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# A new *Pentacomia* (s. str.) from Colombia <sup>1</sup>

(Coleoptera: Cicindelidae)

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Summary: A new species, *Pentacomia (Pentacomia) fernandezi* n. sp., is described from Urrao via a Calles, Antioquia, Colombia.

Zusammenfassung: Eine neue Art, *Pentacomia (Pentacomia) fernandezi* n. sp., wird von Urrao via a Calles, Antioquia, Colombia, beschrieben.

### Introduction

Colombia is a large South American country, whose tiger beetle fauna is still uncompletely known. A preliminary evaluation of such a fauna indicated 42 species in all, seven of which endemic of the country (PEARSON & CASSOLA 1992). Later checklists by FERNÁNDEZ et al. (1993, 1994) raised such a number to 56 species, with at least 15 additional species known from the bordering areas of adjacent countries, and which may occur in Colombia as well. Later on, further information was added by CASSOLA (1996, 1997), KIPPENHAN (1997), NAVIAUX (1998), and WIESNER (1999a), mainly as a consequence of systematic revisions of some important Neotropical genera. CASSOLA & PEARSON (2000) reckoned a total amount of 78 species in all (10 endemics), quoting Colombia as the 22<sup>nd</sup> in the rank order of the world countries with the highest number of recorded tiger beetle species. My own unpublished list presently sums up to 81 species (16 of which are apparently Colombian endemics), including the new species described below.

<sup>&</sup>lt;sup>1</sup> Studies of Tiger Beetles – CXIV.

Future field collecting will likely lead to the discovery of further new species, with regard, in particular, to genera such as Odontocheila Castelnau, 1834, and *Pentacomia* Bates, 1872. As they are presently understood after RIVALIERS revisional paper (RIVALIER 1969), these genera include small to medium-sized, poorly apparent inhabitants of tropical forest paths and undergrowth bushes (PEARSON 1999), which sometimes seek out shaded areas in steep to vertical banks along small rivers and gullies (HUBER 1999). Species of genus Pentacomia may sometimes superficially resemble those of genus Odontocheila, however strongly differing by the inner sac of their male aedeagi, which lack both the flagellum and the reniform (kidney-shaped) sclerite which are so typical of all Odontocheila species (RIVALIER 1969). Two new Odontocheila have been recently described from Honduras and Panama (JOHNSON 1996, 2000), one from Brazil (HUBER 2000), five more from Bolivia, together with four new Pentacomia (HUBER 1999, WIESNER 1999b), and one further Pentacomia species from Paraguay (SAWADA & WIESNER 1997).

The new species described below was kindly submitted for identification by my friend and colleague Fernando FERNÁNDEZ (Instituto Alexander von Humboldt, Santafé de Bogotá, Colombia), whom I thank very much. Further field collecting in the type locality or elsewhere will hopefully provide additional specimens of this distinctive, unexpected new species, including in particular its male, which presently is still unknown.

## Pentacomia (Pentacomia) fernandezi n. sp. (fig. 1 a-c)

Diagnosis: A rather small *Pentacomia* without any white elytral markings, and with two smooth shining areas instead, one above the middle, transversely on disc, the other in the whole apical part of elytra. Elytral surface mostly smooth, distinctly sculptured just on base and shoulders, with a few larger shallow punctures before the apex; a long sharp sutural spine at apex. Female labrum black, 4-haired, 5-toothed. Male unknown.

Description: Head bronze coloured, with slight cupreous reflections, glabrous, with just two fine, long, erect sensorial setae near both eyes; finely but distinctly striated, the striae being concentric on frons, longitudinal on vertex, eyes and genae, transversely waved behind. Eyes pale yellow. Female labrum black, with some slight bronze reflections at sides,

four-haired, five toothed, the three central teeth sharp, produced outwards, the middle one very long, slightly bent downwards. Mandibles black, almost completely covered by the labrum, with the apical teeth protruding laterally at rest. Labial and maxillary palpi slender, rufous-testaceous basally, shining pitchy black on the apical joints. Antennae slender, long, reaching approximately the middle of the elytral length (female), expectedly longer with the male; scape narrow, elongate, greenish bronze, with a single seta near the tip; articles 2-4 bluish-green with some violet reflections, joints 5-11 blackish, elongate, cylindrical, the last three ones slightly thickened, covered with a short, fine, even, golden pubescence.

Thorax: pronotum bronze coloured as on head, clearly longer than wide, cylindrical, parallel-sided in the middle, entirely glabrous, transversely striated. Proepisterna glabrous, striated, with strong cupreous reflections; female coupling sulcus a deep rounded open fovea in the upper front part of mesepisternum.

Elytra elongate, parallel-sided, evenly convex on disc; surface distinctly punctured at base and on shoulders, otherwise mostly smooth, almost impunctate behind on disc, with a few larger shallow punctures before the apex; colour dull black, lacking any white elytral markings, with two gold-shining, smooth, velvety areas instead, one above the middle, transversely on disc, the other all over the preapical elytral callus and the sloping apical part of elytra. Preapical impression strong, apical border non-serrulated, a sharp, long, straight sutural spine at apex. Epipleura metallic bronze green.

Abdominal sternites smooth, metallic bronze green with cupreous reflections at sides; glabrous, just two long erect sensorial setae near the hind edge of segments 3-5. Trochanters reddish-brown, femora greenish-bronze with some cupric reflections, "knees", tibiae and tarsi dark bluishgreen, with a few rows of spiniform whitish setae; claws rufescent apically.

Male unknown.

Length: 9.2 mm (without labrum and sutural spine).
Female holotype from Colombia (Antioquia): Urrao via a Calles, 1000 m, 9 April 1996, E. PALACIO leg., in author's collection.

Etymology: I have the pleasure of naming this beautiful small new species in honour of Dr. Fernando FERNÁNDEZ (Instituto Alexander Humboldt, Santafé de Bogotá, Colombia), who kindly submitted for identification and generously donated to me the single holotype specimen.

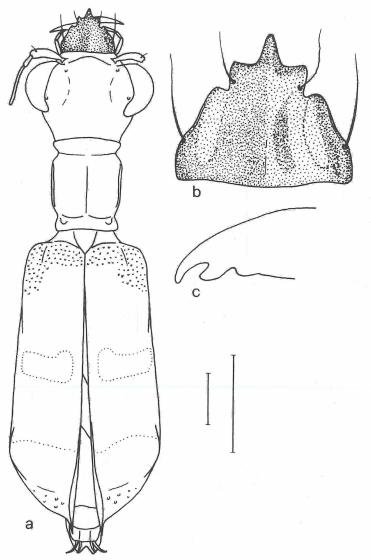


Fig. 1.: Pentacomia (Pentacomia) fernandezi n. sp., female holotype, from Urrao via a Calles, Antioquia, Colombia: habitus (a), labrum (b), apex of labrum (left view) (c). Scale-lines: 1 mm and 0.5 mm.

Remarks: Despite the lack of a male specimen, the placement of *P. fernandezi* **n. sp.** in the nominate subgenus *Pentacomia* can be taken nearly for certain, by reason of its body shape and general appearance, the large protruding eyes, the subcylindrical pronotum, the large 5-toothed labrum, and the occurrence of smooth shining mirrors on elytra. However, it differs from all other known *Pentacomia* species because of the black labrum, the mostly smooth elytra, the lack of white elytral markings (replaced by shining metallic areas instead), and the long sharp sutural spine at the elytral apex. Expectedly, the male will be found to have a partially testaceous labrum and a straight tapered aedeagus with a blunt pointed apex.

#### References

- CASSOLA, F. (1996): Biodiversity and distribution of the Neotropical Genus Pseudoxycheila Guérin, 1939 (Coleoptera: Cicindelidae). Proceedings of the XX International Congress of Entomology (Firenze, Italy, August 25–31, 1996), 73 (No. 02–014) (Studies on Tiger Beetles, LXXXV).
- —— (1997): Studies on Tiger Beetles. XC. Revision of the Neotropical Genus Pseudoxycheila Guérin, 1839 (Coleoptera, Cicindelidae). – Fragmenta Entomologica 29:1–121.
- CASSOLA, F. & PEARSON, D. L. (2000): Global patterns of tiger beetle species richness (Coleoptera: Cicindelidae): their use in conservation planning. Biological Conservation 95:197–208.
- FERNÁNDEZ, F., AMAT, G. & PEARSON, D. L. (1993): Los escarabajos-tigre (Coleoptera: Cicindelidae) de Colombia. I. Introducción y clave para generos. Boletín del Museo de Entomologia de la Universidad de Valle 1: 29-40.
- FERNÁNDEZ, F., AMAT, G. & PEARSON, D. L. (1994): Preliminary list of the species of tiger beetles of Colombia (Coleoptera: Cicindelidae). Cicindela 26: 27–30.
- JOHNSON, W. N. (1996): A new species of *Odontocheila* from Honduras with notes on other Central American species (Coleoptera: Cicindelidae). – Cicindela 28:37-44.
- JOHNSON, W. N. (2000): A new species of *Odontocheila* from Panama (Coleoptera: Cicindelidae). Cicindela **32**:13–18.
- HUBER, R. L. (1999): Eight new tiger beetle species from Bolivia in the genera *Odontocheila*, *Pentacomia* and *Pometon* (Coleoptera: Cicindelidae). Cicindela 31:1–44.
- HUBER, R.L. (2000): A new species of *Odontocheila* from Rondônia, Brazil (Coleoptera: Cicindelidae). Cicindela **32**:37–45.

- KIPPENHAN, M.G. (1997): A review of the Neotropical tiger beetle genus *Oxygonia* Mannerhim (Coleoptera: Cicindelidae). Contributions on Entomology, International 2:301–353.
- NAVIAUX, R. (1998): Les *Ctenostoma* (Coleoptera, Cicindelidae). Révision du genre et descriptions de nouveaux taxons. Mémoires de la SEF (Société Entomologique de France) 2:1–186.
- Pearson, D. L. (1999): Natural history of selected genera of tiger beetles (Coleoptera: Cicindelidae) of the world. Cicindela 31:53–71.
- PEARSON, D. L. & CASSOLA, F. (1992): World—wide species richness patterns of tiger beetles (Coleoptera: Cicindelidae): indicator taxon for biofiversity and conservation studies. Conservation Biology 6:376–391.
- RIVALIER, É. (1969): Démembrement du genre *Odontochila* (Col. Cicindelidae) et révision des principales espèces. Annales de la Société Entomologique de France (N.S.) 5:195–237.
- SAWADA, H. & WIESNER, J. (1997): Zwei neue Cicindelidae aus Paraguay (Coleoptera). Entomologische Zeitschrift mit Insektenbörse 107:127–132.
- Wiesner, J. (1999a): The tiger beetle genus *Oxycheila* (Insecta: Coleoptera: Cicindelidae). 50th contribution towards the knowledge of Cicindelidae. Coleoptera, Schwanfelder Coleopterologische Mitteilungen 3:1–81.
- (1999b): *Pentacomia cupricollis* and descriptions of two related species from Bolivia (Coleoptera, Cicindelidae). Mitteilungen der Münchner Entomologischen Gesellshaft **89**:87–94.

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