

## Studies on the genus *Intybia* PASCOE (Coleoptera: Malachiidae)

### IV. Notes on the fauna of the Philippines

Isidor S. PLONSKI

#### Abstract

A contribution to the Philippine species of the genus *Intybia* PASCOE, 1866, is given. Two species are described as new to science: *Intybia pangantihoni* sp.n. from Cebu Island and *I. meyi* sp.n. from Panay Island. Two new generic combinations are proposed and given together with new island records: *Intybia rectefasciata* (CHAMPION, 1921) comb.n. is reported from Camiguin, and *Intybia semperi* (CHAMPION, 1921) comb.n. is reported from Olango Island near Cebu.

**Key words:** Coleoptera, Malachiidae, *Intybia*, *Laius*, faunistics, taxonomy, new species, new combination, The Philippines.

#### Zusammenfassung

Ein Beitrag zur Kenntnis der philippinischen Arten der Gattung *Intybia* PASCOE, 1866 wird gegeben. Zwei Arten werden als neu für die Wissenschaft beschrieben: *Intybia pangantihoni* sp.n. von der Insel Cebu und *I. meyi* sp.n. von der Insel Panay. Zwei neue Gattungskombinationen werden zusammen mit neuen Insel-Nachweisen kommuniziert: *Intybia rectefasciata* (CHAMPION, 1921) comb.n. wird zum ersten Mal für Camiguin und *I. semperi* (CHAMPION, 1921) comb.n. erstmals für Olango nahe Cebu gemeldet.

#### Introduction

Our knowledge of the species of the genera *Intybia* PASCOE, 1866 and *Dicranolaius* CHAMPION, 1921 from the Philippines is given through the works of Léon Fairmaire (1820–1906), George Charles Champion (1851–1927), Maurice Pic (1866–1957), and Walter Wittmer (1915–1998). Before 1994, 13 species had been described in the genus *Laius* GUÉRIN-MENEVILLE, 1830 (see FAIRMAIRE 1898, PIC 1910, 1917, CHAMPION 1921, WITTMER 1941), of which at least three species belong to *Intybia*, and after 1994 only two species were described in *Intybia* (see WITTMER 1997). From the first group, *Laius baeri* FAIRMAIRE, 1898, has already been transferred to *Intybia* by WITTMER (1997: 183), and two species are transferred in this paper. In addition, a Philippine record of *Intybia guttata* PASCOE, 1866 by WITTMER (1941: 225, as *Laius guttatus*) is doubtful.

However, the species diversity is much higher than presently known: At least four species of *Intybia* and two species of *Dicranolaius* are known to the author by male singletons (Plonski, unpubl. data) and await description as soon as additional material becomes

available. And another species of *Intybia* will be described by Sergei Tshernyshev in the near future (Tshernyshev, in litt.).

The aim of the present communication is to continue my project on *Intybia* by (I) introducing two taxa as new to science; (II) proposing two new generic combinations; and (III) communicating faunistic records of three taxa. For the preceding parts of my project see PLONSKI (2013, 2014) and PLONSKI & GEISER (2014).

### Material and methods

A total of 14 specimens were examined for this study. All specimens are dry preserved. Their label data and housings are detailed below. The terminalia of four male specimens (the holotypes of the new species described below) have been dissected.

The methodology of taxonomic citation, generic placement assignment, species group definition, dissection, label data citation, observation, measurement and illustration are the same as in preceding studies (PLONSKI 2013, 2014, PLONSKI & GEISER 2014).

#### Acronymy:

Collections: cHZ – Coll. Herbert Zettel, Vienna, Austria; cIP – Coll. Isidor Plonski, Vienna, Austria; NHUB – Museum für Naturkunde an der Humboldt Universität, Berlin, Germany; NMM – National Museum, Manila, The Philippines; NMW Naturhistorisches Museum, Vienna, Austria.

Label data: hwr – hand writing; p – printed; r – red; w – white; y – yellow.

Specimens: diss. – dissected (male terminalia); IP – (dissected) by Isidor Plonski.

### Taxonomy and faunistics

#### *Intybia meyi* sp.n. (Figs. 1–3)

**E t y m o l o g y:** Patronymic. The new taxon is named after its collector, Dr. Wolfram Mey, who is a specialist for Lepidoptera of Africa and Trichoptera of the Philippines.

**T y p e l o c a l i t y:** Environment of a brook, barangay Aningalan (N 10°53', E 122°11'; ca. 600 m a.s.l.), municipality of San Remigio, Antique Province, The Philippines.

**T y p e m a t e r i a l:** Holotype (♂, NHUB) [diss., IP]: “Philippinen, Panay \ Antique, 9-10.4.1995 \ San Reminigio [sic!], Anin- \ galan, leg. W. MEY” [y, p], “H O L O T Y P U S \ Intybia \ meyi \ spec.nov. \ det. I. Plonski 2014” [r, p].

**D e s c r i p t i o n o f t h e h o l o t y p e:** Body length: 2.92 mm.

**C o l o u r a t i o n:** Body tricolourous and lustreless, covered with white hairs throughout. Head capsule black. Compound eyes black in dried specimen. Mouthparts black. Antennae bicolourous; antennomeres I–II and V–VI dark pitch brown; antennomeres III–IV orange to beige brown; antennomeres VII–XI black. Pronotum, prothorax, scutellum, mesothorax, metathorax, and abdomen black. Elytra black, each elytron with one cream-white transverse macula on anterior two sevenths. Legs: femora and tibiae black; tarsi straw yellow.

**S t r u c t u r e s:** Head capsule elongated, distinctly wider than pronotum, densely covered with punctures and fine short hairs all over the dorsal surface; puncturation appearing reticulate, composed of small dots; vertex rather flat, supraocularly raised (these keels

without puncturation and shiny; see Fig. 1) and with a faint interocular median furrow; frontal part broadly rounded. Eyes large, globular. Maxillary palpi with broad and truncated terminal palpomere. Antennae thick; antennomere I very broad, drop-shaped, 1.4 times as long as maximum width; antennomere II very short, globular; antennomere III (Fig. 2) very large, 1.5 times as long as broad, sub-elliptical to sub-rectangular in outline, apically broadly rounded, basally with marked corners, on inner side concave and with reflexed lobe, semi-circularly impressed at base and with circular impression next to apex; antennomeres IV–XI filiform, antennomere IV shorter than following, antennomeres V–X sub-parallel, antennomere XI ellipsoid. Pronotum nearly as long as broad, with similar puncturation and pubescence as on vertex, but punctures slightly bigger and hairs slightly longer; disc convex, bulged in second and third quarters of total length, at posterior third transversely depressed; constricted near base, sides arcuate, with knob-like protuberance in posterior quarter, apex arcuate, base straight; hind margin narrowly marginate throughout. Elytra oblong, 1.6 times as long as broad; sides almost straight on basal five sevenths of length, divergent posteriorly, abruptly convergent apically; shoulders developed; elytral tips individually rounded; suture normal. Elytral puncturation as on pronotal disc. Elytral pubescence composed of reclinate short hairs and intermixed much longer sub-erect setae. Legs long and slender, fully covered with short hairs; femora and tibiae unmodified. Abdominal sterna unsclerotized in their middle portions. Aedeagus: apical tip of median lobe (Fig. 3) about twice as long as broad, truncated; main piece about 5.2 times as long as maximum width; endophallus with one long basal sclerite and two lateral rows of thorn-like sclerites which are partly ankylotic next to apex. Measurements in mm ( $n = 1$ ): head length: 0.52; head width: 0.75; interocular width: 0.50; pronotal length: 0.65; pronotal width: 0.70; elytral length: 1.75; elytral width: 1.05.

**Differential diagnosis:** There are two other described species possessing a single macula on each elytron: *Intybia biguttula* (ERICHSON, 1840) (loc. typ.: Bintan Isl.), and *Intybia unimaculata* (PIC, 1917) (loc. typ.: Borneo Isl.). The new taxon differs from both chromatically (colouration of head capsule) and structurally (morphology of head capsule), and the male can be easily recognised by the shape of antennomere III.

**Distribution:** So far, only known from its type locality on Panay Island.

### *Intybia mindoroica* WITTMER, 1997

*Intybia mindoroica* WITTMER, 1997: 184.

**Material examined:** 4 ♀♀ (3 ♀♀ NMW, 1 ♀ cIP): “leg. Jäch 27.-29.11 \ PHILIPPINEN – Mindoro \ 28km S Calapan 1992 \ Balete 100-700m (19)” [w, p], “Laius \ pictus \ Er.? [all lines hwr, MS Wittmer] \ det. W. Wittmer [p]” [w].

**Note:** This species has been described after two specimens collected from the same locality (“28 km south of Calapan”). Thus, the identification of the herein reported four females seems to be justified.

### *Intybia pangantihoni* sp.n. (Figs. 4–6)

**Etymology:** Patronymic. The new taxon is named after its collector, Clister V. Pangantihon, who is a gifted biologist and naturalist.

**Type locality:** Alcoy Forest Reserve (N 9°42', E 123°26'; ca. 700–800 m a.s.l.), barangay Nug-as, Municipality of Alcoy, Cebu Province, The Philippines.

Type material: Holotype (♂, NMM) [diss., IP]: “Philippines: Cebu, Alcoy \ B[aran]g[a]y. Nug-as, Alcoy Forest \ Res[erve], 15.-20.IX.2013, leg. \ C. V. Pangantihon (P486)” [w, p], “H O L O T Y P U S \ *Intybia \ pangantihoni* sp.n. \ det. I. Plonski 2014” [r, p]. – Allotype (♀, cHZ) and paratypes (1 ♂, 2 ♀♀ in cHZ; 1 ♂, 1 ♀ in cIP) with identical patria labels as holotype, and respective type labels.

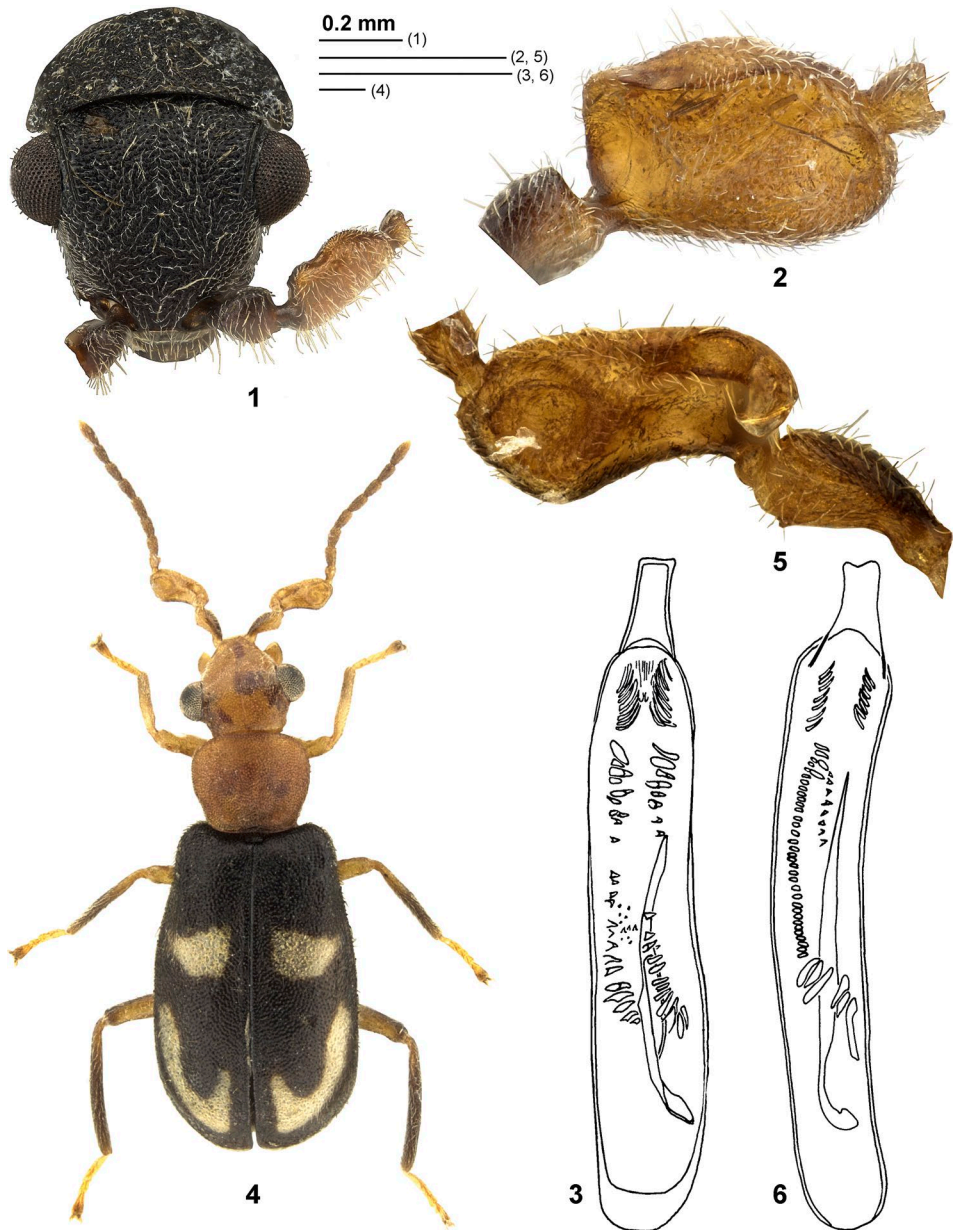
Additional material examined: 1 ♀ (cHZ): “Philippinen: Negros Or. \ Lake Balinasayao – \ Lake Danao, Sibulao, \ 28.-30.10.2004, leg. \ C. Pangantihon (P403)”.

Description of types: Body length: 2.95–3.35 mm.

Colouration of males (Fig. 4): Body tricolourous and almost lustreless, covered with white hairs throughout. Head capsule weakly shiny, rufotestaceous with brownish patches. Compound eyes black in dried specimens. Mouthparts rufotestaceous. Antennae testaceous to rufotestaceous; antennomere I with brownish patch on upper side; antennomeres V–XI slightly darker than preceding ones. Pronotum and prothorax both rufotestaceous, the former weakly shiny. Scutellum, mesothorax, metathorax, and abdomen black. Elytra lustreless and black, each with two cream-white markings reaching neither suture nor lateral margin: first one transverse and situated at base of second third of length, in some specimens broadened towards suture; second one u-shaped, starting briefly behind mid-length, running parallel to lateral margin and becoming broader towards suture at apex. Front legs testaceous to rufotestaceous, except tarsomere V brownish black. Middle legs of same colouration, but tibia distally dark brownish. Hind legs of same colour, but femora dark in basal third and with dark brownish tip and upper side and tibia completely brownish black.

Colouration of females: Body of same colour as in males. Extremities similarly, but darker coloured: Antenna with antennomeres I and III brown to black on upper side, and antennomeres (IV–V) VI–XI brownish black. Front legs of the same colour pattern as the male’s middle legs. Middle and hind legs of the same colour pattern as the male’s hind legs.

Structure of males: Head capsule elongated, wider than pronotum (incl. eyes), densely covered with fine punctures and reclinate hairs all over dorsal surface; puncturation composed of fine, densely set punctures with slightly raised margins, smooth interspaces smaller than a puncture’s diameter; vertex flat, with median furrow between eyes; frontal part conically elongated, with frons stepped towards cheeks and slightly raised next to antennal sockets. Eyes large, hemispherical, and laterally strongly protruding. Maxillary palpi with broad and truncated terminal palpomeres. Antenna rather long; antennomere I conical in basal fifth, then broadened, club-shaped, 3.8 times as long as maximum width; antennomere II short, globular, partly concealed by first segment; antennomere III (Fig. 5) very large, slightly more than twice as long as broad, sub-elliptical to sub-rectangular, with two shallow depressions on inner side, curved apodeme next to base, and depression on upper side next to basal apodeme; antennomeres IV–XI filiform, each segment elongated, IV conical, broadest in apical third, V–X sub-parallel, XI broadest at mid-length and pointed at tip. Pronotum 1.2 times broader than long; with similar puncturation and pubescence as on vertex, but punctures bigger and interspaces smaller, thus appearing rather punctate-reticulate; disc convex, impressed medially and laterally near base; apex and sides arcuate, base weakly bisinuate; hind margin narrowly marginate, not reaching sides. Elytra oblong, 1.6 times as long as broad, sides divergent in basal third, then sub-parallel and smoothly convergent in apical five sevenths; shoulders developed; elytral tips individually rounded; suture normal. Elytral puncturation indistinct, composed of rather shallow dots with blurred margin and interspaces with coriaceous texture. Elytral pubescence slightly longer than on head and pronotum. Legs stout and slender, covered



Figs. 1–6: (1–3) *Intybia meyi* sp.n., holotypus: (1) head capsule, frontally; (2) right antennomere III; (3) median lobe of aedeagus, dorsally. (4–6) *Intybia pangantihoni* sp.n.: (4) habitus of holotypus; (5) left antennomere III of holotypus; (6) aedeagus, dorsally, of paratypus.

with short hairs throughout; femora and tibiae unmodified. Abdominal sterna unsclerotized in their middle portions. Aedeagus: apical tip of median lobe (Fig. 6) about twice as long as broad, truncated; main piece about 8.2 times as long as broad; endophallus with large

basal thorn-like sclerites and apically with two parallel rows of smaller thorn-like sclerites. Measurements in mm (n = 3): head length: 0.55–0.60 (mean: 0.57; holotype: 0.55); head width: 0.70–0.80 (mean: 0.77; holotype: 0.70); interocular width: 0.42–0.50 (mean: 0.47; holotype: 0.42); pronotal length: 0.60–0.65 (mean: 0.62; holotype: 0.60); pronotal width: 0.67–0.77 (mean: 0.73; holotype: 0.67); elytral length: 1.80–2.10 (mean: 1.95; holotype: 1.80); elytral width: 1.02–1.30 (mean: 1.20; holotype: 1.02); total body length: 2.95–3.35.

Structures of females: Main body parts as in male, except elytra in some specimens more widened in middle. Distinct from male by simple shape of antennomere III, that is enlarged to a multiple of the following antennomeres, twice as long as broad, and sub-parallel in outline. Terminalia not examined. Measurements in mm (n = 3): head length: 0.52–0.55 (mean: 0.54; allotype: 0.55); head width: 0.77; interocular width: 0.47–0.50 (mean: 0.49; allotype: 0.50); pronotal length: 0.65; pronotal width: 0.75–0.77 (mean: 0.76; allotype: 0.77); elytral length: 2.05–2.12 (mean: 2.10; allotype: 2.12); elytral width: 1.32–1.37 (mean: 1.35; allotype: 1.37); total body length: 3.25–3.32.

Description of the unique female from Negros: similar to the specimens from Cebu, but elytral markings of pure white colour, and size smaller. Measurements in mm (n = 1): head length: 0.47; head width: 0.67; interocular width: 0.45; pronotal length: 0.55; pronotal width: 0.65; elytral length: 1.80; elytral width: 1.10; total body length: 2.82.

Differential diagnosis: The new taxon is well characterised by its colouration, specifically by the combination of orange-red head and pronotum, black scutellum and elytra, and the latter bearing two pairs of whitish maculae, are slightly transverse before the middle, the other u-shaped in the posterior fourth. By colour it is similar to two other taxa that were described from the Philippines and are currently known to the author only by the original descriptions: *Laius quadristrigatus* CHAMPION, 1921 and *Laius confluens* WITTMER, 1941. Both species differ significantly in the structures of the male antennomere III (compare CHAMPION 1921: fig. 6; and WITTMER 1941: fig. 1). Furthermore, *L. quadristrigatus* possesses one pair of teeth on the lateral margins of pronotum.

Ecology: The type series has been collected from vegetation; there are no brooks in Alcoy Forest (C. V. Pangantihon, e-mail to H. Zettel, 22 January 2014).

Distribution: So far only known from two localities in the terrestrial biogeographic region of Greater Negros-Panay (sensu ONG et al. 2002).

### ***Intybia rectefasciata* (CHAMPION, 1921), comb.n.**

*Laius rectefasciatus* CHAMPION, 1921: 197. – GREINER 1937: 153. – WITTMER 1941: 223.

Material examined: 1 ♀ (cHZ): “Philippines: Camiguin \ Mambajao, Sudlon, slopes \ of Mt. Hibok-Hibok, 400 m \ 14.2.2007, lg. Zettel (471)” [w, p]; 3 ♀♀ (2 ♀♀ in cHZ; 1 ♀ in cIP): “Philippines: Camiguin \ Mambajao, Dagoocan \ spring, 350m, 14.2. \ 2007, lg. H. Zettel (472)” [w, p].

Distribution: This species was described after two females from the environment of Iligan City (Lanao del Norte Province) on Mindanao Island (CHAMPION 1921). WITTMER (1941) reported one female from “Dansalan” (= Marawi City; Lanao del Sur Province) on Mindanao. These are the first records from Camiguin Island.

Taxonomic note: Although the male sex is still unknown, this species is here tentatively transferred from *Laius* to *Intybia*.

### *Intybia semperi* (CHAMPION, 1921), comb.n.

*Laius semperi* CHAMPION, 1921: 201. – GREINER 1937: 154. – WITTMER 1941: 226.

Material examined: 1 ♂ (CHZ): “Philippinen: Cebu, Olango \ Is. (S), Olango Bird Sanct[uary], \ mangrove, shore, 15.11.2003 \ I. Zettel & Pangantihon (356)” [w, p].

Distribution: This species was described after a male and a female from Luzon (CHAMPION 1921). This is the first record from the terrestrial biogeographic region of Greater Negros-Panay (sensu ONG et al. 2002). The small islet Olango (N 10°14–17', E 124°01–04') is situated close to the eastern shores of Cebu and Mactan.

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Author's address: Isidor S. PLONSKI, Rembrandtstraße 1/4, 1020 Vienna, Austria  
E-mail: isidor.plonski@gmx.at