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## On the identity of the tiger beetle *Cicindela philippinensis* Mandl, 1956 (Coleoptera: Carabidae: Cicindelinae)

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In the course of preparing a key to the Philippine tiger beetle genera (Pangantihon & Zettel, in prep.) it became necessary to examine the holotype of *Cicindela philippinensis* Mandl, 1956, the only specimen from the Philippines that has been tentatively assigned to the genus *Myriochila* Motschulsky, 1857.

Karl Mandl (1956: pp. 396–397) described *Cicindela philippinensis* based on a single male from Pilar, Abra, the Philippines, that was deposited in his private collection in Vienna, Austria. Later the holotype was transferred to the Museum G. Frey in Tutzing near Munich, Germany, and today it is part of the Georg Frey Collection in the Naturhistorisches Museum Basel, Switzerland.

Since the 1950's many subgenera of the genus *Cicindela* Linnaeus, 1758 have been raised to genera (e.g., Rivalier, 1961), and thus the generic position of *Cicindela philippinensis* has become doubtful. Because Mandl (1956) related *C. philippinensis* to *Cicindela sinica* Fleutiaux, 1889, a species of *Myriochila* (s.str.) Motschulsky, 1859, Wiesner (1980) tentatively placed *philippinensis* in "*Myriochile* Motschulsky, 1862 subg. *Myriochile* s. str." for the first time. Thereafter, Wiesner (1992: p. 210) annotated this generic assignment with a question mark. Despite numerous publications on the Philippine tiger beetle fauna, a re-examination of the type of *Cicindela philippinensis philippinensis* has not happened since. In this short note we confirm the inclusion of *Cicindela philippinensis* in *Myriochila*, provide a full description and illustrations of the holotype, and discuss the differences between *M. philippinensis* and *M. sinica*.

### *Myriochila philippinensis* (Mandl, 1956)

(Figs. 1–7)

*Cicindela philippinensis* Mandl, 1956: 396–397 (description).

*Myriochile philippinensis* (Mandl, 1956): Wiesner, 1980: 126 (in list of Philippine tiger beetles).

*Myriochile* ? *philippinensis* (Mandl, 1956): Wiesner, 1992: 210 (in world catalogue of tiger beetles).

**Type material examined.** Holotype (male, Catalogue Number 63, Naturhistorisches Museum Basel), labelled "Pilar. Abra Philippinen R.P. Niedurny", labels see Figure 7.

**Notes on the holotype.** The specimen is in a regular state of conservation. It seems to have been originally pinned and later glued onto a cardboard. Left antenna, left foreleg, left hind leg, and distal part (tibia and tarsus) of right hind leg are missing. The right elytron was broken and glued to the abdomen; its apical margin is broken off.

**Notes on the type locality.** Pilar (ca. N 17°25' E 120°36', ca. 300 m a.s.l.) is a municipality in Abra Province in the northern part of Luzon Island, the Philippines.

**Redescription.** Measurements: Total length ca. 8.2 mm. Head width 2.25 mm. Pronotum width 1.60 mm, length at midline 1.54 mm. Sutural length of left elytron 4.81 mm.

Colour and pilosity (Figs. 1–4): Head dorsally bronze black with metallic purple to greenish reflection, ventrally with strong blue reflection; antennal plate and suborbital declivity to genae with strong bluish green reflection; clypeus metallic bronze with green reflection. Labrum pale yellow to testaceous, with black apical margin. Eyes dark brown to grey. Mandibles basally testaceous, apically and on teeth dark rufous to black, with strong green reflection at mid-length. Labial and maxillary palpi testaceous except all terminal palpomeres metallic green, and penultimate segment of

maxillary palpi dark brown. Antenna: scape to antennomere 4 bronze black with greenish and purple reflection; antennomeres 5–11 brown, entirely covered with white pilosity. Pronotum bronze with metallic green to bluish reflection; posterior lateral tubercles metallic green with strong reflection of bronze on both sides; sides of front and hind lobe black with bronze to green reflection. Scutellum bronze to purple. Elytra bronze black, with basally greenish reflection, with purple shimmer (more on sides); grooves green, their centres often blue; white to yellowish markings strongly reduced; epipleura dark testaceous, with strong purple reflection. Sides and venter (as far as visible) bronze black. Legs almost entirely with metallic reflection, except trochanters dark testaceous; coxae and femora chiefly green, tibiae chiefly bronze, tarsi basally green tending to violet and blue towards apex; apices of femora and tibiae polychromous. Maxilla and labial palps with some long white hairs, especially penultimate segment of labial palp with dense brush. Sides of prothorax with some white hairs ventrally (Fig. 3). Venter with numerous long, slender, white hairs.

Structures: Head fully glabrous, except two pairs of short orbital setae (anteriorly and at mid-length of eye). Frons finely shagreened, vertex finely, irregularly wrinkled, orbitals longitudinally creased (Fig. 2). Genae and tempora longitudinally striate and somewhat shiny (Fig. 3). Orbitals and frons almost in the same plane. Eyes large, their smallest distance 0.39 times head width. Clypeus (Fig. 4) narrow, finely shagreened, without setae. Labrum (Fig. 4) shiny and almost smooth, with hardly discernable reticulate microstructure, medially protruded, 2.2 times as wide as long, with two pairs of setae, one laterally and one near midline; foremargin with one distinct median tooth and two blunt lobes laterally of it. Mandible long, with four slender teeth (including apex). Antenna (Figs. 1, 5) long, in male reaching to middle of elytra, antennal segments cylindrical, segments 1–4 shiny, with extremely fine microstructure, segments 5–11 matt.

Pronotum (Fig. 2) minimally wider than long, with moderately convex sides, hardly constricted before apex and base; transverse furrows near anterior and posterior margins shallow, but distinct, sinuate; midline hardly impressed; disk with coarse wrinkles; sides finely shagreened and with some superficial furrows. Scutellum finely shagreened and with some transverse wrinkles.

Elytra (Fig. 1) with numerous small shallow grooves and several deeper pits (some of them bearing short setae); deep and rather large pits distributed along lateral margins, and along medial margin next to scutellum, in a row in some distance from suture, and in a double row medially of humerus. Apex (Fig. 6) almost rectangular, with an extremely short sutural spine. Posterior margin with a minute, hardly discernable tooth.

Legs very slender, moderately long. Tarsomeres 1–3 of foreleg (Fig. 5) moderately widened, almost twice as wide as tarsomeres 4 and 5; third tarsomere 2.9 times as long as wide.

Venter (as far as visible in the glued specimen) matt, densely shagreened and with strong punctures at hair base.

Aedeagus: Not dissected due to the condition of the unique specimen. Apex of median lobe externally visible (Fig. 6).

**Comparative notes:** *Myriochila philippinensis* is similar to *M. sinica*. Mandl (1956) stated that *M. philippinensis* is smaller than *M. sinica*, but his measurement ("Länge: 7 mm") was incorrect. We have studied specimens of *M. sinica* from Thailand, Laos, and Vietnam in the Natural History Museum Vienna, and two males have a similarly small size as the holotype of *M. philippinensis*. The elytral colour pattern of *M. sinica* is rather variable. We found differences only in the structure of the labrum and the antenna: *Myriochila philippinensis* has a median labrum tooth accompanied by two short blunt lobes (Fig. 4), whereas *M. sinica* has three subequal teeth. *Myriochila philippinensis* has cylindrical antennal segments 3 and 4 (Fig. 5), whereas they are compressed in *M. sinica*. Whether these differences are sufficient to hold *M. philippinensis* as a distinct species, or are a matter of intraspecific variation or individual aberration must be decided after the study of more specimens from the Philippines.

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**FIGURES 1–7.** Holotype of *Cicindela philippinensis*: (1) Habitus, dorsal view; (2) head and pronotum, dorsal view; (3) head and pronotum, lateral view; (4) head, frontal view; (5) basal antennal segments and right foretarsus; (6) apices of elytra and abdomen with protruded tip of aedeagus; (7) labels.

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