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## New subgenus and three new species of the genus *Metataenia* THÉRY (Coleoptera: Buprestidae)

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ABSTRACT. Three new species of *Metataenia* THÉRY are described: erection of a new subgenus, *Metachuckia* sg. n., was needed to accommodate *M. extranea* sp. n. from Luzon, while *M. pilosa* sp. n. and *M. quoqueversa* sp. n. (both from New Guinea) represent *Metataenia* THÉRY s. str.

Key words: entomology, taxonomy, new taxa, Indo-Pacific Region, Coleoptera, Buprestidae, *Metataenia*.

The genus *Metataenia* THÉRY was erected by THÉRY (1923) for simultaneously described *M. meeki* THÉRY (later – HOLYŃSKI 1997 – recognized as junior synonym of *Paracupta meecki* KERR. and designated as the type-species), *M. quadrimaculata* THÉRY, *M. insulicola* THÉRY, and *M. purpurascens* THÉRY. In the following years various authors named several additional taxa, and recently (HOLYŃSKI 2009) the concept of the genus has been markedly expanded with inclusion of *Mroczkowskia* HOL., *Papuodema* OBB. and some other groups previously considered to belong to *Paracupta* DEYR., &c. to become, with ca. 60 known species in 13 subgenera, one of the most speciose groups of the Indo-Pacific **Chrysochroina** CAST. Many years ago I received a specimen, bearing BÍLÝ's identification label "*Chrysodema instabilis* Deyr. var." but evidently not belonging to that taxon (or even to the subtribe **Chalcophorina** LAC. at all), being easily recognizable as a member of the "paracuptoid lineage" (HOLYŃSKI 2009) of the **Chrysochroina** CAST. Closer examination revealed that it must be classified as a new species of *Metataenia* THÉRY s.l., but the "incongruent" combination of characters prevents its inclusion into any known subtaxon; herein it is described as the type-species of a new, monotypic subgenus. Another distinctive specimen in my collection, a relatively large black beetle superficially resembling some *Paracupta* DEYR. but apparently be-

longing to the *Quadriplagis*-circle of *Metataenia* THÉRY s. str., has been long awaiting description [to be sure, the two above-mentioned new species, and some others recently discovered, seem to blur the distinction between *Metataenia* THÉRY and *Paracupta* DEYR., so perhaps the old system combining them in single genus will prove the best reflection of the natural relationships?]. Moreover, some time ago C.L. BELLAMY sent me for study various SE-Asian buprestids including – among other very interesting material, partly elaborated in my earlier publication (HOLYŃSKI 2011) – another new species of this genus; its description is also provided below.

#### CONVENTIONS AND ABBREVIATIONS

As in my other recent works, labels of type-specimens are quoted as exactly as possible, including *italics* and *handwriting* (both represented in my text by *italics*), CAPITAL LETTERS, SMALLCAPS and framing. Labels provided by me are as a rule not cited – according to my current protocol they are two or three: white determination-label (e.g. “*Metataenia pilosa* HOL. det. R. HOLYŃSKI 2001” – the year of determination written vertically on the left), red holotype- or green paratype-label (e.g. “*Metataenia pilosa* HOLYŃSKI HOLOTYPE”, and – if belonging to my collection – small white collection-label with specimen-identifying signature (e.g. “coll. RBHOLYŃSKI BPksd”). In the text, personal family-names are written in SMALLCAPS, species- and genus-group names in *italics*, suprageneric in **bold** [not a generally accepted custom, but often important, as some of such names (e.g. of the subtribes **Buprestina** LEACH, **Melobasina** BÍLY or **Coraebina** BED.) are (or may easily become) “homonymous” (but valid!) with generic or subgeneric ones (*Buprestina* OBB., *Melobasina* KERR., *Coraebina* OBB.): we must make possibly unequivocal what we have in mind, and possibly easy for the reader to “optically” spot the “wanted” name in the text!]. Collection names are abbreviated as CSCA (California State Collection of Arthropods, Sacramento, USA) and RBH (Roman B. HOLYŃSKI, Milanówek, POLAND).

Additionally, the following abbreviations are used in morphological descriptions:

- dfp = “dense-and-fine punctulation” or “densely-and-finely punctulate”; refers to the type of sculpture occurring mainly in depressed areas (foveae, sulci), and consisting of fine, dense, regular punctulation on usually distinctly microsculptured background, covered with dense pubescence and frequently pulverulent;
- L = length;
- W = width;
- BW = basal width;
- AW = apical width;
- H = width of head with eyes;
- V = width of vertex between eyes;
- ≈ = approximately equal to.

*Metachuckia* sg. n.

Type-species: *Metataenia extranea* sp. n. Gender: feminine.

## GENERAL CHARACTERISTICS

Monotypic, therefore subgeneric characters are those of the type-species (see below). The (plesiomorphic? convergent?) combination of traits typical of various supraspecific taxa makes it very different from any of them: medially subcarinate pronotum (what probably misled BÍLÝ to place the specimen in the chalcophorine genus *Chrysodema* C.G.) distinguishes it from all subgenera except *Papuodema* OBB.; lateral elytral dfp band (characteristic rather of the nominotypical subgenus of *Paracupta* DEYR.) from all but *Marginicupta* HOL.; lack of pronotal and abdominal dfp spaces seems to occur otherwise only in some species of *Mroczkowskia* HOL.; unusually elongated body, entirely dark legs, and weak but discernible discal costae on elytra are (separately!) shared with but few representatives of other subgroups of *Metataenia* THÉRY.

## REMARKS

Besides the odd morphology, the other peculiarity of *Metachuckia* sg. n. is its geographical distribution: the only known specimen has, according to the label, been collected in northern Philippines – rather unexpected locality for a *Metataenia* THÉRY, a genus of (like the “paracuptoid lineage” in general) Melanesian origin, whose no other representative extends to the NW beyond New Guinea! If the occurrence on Luzon is real (*i.e.* if neither mislabelling nor artificial introduction has been involved), *Metachuckia* sg.n. may be an example of “palaeomelanesian” (HOLYŃSKI 2001) taxa which, using the drifting terranes of the Melanesian and Caroline (=West Pacific – DE BOER 1995) Arcs (see *e.g.* HALL 2002 for palaeogeographic reconstructions), reached as far north as Philippines [*Maoraxia* OBB. (HOLYŃSKI 2001) or *Melobasina* KERR. (HOLYŃSKI 2011) may serve as other buprestid examples]. The curious combination of possibly plesiomorphic features – suggesting relative phylogenetic antiquity and long separate evolution – does not seem incongruent with such scenario.

*Metataenia (Metachuckia) extranea* sp. n. (Fig. 1)

## MATERIAL EXAMINED

**Holotype:** “Mountain province, PHILIPPINES, VII 1986” “*Chrysodema instabilis* Deyr. var., Det. Sv. Bílý” [♀ (RBH: BPksd)].

**Additional material:** none.

## DESCRIPTION

**Holotype:** Female 23.5×7.5 mm. Elongated, somewhat flattened dorsally; piceous-black with only anterior parts of head, scutellum, elytral dfp sulci, sides of ventral surface, first antennomere, and legs (including basal joints of pro- and metatarsi – otherwise tarsi dark bluish-green) bright cupreous-red. No distinct pilosity on dorsal side

except for the lateral dfp bands on elytra; that on ventral surface rather inconspicuous, whitish, short, recumbent, sparse.

Epistome very short, broadly and shallowly emarginated at middle, with some coarse punctures along base, separated from front by transverse combination of rather deep but narrow sulcus and sharp but somewhat irregular ridge; supraantennal carinulae sharp but short; frontal depression very well developed, extending laterally from one ocular border to another and longitudinally far above the level of upper ends of eyes, broadly triangularly deepened on anterior third, almost smooth ("frontal mirror") except for evenly scattered, inconspicuous, fine, sparse, shallow punctures; median groove coarse and deep anteriorly, shallower and narrower towards vertex; punctulation of vertex very fine and sparse; eyes prominent, distinctly protruding beyond outline of head, which nevertheless remains somewhat narrower than anterior pronotal margin;  $V:H \approx 0.5$ . Antennae slender, long, reaching to near pronotal base; 1. antennomere fusiform, *ca.*  $4\times$  longer than thick; 2. subcylindrical, somewhat longer than wide, slightly narrower and  $4\times$  shorter than 1.; 3. as long as 1., still thinner (except at very apex) than 2., almost cylindrical; 4.-10. triangular, somewhat wider apically than 1., 4. almost as long as 3., others progressively shorter (10. twice shorter than 4., *ca.*  $1.5\times$  longer than wide) and more rhomboidal; 11. asymmetrically subovate, *ca.* as long as 7.

Pronotum trapezoidal (BW:AW:L $\approx$ 1.6:1.1:1), basal margin very shallowly bisinuate, posterior angles sharply acute; sides strongly, almost straightly convergent from base to distinct "collar"; apical margin straight at middle and very shallowly sinuate on each lateral third. Surface regularly convex except for laterally deep but at middle broadly interrupted "collar"-sulcus, deep but irregular (not dfp) laterobasal depressions, and indistinct prescutellar foveola; median line neither sulcate nor elevated but impunctate and somewhat irregularly bordered with stripes of rather fine but dense punctation, thus making the appearance of median ridge; disk otherwise rather sparsely, sides again very densely and much coarser punctured; lateral carinae relatively long, reaching to *ca.* anterior third of pronotal length. Scutellum roundedly trapezoidal, wider than long, as wide as two interstriae, impunctate, sulcate along midline.

Elytra (L:W $\approx$ 2.35) obliquely truncated at humeri, then very shallowly sinuately subparallelsided to midlength and arcuately tapering to just before very indistinctly "caudate" apices; no subhumeral denticles; lateroapical margins sharply denticulate. Punctation on discal surface moderately coarse, confluent into almost regular striae; 1., 3., and 6. interstria slightly costately elevated posteriorly; lateral striae confused; sharply developed, depressed dfp stripe runs along sides from base to apical sixth, extending inwards to what should be 9. stria and bordered laterally with prominent costa; space between costa and lateral margin narrowly sulciform in basal half, widened (as wide as dfp stripe) and finely densely punctulate behind; similarly widened and punctulate is apical part of 3. interstria; epipleura practically non-existent.

Proepisterna rather coarsely and not very densely punctured; anterior margin of prosternum swollen; prosternal process narrow, parallelsided, deeply sulcate, coarsely and densely punctured median part barely wider than smooth and shining convex lateral rims. Metasternum deeply sulcate along midline of the anterior (before arcuate metaventral suture) part, very finely and sparsely punctulate on flat median surface,

somewhat denser on lateral “slopes” and metepisterna; no metacoxal denticle. First sternite deeply sulcate along midline of intermetacoxal process, almost imperceptibly so in posterior half; abdominal punctation rather fine and sparse medially, very fine and dense (but not forming clearly dfp spots even in small but rather deep lateral depressions); anal sternite rather shallowly triangularly notched at apex.

#### GEOGRAPHICAL DISTRIBUTION

Known only from the holotype, allegedly collected in the Mountain Province of Philippines (central Luzon), but this is rather unexpected locality should be treated with caution, especially so that the specimen seems to have been originally obtained from a “dealer”. To my knowledge, no other species of *Metataenia* THÉRY – indeed, except for *Iridotaenia* DEYR. no other member of the “paracuptoid lineage” of the **Chrysochroina** CAST. – has been known to occur to the NW of Lydekker’s Line.

#### REMARKS

The combination of pseudocarinata (flat and impunctate) midline of pronotum, lack of pronotal or abdominal dfp pattern, lateral dfp bands on elytra, &c., make this species unmistakable among *Metataenia* THÉRY.

#### *Metataenia* THÉRY s. str.

*Metataenia* THÉRY, 1923: 216.

#### *Metataenia* (s. str.) *quoqueversa* sp. n. (Fig. 3)

#### MATERIAL EXAMINED

**Holotype:** “R. VOORHOEVE, Nieuw Guinea, Tami rivier, Hollandia 1930” [♀ RBH: BPiun].

**Additional material:** none.

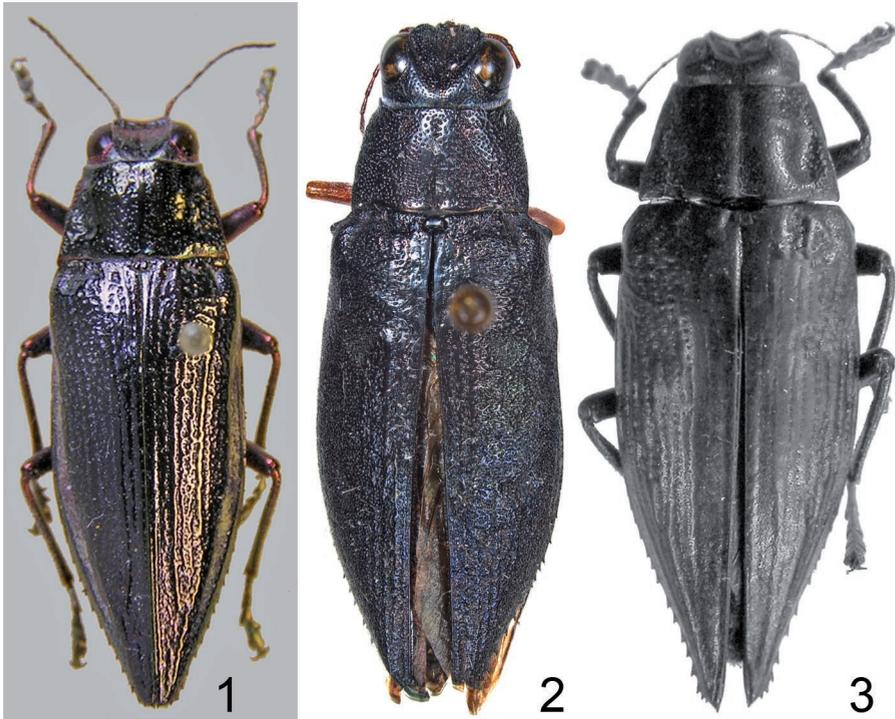
#### DESCRIPTION

**Holotype:** Female 27×9.5. Entirely piceous-black above and below (with slight bluish shine here and there, especially on femora and sides of undersurface), only labrum and tarsi yellow-testaceous and antennae (except dark blue 1. joint) brownish-ferruginous. Body above glabrous; very short, recumbent pubescence on sides of sternum and abdomen; meso- and metafemoral brushes composed of very dense but very short white setae.

Epistome arcuately emarginated between sharply acute lateral angles, microsculptured, impunctate, separated from front by deep transversely arcuate sulcus; supraantennal carinulae sharp but short, directed steeply upwards (almost parallel to each other), ending at level of mid-height of eyes, somewhat inwards of the lower termination of also prominent and sharp but short periocular ridges, which extend straightly upwards to slightly beyond upper ocular margins; frontal depression broadly semielliptic, almost impunctate, delimited by very finely punctulate (almost dfp) sulcus starting at anterior

margin between eye and supraantennal carina and running inwards of perioocular ridge not quite reaching its upper end, then arcuately around along frontovertical border to meet opposite lateral branch; anterior hollow triangular, limited laterodorsally by pair of oblique lustrous elevations; median groove entire, coarse and deep; punctuation of vertex fine and rather sparse; eyes but slightly protruding beyond outline of head; V:  $H \approx 0.5$ . Antennae slender; 1. antennomere fusiform, *ca.*  $4 \times$  longer than thick; 2. globular, as long as thick, much thinner and  $3 \times$  shorter than 1.; 3. almost cylindrical but somewhat flattened and distinctly thickened at obliquely truncated apex, *ca.* as wide as 1. but somewhat longer; 4. elongately triangular, shorter but wider than 3.,  $3 \times$  longer than wide; 5.-7. of width subequal to 4. but progressively more rhomboidal and shorter; distal antennomeres missing.

Pronotum subtrapezoidal (BW:AW:L $\approx$ 1.6:1.1:1), basal margin very shallowly bisinuate, with subangular median lobe and slightly acute posterior angles; sides almost imperceptibly biarcuate with arcs meeting at basal  $2/5$ , "collar" short and hardly appreciable; apical margin straight between slightly produced anterior angles. Surface somewhat irregularly convex, with deep and sharp entire median sulcus and deep rounded laterobasal foveae prolonged anterad (to *ca.* apical third) by shallower cuneate



1. *Metataenia* (*Metachuckia* sg. n.) *extranea* sp.n. HT ♀ – Philippines: Luzon: Mt. Prov.; 2. *Metataenia* (s. str.) *pilosa* sp. n. HT ♀ – N. Guinea: Wau; 3. *Metataenia* (s. str.) *quoqueversa* sp. n. HT ♀ – N. Guinea: Tami Riv.

depressions and bordered from sides with elevated ridges close to, and parallel with, basally (to apical third) sharp, almost straight lateral carinae; punctation fine and sparse on disk, becomes much coarser and dense, irregular anterolaterally, traces of dfp in foveae. Scutellum transversely trapezoidal, slightly depressed at middle, microsculptured without distinct punctulation.

Elytra (L:W $\approx$ 2.2) obliquely truncated at humeri, without appreciable indication of subhumeral denticles, then sides very slightly divergent to somewhat before midlength, arcuately narrowed to apical fourth and sinuately so to definitely caudate apices; margins in narrowed parts sharply denticulate, denticles progressively larger backwards, apical almost spiniform; in profile elytra strongly convex in basal 2/3, concave apically, what gives them definitely “hump-backed”, “paracuptoid” appearance. Each elytron with two shallow, rather inconspicuous, normally sculptured midlateral depressions at midlength and basal fourth; striae progressively deeper and coarser punctured from sutural (inner two very fine, superficial, sparsely and finely punctulate) to lateral (deep, with almost confluent coarse punctures), 4.-7. in basal fourth abruptly turning outwards and confused; no distinct costae, only 1., 3., and 5. interstria somewhat elevated in apical half; there 2. and 4. interval inconspicuously dfp, otherwise surface between striae smooth with but very fine microsculpture; epipleura very narrow and inconspicuous basally, non-existent behind midlength.

Ventral profile of sternum straight, of abdomen strongly convex. Anterior margin of prosternum straight, definitely behind protruding anterior angles of pronotum; proepisterna dfp except smooth elevated and sparsely punctured band along middle; prosternal process broadly and deeply sulcate in apical half, with but very narrow and shallow, inconspicuous stria anteriorly, surface otherwise covered with fine and rather sparse punctulation vanishing backwards. Metasternum broadly depressed along middle, punctulation on disk very fine and sparse, almost as fine but dense on sides, metepisterna and metacoxae; no metacoxal denticle. First sternite broadly and deeply depressed on intercoxal process, rather shallowly behind, second normally convex; abdominal punctation fine and sparse medially, still finer but denser towards sides; lateral depressions on sternites rather deep, normally punctulate; lateroapical parts of anal sternite become much coarser and denser punctured, midline with shallow sulciform foveola before roundedly subtruncated apex.

#### GEOGRAPHICAL DISTRIBUTION

New Guinea (river Tami flows into the Pacific just on the western side of the present Indonesian-Papuan border). Known only from the holotype.

#### REMARKS

“Hump-backed” dorsal profile, definitely caudate elytra, lack of distinct dfp spots, make the new species unmistakable. The closest relative seems to be, also New Guinean, *M. quadriplagis* OBB., but – beyond the above-mentioned characters – black rather than dark bronzed dorsal colouration, entirely dark tibiae, shorter tarsi, very fine inner elytral striae &c. clearly differentiate them.

*Metataenia* (s. str.) *pilosa* sp. n. (Fig. 2)

## MATERIAL EXAMINED

**Holotype:** "NEW GUINEA: NE, Wau m, II 1974" "P-23" "Ex. Coll. C.L. Bellamy (CLBC)" [purplish label] [♀ (CSCA)].

**Additional material:** none.

## DESCRIPTION

**Holotype:** Female 17×6 mm. Sides of ventral surface dark bronzed, otherwise piceous-black with faint bronzed tinge on front and pronotum; labrum, antennae and legs entirely yellow-testaceous, only apices of proximal and lobes of distal antennomeres darker brown). Body conspicuously pubescent: pilosity short recumbent on elytra, longer semierect on (especially sides of) pronotum, long semierect on abdomen, long erect on sternum and front; meso- and metafemoral brushes not conspicuous: composed of long, erect, but soft, thin and not dense white setae.

Epistome deeply emarginated, microsculptured, with some relatively coarse punctures on sides, separated from front by rather deep transverse depression; supraantennal carinulae sharp but short, directed obliquely upwards; periocular ridges prominent but also short, developed only along upper margins of eyes, separated from supraantennal carinae by long non-elevated spaces at middle of ocular margins and from one another by also not ridged fronto-vertical border; frontal depression broadly paraboloidal, coarsely and densely punctured; median groove coarse and deep, limited somewhat below the upper margin of frontal depression by short transverse smooth relief; punctuation of vertex much finer and sparser; eyes prominent, distinctly protruding beyond outline of head, making it somewhat wider than anterior pronotal margin; V:H≈0.5. Antennae slender, long, reaching somewhat beyond pronotal base; 1. antennomere fusiform, *ca.* 4× longer than thick; 2. globular, almost as thick but 4× shorter than 1.; 3. almost cylindrical but distinctly thickened at apex, somewhat thinner and shorter than 1.; 4. subequal to 3. in length but slightly wider apically, flattened, very elongately triangular, at tip as wide as 1.; 5. minimally wider again but slightly shorter (*ca.* 2.5× longer than wide); 6.-10. of width subequal to 5. but progressively shorter (10. *ca.* 1.5× longer than wide) and more rhomboidal; 11. very elongately fusiform, pointed apically, *ca.* as long as 3. or 4.

Pronotum subtrapezoidal (BW:AW:L≈1.7:1.3:1), basal margin very shallowly bisinuate, posterior angles slightly acute, sides strongly regularly arcuate from base to distinct "collar", apical margin straight at middle and shallowly sinuate on each lateral third. Surface regularly convex except for only laterally discernible transverse preapical ("collar") groove and inconspicuous (shallow at middle, deepened in basal third and somewhat behind anterior margin) and irregular median sulcus; disk coarsely but rather sparsely, sides still coarser and very densely punctured; lateral carinae short, reaching to *ca.* 1/3 of pronotal length. Scutellum trapezoidal, twice wider than long, as wide as two interstriae, impunctate.

Elytra (L:W≈2.2) subparallelsided behind humeri, then slightly widened to mid-length and arcuately tapering to jointly rounded apices; subhumeral denticles very

prominent; lateroapical margins sharply denticulate. Punctuation very irregular, extremely dense and confluent into transverse wrinkles on sides, somewhat sparser at middle; striae marked only as inconspicuous shallowly depressed stripes on sutural half, completely disappearing laterally; two very indistinct depressions on each elytron – one broader, somewhat closer to suture than to side margin, at basal fourth, and one smaller, closer to side, at apical third – represent dfp spots; epipleura practically non-existent.

Proepisterna finely and not very densely punctured, rather deeply depressed at procoxae and at hind margin; prosternal process narrow, deeply sulcate, finely but densely punctured median part barely wider than smooth and shining convex lateral rims. Metasternum finely and very sparsely punctulate on flat median part, denser on lateral “slopes”, very densely on metepisterna; no metacoxal denticle. First sternite distinctly, second inconspicuously sulcate along midline; abdominal punctuation sparse, rather coarse medially, very fine towards sides; lateral dfp areas on sternites well differentiated, deeply depressed; anal sternite with dense brush of brownish hair before deeply notched apex.

#### GEOGRAPHICAL DISTRIBUTION

New Guinea. Known only from the holotype collected at Wau (Morobe Pr.).

#### REMARKS

This species apparently belongs to the very poorly known *Gilvogeniculata*-circle, but combination of prominent pilosity, markedly rounded sides and inconspicuous median sulcus of pronotum, practically lacking striae and costae on elytra, and entirely yellow legs makes it easily recognizable.

#### ACKNOWLEDGEMENTS

I am greatly indebted to Piotr ŚLIPIŃSKI for the image of *M. pilosa* sp.n. and to Miłosz MAZUR for the advice enabling a photographic bungler to make tolerably informative pictures and for additional processing of *M. extranea* image. The late C.L. BELLAMY, to whom this paper is dedicated and on whose material it has been partly based, deserves special thanks for many explanations and advices provided throughout the three decades of our cooperation.

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