

## A description of *Papuderma* gen. nov. from Indonesian Papua (Coleoptera: Dermestidae: Megatominae)

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**Taxonomy, new genus, new species, descriptions, Coleoptera, Dermestidae, Megatominae, *Papuderma*, Indonesian Papua**

**Abstract.** The genus *Papuderma* gen. nov. and *Papuderma nigrum* sp. nov. from Indonesian Papua are described, illustrated and compared with members of similar genera. The new genus differs by the structure of antennae and palpomeres, spines on tibiae and male genitalia.

### INTRODUCTION

The subtribe Trogodermina of the subfamily Megatomine, family Dermestidae includes 11 genera worldwide (Háva 2015, 2020b); in the Australian Region only three genera can be found as follows: *Trogoparvus* Háva, 2001, *Trogoderma* Dejean, 1821 and introduced *Phradonoma* Jacquelin du Val, 1859. During the determination of Dermestidae deposited in National Museum, Prague I found a new genus with one new species from Indonesian Papua as described here. The new genus is very similar to the genus *Paratrogoderma* Scott, 1926 and *Orbeola* Mulsant & Rey, 1868 (Háva & Poussereau 2019, Háva 2020a).

### MATERIAL AND METHODS

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

total length (TL) - linear distance from anterior margin of pronotum to apex of elytra.

elytral width (EW) - maximum linear transverse distance.

The material studied is deposited in the following collections:

NMPC National Museum, Praha, Czech Republic;

JHAC Jiří Háva, Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-West, Czech Republic.

Specimens of the presently described species are provided with red, printed labels with the text as follows: „HOLOTYPE (or PARATYPE, respectively) *Papuderma* gen. nov. *nigrum* sp. nov. J. Háva det. 2020”.

## RESULTS

### Genus *Papuderma* gen. nov.

**Type species:** *Papuderma nigrum* sp. nov., by monotypy.

**Description.** Body small and oval. Head finely punctate with long silver setation. Ocellus on frons present. Antennae composed of 10 antennomeres, antennal club with 3 antennomeres. Pronotum finely punctate like head with long silver, recumbent setation; lateral and anterior margins continuous, regularly rounded, posterior margin conspicuously bisinuate, anterior angles not visible from above. Elytra coarsely punctate; black, covered by short recumbent brown setation. Abdominal ventrites black with long, recumbent yellowish setation. Legs brown, anterior tibiae with spines along shaft.

**Diagnosis.** The new genus visually and according to 10-antennomered antennae very similar to the genus *Trogoparvus* Háva, 2001 but differs from it and other similar genera by the characters in following key; the genera *Trogoderma* Dejean, 1821 and *Phradonoma* Jacquelin du Val, 1859 differs by the 11-antennomered antennae.

- 1(6) antennae with non-flabellate 3-antennomered club
- 2(3) anterior tibiae without spines along shaft; antennomeres fit together; male genitalia: parameres very narrow (Afrotropical Region) ..... *Paratrogoderma* Scott, 1926
- 3(2) anterior tibiae with spines along shaft
- 4(5) tibia with long spines at the end, tibia long and narrow, tarsomeres long (Fig. 7); palpomeres broad; antennomeres as in Figs. 2-3; male genitalia: parameres terminally flat and broad (Fig. 6) (Indonesia: Papua) ..... *Papuderma* gen. nov.
- 5(4) tibia with long spines over the whole length, tibia short and broad, tarsomeres short (Fig. 9); palpomeres narrow; antennomeres as in Fig. 8; male genitalia: parameres terminally narrow (Fig. 10) (Afrotropical and Palaearctic Regions) ..... *Orbeola* Mulsant & Rey, 1868
- 6(1) antennae with more than 3-antennomered flabellate club
- 7(8) antennae with flabellate 5-antennomered club; male genitalia: parameres very broad (Malaysia, Indonesia, West Australia) ..... *Trogoparvus* Háva, 2001
- 8(7) antennae with flabellate 8-antennomered club (Cameroon, Congo, Ghana) .. *Volvicornis* Háva & Kalík, 2004

**Etymology.** The name *Papuderma* is a combination of the generic name *Trogoderma* and name of *Papua* (Indonesia: Papua). Feminine gender.

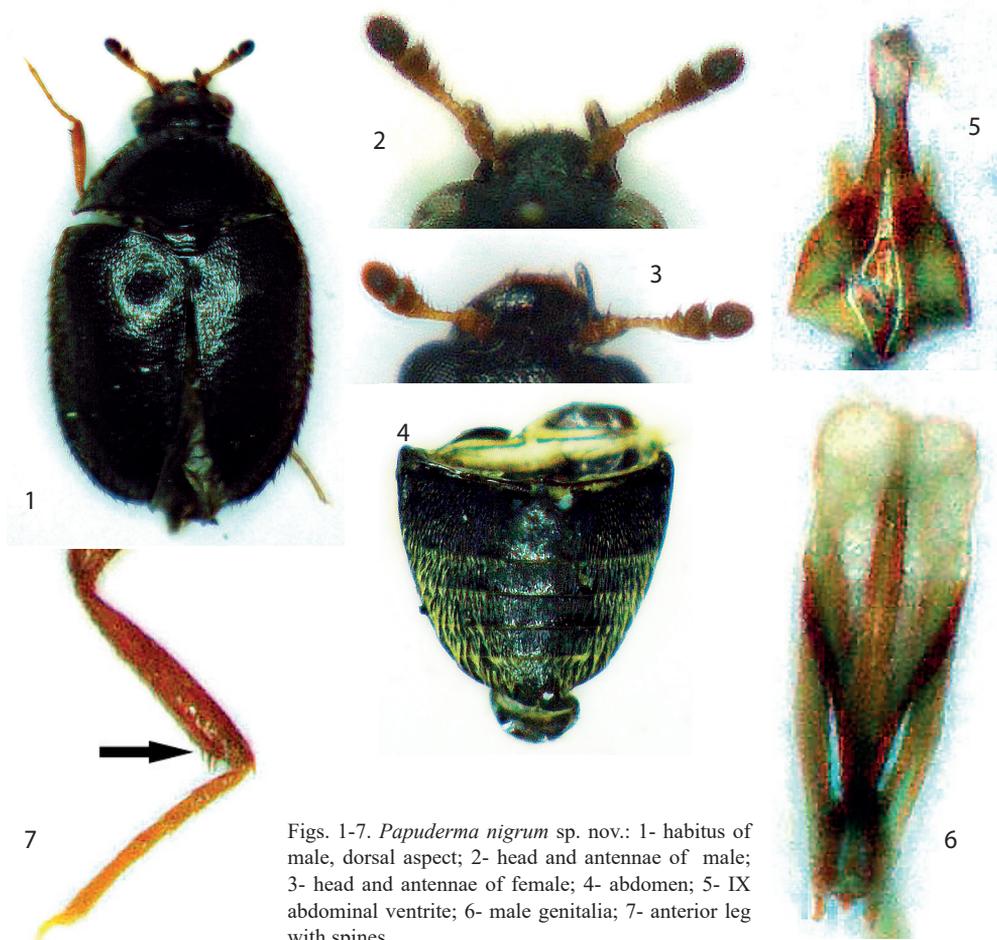
*Papuderma nigrum* sp. nov.

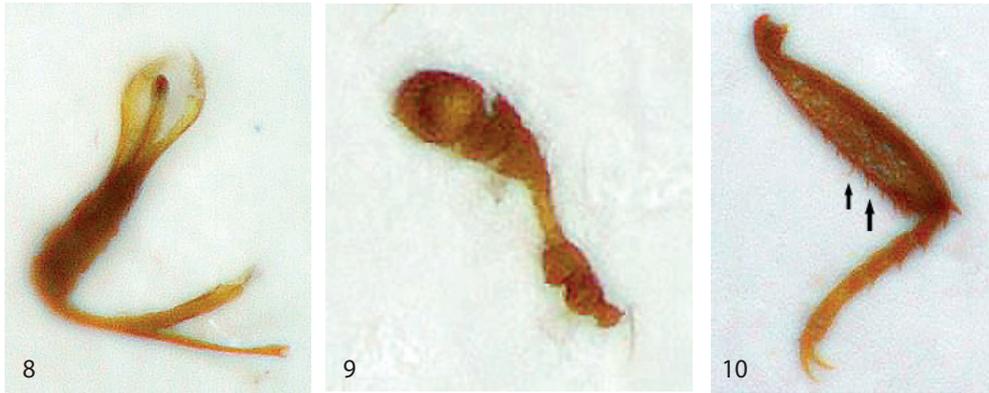
(Figs. 1-7)

**Type material.** Holotype (♂): “INDONESIA: PAPUA: Jayawijaya Distr., Baliem valley, 10 km NE of Wamena, forest above Baliem valley resort, 04°03.6'S 139°01.9'E, 2050 m, 2-3.ii.2015, J. Hájek & J. Šumpich leg.”, (NMPC). Paratype: (1 ♀): the same data as holotype, (JHAC).

**Description.** Male. Small and oval (Fig. 1). Body measurements (in mm): TL 2.1 EW 1.4. Black on dorsal surfaces and black on ventral surfaces, legs paler, brown, scape, antennomeres I-VIII brown, antennomeres IX-XI dark brown.

Head finely punctate with long silver setation. Palpomeres entirely light brown, broad; setation on mentum dense. Eyes small, not overlapping lateral margin of head in dorsal view. Ocellus on frons present. Antennae (Fig. 2) composed of 10 antennomeres, antennal club of 3 antennomeres.





Figs. 8-10. *Orbeola hirsutululum* (Reiche in Mulsant & Rey, 1868): 8- antenna of male; 9- anterior leg with spines; 10- male genitalia.

Pronotum finely punctate alike head with long yellow, recumbent setation on lateral parts, disc with long brown, recumbent setation; lateral and anterior margins continuous, regularly rounded, posterior margin conspicuously bisinuate, anterior angles not visible from above. Pronotal cavity closed. Mesonotum heavily sclerotized, scutellum very small, triangular, finely punctate alike pronotum and head, without setation. Metanotum robust, more weakly sclerotized than mesonotum. Meso-metasternum black with long yellowish-light brown setation.

Elytra coarsely punctate; black, covered by short, recumbent brown setation. Humeri with small bumps. Elytral epipleuron entirely black with short yellowish-light brown setation.

Legs dark brown with short grey setation; anterior tibia long and narrow with very short spines and long spines at the end (Fig. 7), tarsomeres narrow and long.

Abdominal ventrites black with long, recumbent yellowish setation (Fig. 4). First visible abdominal ventrite without distinct oblique discal striae and robust, heavily sclerotized median tubercle. Pygidium black with long brown setation. Ventrite 9<sup>th</sup> as in Fig. 5.

Male genitalia (Fig. 6).

Female. Habitually similar to male. Antennomeres in antennal club rather small. Body TL 2.7 EW 1.8.

**Differential diagnosis.** See the above diagnosis of genera.

**Name derivation.** Named after the black body - *nigrum* (nigra, niger).

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