type specimens needed for comparison.




**Figs. 3a-d.** *Cryptorhopalum cuespani* sp. nov. (holotypus, male).
**a.-** Habitus. **b.-** Antenna. **c.-** Abdomen. **d.-** Genitalia.

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