

***Oculapalochrus maindroni* (ABEILLE DE PERRIN, 1900) comb.n.
(Coleoptera: Malachiidae) in Pakistan:
rediscovery after 119 years**

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Abstract

Oculapalochrus maindroni (ABEILLE DE PERRIN, 1900) comb.n. (transferred from *Hadrocnemus* KRAATZ, 1895) is reported from Pakistan for the second time. This species is most similar to *O. laticeps* (PIC, 1943). A photograph of the specimen illustrates the species-specific structures. A synoptic table for the diagnostic characters is presented.

Key words: Melyridae s.l., terminalia of male, redescription.

Zusammenfassung

Oculapalochrus maindroni (ABEILLE DE PERRIN, 1900) comb.n. (transferiert von *Hadrocnemus* KRAATZ, 1895) wird das zweite Mal aus Pakistan gemeldet. *Oculapalochrus laticeps* (PIC, 1943) ist dieser Art am ähnlichsten. Eine Fotografie des Exemplars zeigt die artspezifischen Merkmale. Eine synoptische Tabelle für die differentialdiagnostischen Merkmale wird präsentiert.

Introduction

In 1896, Maurice Maindron (7 February 1857 – 19 July 1911) collected in Pakistan during a mission financed by the Muséum National d'Histoire Naturelle (cf. MAINDRON 1899). One newly discovered species was *Apalochrus maindroni*, which was described after specimens of both sexes by Elzéar Emmanuel Arène Abeille de Perrin (3 January 1843 – 9 October 1910) in 1900. The original description is hard to obtain, and mostly known after separatum copies distributed by Abeille de Perrin himself. *Apalochrus maindroni* was subsequently catalogued erroneously as a nomen in litteris by GREINER (1937), and treated as a nomen nudum by EVERS (1987). MAYOR (2003) transferred this taxon to the genus *Hadrocnemus* KRAATZ, 1895.

In this publication, the present authors report another finding of this species from 2015, and give a (re-)descriptive note on the male and a differential diagnosis comparing it to the closely related *O. laticeps* (PIC, 1943) sensu TSHERNYSHEV (2015).

Material and methods

One specimen was examined. It is dry preserved and currently housed in the collection of the Natural History Museum in Vienna (NMW). The habitus photography was made by H. Schillhammer – his imaging method is described in detail elsewhere (see SCHILL-

HAMMER 2015: 122). For the study of the terminalia, the male was softened in hot distilled water and its abdomen dissected following the methodology described in PLONSKI (2014). The male specimen was identified with the original description (ABEILLE DE PERRIN 1900) by the help of a Leica MZ6 stereo-microscope, and compared to the description and illustrations of an Iranian male specimen of *O. laticeps* (PIC, 1943) by TSHERNYSHEV (2015). The original type series of *Apalochrus maindroni* is currently not accessible due to an ongoing loan embargo.

Acronyms of measurements:

- HL Head length. Maximum length of head capsule, measured in dorsal view.
HW Head width. Maximum width of head including eyes, measured in dorsal view.
IOW Interocular width. Minimum width of interspace between eyes, measured in dorsal view.
PL Pronotal length. Maximum length of pronotum, measured in dorsal view.
PW Pronotal width. Maximum width of pronotum, measured in dorsal view.
SW Shoulder width. Maximum width of elytra around the shoulders, measured in dorsal view.
EL Elytral length. Maximum length of elytra, including the scutellum, measured along the suture in dorsal view.
EW Elytral width. Maximum width of elytra, measured in dorsal view.

Results

***Oculapalochrus maindroni* (ABEILLE DE PERRIN, 1900) comb.n. (Fig. 1)**

Hapalochroüs Maindroni ABEILLE DE PERRIN, 1900: 21 (original description, seen as separatum).

Apalochrus maindroni: GREINER 1937: 162 (catalogue, as nomen in litteris). – EVERS 1987: 12 (listed as nomen nudum).

Hadrocnemus maindroni: MAYOR 2003: 92 (new combination). – MAYOR 2007: 417 (catalogue).

Type locality: Environment of historical Karachi City, Karachi Central District, Sindh Province, Pakistan.

Material examined: Pakistan, Sindh, Hyderabad District, Shaikh Bhirkio vill. env., 22.VI.2015, 1♂, leg. Z. Ahmed, det. I. Plonski, coll. NMW.

Note on identification: The characteristic features (quotations all from the original description) determinant for the identification were (1) coloration of body (“vert-doré”; “irises au sommet”) and extremities (“antennes (...) flaves, avec leurs 7 lamelles noires”; “pattes rouges, toutes les cuisses assombries à la base ainsi que les tibias posterieurs”), (2) size of compound eyes (“enormes”), (3) shape (“transverse”) and (4) structure (“deux fortes impressions discoidales basales, et une autre avant l’angle postérieur”) of pronotum, and especially (5) structure of elytra (“avec un pli longitudinal intrahumeral [sic!; in the following called “infrahumeral longitudinal fold”]).

Supplementary re-descriptive notes: Male: Body (Fig. 1) elongate, narrow, parallel.



Fig 1: *Oculapalochrus maindroni* comb.n., habitus of male specimen from Pakistan (lacking parts completed with the help of Photoshop). © Harald Schillhammer.

Tab. 1: Synoptic table for the differential diagnostic characters between *Oculalpalochrus laticeps* and *O. maindroni*.

Character	<i>O. laticeps</i>	<i>O. maindroni</i>
Colouration of maxillary palpomeres	I–III totally orange red	I–II orange red, III black.
Colouration of infrahumeral longitudinal fold	bicolorous, mostly orange-red subhumerally (TSHERNYSHEV 2015: fig. 30)	unicolorous, as rest of elytra (Fig. 1)
Shape of pronotum	sub-pentagonal, apex more constricted anteriorly than basally (TSHERNYSHEV 2015: fig. 30)	sub-ellipsoidal, apex and base evenly rounded, sides arcuate (Fig. 1)
Length-width ratio of antennomere III	slightly longer than wide (l/w: 1.2) (TSHERNYSHEV 2015: fig. 32)	distinctly longer than wide (l/w: 2.0) (Fig. 1)

Colouration: Head capsule, thorax (incl. scutellum and thoracic mesepimera) and elytra completely black with a bright green metallic lustre on dorsum. Pronotum in addition with a golden-coppery tinge. Mouthparts bicolorous: labrum mostly dark brown, with orange brightened anterior and posterior margins; maxillary palpomeres I–II orange red, maxillary palpomere III black. Antenna bicolorous: scape, pedicel and antennomere III orange red; antennomeres IV and V orange red with exception of black dent or ramus respectively; antennomeres VI–X with black rami and orange to dark brown brightened bases; antennomere XI totally dark brown to black. Legs bicolorous: outer margins of trochanters, apices of femora, tibiae and tarsomeres I–II orange red in front- and middle-legs, with most parts of femora black and blackish darkened tarsomeres III–V; hind legs with apices of femora and tibiae orange red, and most parts of tibiae and tarsi blackish darkened.

Pubescence: dorsal integument evenly covered with semi-erect short white setae.

Structures: Head (Fig. 1) wider than pronotum. Eyes strongly protruding, large and round; interocular area ca. 2.5 times narrower than head. Frons narrow, flat except a faint impression next to each antennal socket (epistomal plate slightly elevated) and a more distinct round impression more posteriorly, in between the eyes. Genae short and straight. Clypeus not elongate, transverse, straight. Labrum narrow, transverse. Maxillary palpi simple with apical segments oblong and narrowed to tip. Surface of head shiny, sparsely and finely punctured, lacking microsculpture. Antennae flabellate, reaching the middle of the elytra; scape clavate; pedicel small, round, almost completely hidden by scape; antennomere III elongate; antennomere IV triangular with distinct dent; remaining segments elongate, sub-cylindrical, with well-developed rami. Pronotum transverse, sub-elliptical, distinctly marginate, surface densely and finely punctured, lacking microsculpture, shiny; with more or less distinct impressions next to the corners. Scutellum sub-rectangular, transverse, well visible and not covered by pronotum; densely punctured. Elytra parallel, not widened towards apex, at base 1.26 times wider than pronotum; humeri well developed; apices evenly rounded, simple, gaping; suture distinctly marginate and elevated; lateral edge near epipleura elevated and appearing like a longitudinal carina (the “infrahumeral longitudinal fold” sensu Abeille de Perrin); surface shiny, lacking microsculpture, densely punctured; punctures smoothed and adjoined to wrinkles. Hind wings normally developed. Legs

long, thin, and without modifications; posterior femora reaching elytral apices; all tibiae and femora simple, not swollen or excavate, thin, straight, not curved; all tarsi pentamer, narrow and elongate; front-tarsomere II with a comb above (cf. TSHERNYSHEV 2015: fig. 33); tarsomere V longest, equal to 1st and 2nd segments in all legs; claws narrow, slightly curved, with very small membrane at base. Metathorax slightly swollen, round, simple, lacking appendages or hairs. Pygidium shaped almost as in *O. laticeps* (cf. TSHERNYSHEV 2015: fig. 34), differing only in the extent of subapical depigmentation. Sternite VIII shaped almost as in *O. laticeps* (cf. TSHERNYSHEV 2015: fig. 35). Aedeagus very similar to *O. laticeps* (cf. TSHERNYSHEV 2015: fig. 37), differing only in the form of apical tip of median lobe that is not bent, but rather straight. Measurements: HL: 0.88 mm; HW: 1.01 mm; IOW: 0.40 mm; PL: 0.73 mm; PW: 0.90 mm; SW: 1.13 mm; EL: 2.22 mm; EW: 1.13 mm.

Diagnosis and systematic position: The almost “identical” colouration and structure of head capsule (especially the surface sculpture in between the eyes; cf. TSHERNYSHEV 2015: fig. 31), elytra, legs (cf. TSHERNYSHEV 2015: fig. 33) and terminalia (cf. TSHERNYSHEV 2015: fig. 34–37) support the conclusion that the Iranian specimen reported by TSHERNYSHEV (2015) and the Pakistani specimen reported above are congeners and closely related species.

The “infrahumeral longitudinal fold” and the elevated suture of elytra make the elytral disc appear impressed. This is a feature shared with *O. laticeps* (PIC, 1943), the type species of *Oculapalochrus* TSHERNYSHEV, 2015. PIC (1943: 7) writes “ad humeros et ad suturam postice impressis”.

Oculapalochrus maindroni comb.n. and the closely related *O. laticeps* can be separated easily in eidonomy (see Tab. 1).

Distribution: So far, only known from Sindh Province in Pakistan.

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