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Studies on the genus *Intybia* PASCOE, part II. Faunistic and taxonomic notes, with description of a new species of the *I. plagiata*-group (Coleoptera: Malachiidae)

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Abstract

A new species of the *Intybia plagiata* group (Coleoptera: Malachiidae: Malachiinae: Apalochrini) is described: *I. manfredjaechi* sp.n. from central India (Madhya Pradesh). Furthermore, a new key to the species group, and supplementary faunistic notes are provided. Three new combinations are proposed: *Intybia biguttula* (ERICHSON, 1840) comb.n., *I. rubrithorax* (PIC, 1907) comb.n. and *I. unimaculata* (PIC, 1917) comb.n. are transferred from *Laius* GUÉRIN-MÉNEVILLE, 1830.

Key words: Coleoptera, Malachiidae, *Intybia*, *Laius*, taxonomy, new species, new combinations, faunistics, India, Nepal, Sri Lanka, Thailand.

Introduction

The *Intybia plagiata* group of species has been monographed by WITTMER (1986; sub *Laius*). An additional species, *Intybia schuhi* (WITTMER, 1994), has been described by WITTMER (1994, sub *Laius*). All taxa treated by WITTMER (1986, 1994) have been transferred from *Laius* GUÉRIN-MÉNEVILLE, 1830 to *Intybia* PASCOE, 1866 by PLONSKI (2013).

According to WITTMER (1986), the species group is defined as follows: Consistently small species with grossly punctate elytra and less so dotted head and pronotum. The colour is in most species dominating black with dark or with more or less brightened 1st and 2nd antennomeres. The elytra have a yellow, brown or reddish transverse band on the basal third, which is enlarged to the sides, and a further transverse band before the apex, which however does not always reach the sides; These transverse bands are connected along the suture; At the sides of the bands, especially at the rear, the brown colour is sometimes mixed with a little white.

The present study is the second part of a project – for the preceding part see PLONSKI (2013). The aim of this study is (1) to describe one taxon as new to science, (2) to present a new key to the species group in question, to propose (3) new nomenclatorial acts, and to present (4) new faunistic records.

Material & methods

Nine specimens are dealt with in this study. All are dry preserved and housed in the Naturhistorisches Museum Wien (NMW), the Muséum National d'Histoire Naturelle, Paris (MHNP), and in the private collection of the author (cIP).

In order to study the aedeagus, the holotype of the new species was softened in distilled water for about 24 hours. Afterwards the abdomen was removed by using minuten pins. The abdomen was then treated in potassium hydroxide (KOH) for maceration of fat tissue, viz. heated for about five minutes long in a 10 percent solution (an encaustic painting iron was used as a heating dish). Then the terminalia were dissected by using minuten pins mounted on wooden handles. After rinsing, the dissected terminalia were mounted in a drop of dimethyl hydantoin formaldehyd

(DMHF) on a rectangular transparent plastic card, which has been affixed below the appropriate specimen on the same pin.

Label data are cited and described as accurate as possible for easier specimen identification in future revisions. The data of each label are placed between quotation marks (“...”), a backslash with a space on either side (\) separates lines, and information placed between square brackets ([...]) provides further details. Different labels associated with one specimen are linked with a comma. Furthermore, the colour of the labels is noted (w = white; r = red), as well if information is handwritten (hwr) or printed/typed (p).

All observations during the preparation/dissection, identification and description process were made with the help of a Leica MZ 6, with magnification up to 66 ×. Additional comparative observations were made with the help of a Leica M205 C, with magnification up to 120 ×. For illustration of antennomeres a Nikon DS-Ri1 camera mounted on a Nikon SMZ 1500 stereo-microscope, and for illustration of the aedeagus a Nikon DS-Fi1 camera mounted on a Nikon Eclipse 80i microscope have been used.

Results

Intybia manfredjaechi sp.n.

TYPE LOCALITY: Margin of a contributory brook of the Dhobighat Nala [stream], ca. 2 km SE Pachmarhi hill station (Satpura Mountain Range), Hoshangabad district, Madhya Pradesh, central India.

TYPE MATERIAL: **Holotype** ♂ (NMW): “INDIA (MP7) southern \ Madhya Pradesh \ Hoshangabad Dist. \ 27.II.2008 \ leg. M.Jäch, S&P Sharma” [w, p], “Dhobighat Nala [stream] \ ca. 2 km SE Pachmarhi \ Satpura Range \ ca. 900 m \ 22°27'31"N/78°26'41"E” [w, p], “HOLOTYPUS \ *Intybia* \ manfredjaechi \ spec.nov. \ det. I. Plonski 2009” [r, p].

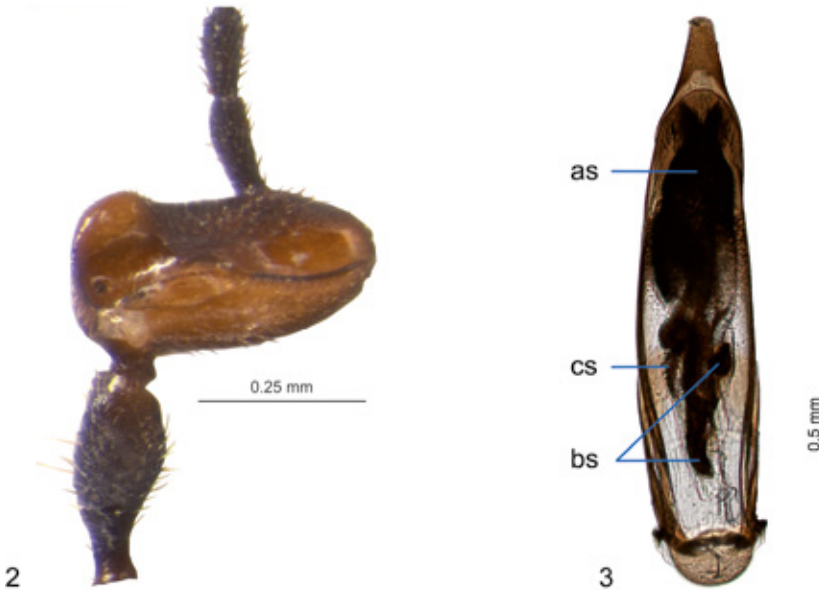
The specimen lacks the right protarsus.

DESCRIPTION: Length: 3.2 mm. Coloration: body lustreless. Pubescence composed of mostly black setae on upper surface, and whitish setae on legs. Head capsule totally black. Eyes black. Mouthparts totally black. Antennae almost black, except inner side of antennomere III partly chestnut brown. Pronotum and prothorax both totally black. Scutellum, mesothorax, metathorax and abdomen totally black. Elytra bicolorous (Fig. 1), mostly orange, with exception of: (1) black macula around scutellum, not reaching shoulders or side margins, covering 2/6 of elytral length; (2) rounded black macula in 2/3 of elytral length, reaching side margin, but not suture; and (3) transverse apical macula, reaching side margin and suture. All legs totally black.

Structure: Head capsule elongate, slightly wider than pronotum, densely covered with punctures with raised margins and short setae on dorsal surface, except shortly before clypeus, where punctures are finer, normal and with more interspace between them; vertex rather flat with a median line just between eyes; frons very weakly elevated against cheeks; frontal part roundly elongate. Maxillary palpi with cylindrical and latero-apically truncate terminal palpomeres. Eyes large and globular. Antennae rather long; antennomere I conical in basal quarter, then abruptly broadened, club-shaped, 2.4 times as long as broad; antennomere II very short and rather globular; antennomere III (Fig. 2) very large, 1.8 times as broad as long, sub-elliptical, with two shallow depressions on inner side, a transverse costa next to the basis, a curved apodeme at the basis of the inner side, and a thickened and rounded extension at the apex of the inner side; antennomeres IV–XI filiform, antennomeres IV–X elongate and subconical, broadest near the middle or the apex respectively, antennomere XI subparallel-sided and pointed at tip.



Fig. 1: Habitus of *Intybia manfredjaechi* sp.n., holotype, restored digitally.



Figs. 2–3: *Intybia manfredjaechi*, 2) antennomeres I–V, 3) aedeagus; as: amorphous structure, bs: basal sclerites, cs: cone-like structure.

Pronotum as broad as long; pubescence and punctation similar to those on vertex, but setae longer and punctures bigger; disc bulged on anterior 2/3; constricted towards base; on posterior 1/3 transversely depressed; hind margin narrowly margined throughout.

Elytral pubescence composed of suberect setae, which are longer than those on pronotum. Elytra oblong, 1.3 times as long as broad, sides almost straight on basal 5/7, divergent posteriorly, then rather abruptly convergent apically; punctate-reticulate throughout, punctures large; shoulders well developed; elytral tips individually rounded; suture elevated, as broad as adjoining punctures.

Legs long and slender, covered with short setae; femora and tibiae normal.

Sternites unsclerotized in the middle portion. Aedeagus (Fig. 3) elongate, broadest in the middle, convergent to both base and apex; apical tip slightly curved ventrad; internal sac at base with about 4–5 large sclerites in basal half, and with a row of tiny sclerites forming a cone-like structure on right side, and at apex with numerous tiny sclerotizations forming a more or less amorphous, apically furcate structure in apical half.

Measurements in mm (n = 1): head length: 0.58; head width: 0.8; interocular width: 0.5; pronotal length: 0.75; pronotal width: 0.75; elytral length: 1.96; elytral width: 1.33.

DIFFERENTIAL DIAGNOSIS: The new taxon is well characterised, especially by the shape and size of the male antennomere III.

DISTRIBUTION: So far, only known from its type locality.

ETYMOLOGY: The epithet is a patronym. The new species is named after its collector, Dr. Manfred A. Jäch, an expert of aquatic beetles.

Revised key to the *Intybia plagiata* group

This key is a translation and a revised version of the key published by WITTMER (1986).

Terms used by WITTMER (1986, 1994) in German describing the morphology of the third antennomere have been translated as follows: “umgeschlagen” as ‘reflexed’; “Querleiste” as ‘transverse costa’.

- | | | |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 1 | Protibiae bicolorous, apical half yellow, basal half black | <i>schuhi</i> (WITTMER, 1994) |
| – | Protibiae unicolorous black | 2 |
| 2 | Sides of forehead more or less raised | 3 |
| – | Sides of forehead not raised, continuously sloping towards cheeks | 9 |
| 3 | Antennomere III with a reflexed part at the inner margin (WITTMER 1986: figs. 1–3)..... | 4 |
| – | Antennomere III not reflexed at the inner margin, but curved (Fig. 2) and 1.8 times wider than long. Sides of forehead hardly raised against the cheeks | <i>manfredjaechi</i> sp.n. |
| 4 | The reflexed part at the inner margin of antennomere III shorter than one third of the antennomere’s width..... | 5 |
| – | The reflexed part at the inner margin of antennomere III longer than one third of the antennomere’s width (WITTMER 1986: figs. 1–2)..... | <i>plagiata</i> (WALKER, 1858) |
| 5 | Antennomere III viewed from above with a transverse costa, which is more or less long; this antennomere is less broad, less than 1.9 times as wide as long..... | 6 |
| – | Antennomere III viewed from above without distinct transverse costa; this antennomere is very slim and broad, nearly 1.9 times as wide as long (WITTMER 1986: figs. 3–4)..... | <i>kurosawai</i> (WITTMER, 1986) |
| 6 | Antennomere III with distinct transverse impression before the reflexed part at the inner margin..... | 7 |
| – | Antennomere III without distinct transverse impression before the reflexed part at the inner margin (WITTMER 1986: figs. 23–24)..... | <i>lueoendi</i> (WITTMER, 1986) |
| 7 | Inside the transverse impression before the reflexed part of antennomere III there is no point-like elevation. Sides of forehead less raised against the cheeks | 8 |
| – | Inside the transverse impression before the reflexed part of antennomere III there is a point-like elevation, which is rarely missing. Sides of forehead strongly raised against the cheeks (WITTMER 1986: figs. 6–7)..... | <i>juengeri</i> (WITTMER, 1986) |
| 8 | Antennomere I on the outer margin angularly extended and broadly and flatly impressed (WITTMER 1986: figs. 8–9)..... | <i>kanarensis</i> (PIC, 1917) |
| – | Antennomere I on the outer margin less angularly extended (WITTMER 1986: fig. 10)..... | <i>kanarensis</i> (PIC, 1917) var. |
| 9 | Smooth areas on the head are missing entirely. The head is entirely densely and deeply punctate..... | 11 |
| – | A smooth area without punctuation is located on the sides of the forehead next to the cheeks, or around the eyes | 10 |
| 10 | The smooth area is impressed and is located on both sides of the forehead next to the cheeks; it starts next to the antennal sockets and reaches nearly the apical margin of the eyes. Antennomeres I–III as in WITTMER (1986: figs. 11–12)..... | <i>canaliculata</i> (WITTMER, 1986) |
| – | The smooth area is not impressed and is located around the eyes. Antennomeres I–III as in WITTMER (1986: figs. 13–14)..... | <i>partepolita</i> (WITTMER, 1986) |
| 11 | Antennomere III without transverse costa | 12 |
| – | Antennomere III with well-developed transverse costa | 13 |

- 12 Antennomere I with a small pointed projection at its base (WITTMER 1986: fig. 16). Outer pit of antennomere III less deep..... *afghanistanica* (WITTMER, 1986)
- Antennomere I more parallel-sided, without small pointed projection on its base or the projection is less developed (WITTMER 1986: fig. 18). Outer pit of antennomere III deeper...
..... *pakistanica* (WITTMER, 1986)
- 13 Transverse costa on antennomere III less than half as long as the width of the antennomere 14
- Transverse costa on antennomere III more than half as long as the width of the antennomere 15
- 14 Antennomere I widened rather strongly at the centre and there less impressed, slightly longer than it is wide. Antennomere III with impression next to the reflexed part at the inner margin as large as the outer one (WITTMER 1986: fig. 19)..... *burmensis* (WITTMER, 1986)
- Antennomere I at the centre widened to both sides. Antennomere III with impression next to the reflexed part at the inner margin smaller than the outer one (WITTMER 1986: fig. 21)....
..... *jocelynae* (WITTMER, 1986)
- Note: in the key by WITTMER (1986: 217) this species is incorrectly spelled as “*jacelinae*”.
- 15 Transverse costa on antennomere III not bead-like thickened against the reflexed part at the inner margin..... 16
- Transverse costa on antennomere III bead-like thickened, best visible next to the reflexed part at the inner margin (WITTMER 1986: fig. 23)..... *lueoendi* (WITTMER, 1986)
- 16 Apex of antennomere I slightly or not broadened, at the outer margin excavated (WITTMER 1986: figs. 31–32)..... 17
- Apex of antennomere I club-like broadened, at the outer margin not flattened (WITTMER 1986: figs. 25–26)..... *variolosa* (BOURGEOIS, 1905)
- 17 Elevated part of antennomere I shorter (WITTMER 1986: fig. 31); pits of antennomere III less deep (WITTMER 1986: figs. 27–28)..... *foveicornis* (PIC, 1917)
- Elevated part of antennomere I longer (WITTMER 1986: fig. 32); pits of antennomere III very deep (WITTMER 1986: figs. 29–30)..... *bengalensis* (WITTMER, 1986)

Taxonomic and faunistic notes

Intybia bengalensis (WITTMER, 1986)

Laius bengalensis WITTMER 1986: 230. – MAYOR 2007: 417.

Intybia bengalensis: PLONSKI 2013: 63.

MATERIAL EXAMINED:

NEPAL: 1 ♂ (NMW): “Nepal, 60km NW Pokhara \ Dana, 1400m \ leg. Wewalka 9.5.1984 (N 10,12)” [w, p]. 1 ♂ (NMW): “NEPAL 13.6.1986 \ Myagdi Distr. \ Shikka-Tatopani” [w, p], “Ghara Khola \ 1000-2000 m \ leg. Probst” [w, p].

Intybia biguttula (ERICHSON, 1840) comb.n.

Laius biguttulus ERICHSON 1840: 64. – GREINER 1937: 149. – WITTMER 1957: 46.

NOTE: This taxon has been redescribed by WITTMER (1957). There is no doubt that it belongs to the genus *Intybia*.

Intybia majeri WITTMER, 1997

Intybia majeri WITTMER 1997: 197.

MATERIAL EXAMINED:

THAILAND (Surat Thani Province): 1 ♂ (cIP): “THAILAND \ around accom. area \ outside KHAO SOK N.P. \ 9.-11.04.2001 \ A. KUDRNA JR. LGT” [w, p].

FAUNISTICS: *Intybia majeri* was described after 30 specimens collected near Phato (Chumphon Province). This is the second record for Thailand, and the first record for the Surat Thani Province respectively.

***Intybia nodifrons* (CHAMPION, 1921)**

Laius nodifrons CHAMPION 1921: 327. – GREINER 1937: 152. – WITTMER 1989: 229. – MAYOR 2007: 418.

Intybia nodifrons: PLONSKI 2013: 65.

MATERIAL EXAMINED:

NEPAL: 1 ♂ (NMW): “Pinthan \ Umg. [surroundings], 12./15.V.” [w, hwr], “Westl. Nepal \ lg. P. König 1967” [w, hwr].

***Intybia plagiata* (WALKER, 1858)**

Malachius plagiatus WALKER 1858: 283.

Laius plagiatus: BOURGEOIS 1905: 130. – CHAMPION 1921: 332. – GREINER 1937: 153. – WITTMER 1986: 217.

Intybia plagiata: PLONSKI 2013: 65.

MATERIAL EXAMINED:

SRI LANKA: 2 ♀♀ (NMW): “Anuradhapura \ W. Horn 1899” [p], “*Laius \ plagiatus* Walk. [both lines hwr by Hicker] \ det.Rich.Hicker [p]” [w].

***Intybia rubrithorax* (PIC, 1907) comb.n.**

Laius rubrithorax PIC 1907: 190.

Laius rubithorax [lapsus calami]: GREINER 1937: 154. – MAYOR 2007: 418.

TYPE MATERIAL EXAMINED:

Holotypus ♂ (MHNP): “Yunnan” [w, p], “type” [w, hwr], “Type” [r, p], “*Laius \ rubrithorax \ Pic*” [w, hwr by Pic], “HOLOTYPUS \ *Laius \ rubrithorax \ Pic, 1907 \ rev. I. Plonski 2013*” [r, p], “*Intybia \ rubrithorax \ (Pic, 1907) \ comb. n. \ det. I. Plonski 2013*” [w, p].

***Intybia unimaculata* (PIC, 1917) comb.n.**

Laius unimaculatus PIC 1917: 6. – GREINER 1937: 155.

TYPE MATERIAL EXAMINED:

Holotypus ♂ (MHNP): “Pontianak \ S. Borneo” [w, hwr], “voi[sin] \ biguttulus \ .. [illegible, probably two letters]” [w, hwr], “n sp” [w, hwr], “type” [w, hwr], “unimaculatus \ Pic” [w, hwr by Pic], “HOLOTYPUS \ *Laius \ unimaculatus \ Pic, 1917 \ rev. I. Plonski 2014*” [r, p], “*Intybia \ unimaculata \ (Pic, 1917) \ comb.n. \ det. I. Plonski 2014*” [w, p].

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References

- BOURGEOIS, J. 1905: Voyage du Dr W. Horn a Ceylan. Malacodermes et Lymexylonoides. – Annales de la Société entomologique de France 74: 127–133.
- CHAMPION, G.C. 1921: Notes on various African and Asiatic species of *Laius*, Guérin, with an account at their accessory ♂-characters (Coleoptera). – The Annals and Magazine of Natural History 9 (7): 322–343.
- ERICHSON, W.F. 1840: Entomographien, Untersuchungen in dem Gebiete der Entomologie, mit besonderer Benutzung der Königl. Sammlung zu Berlin. Erstes Heft. – Berlin: F.H. Morin, 180 pp.
- GREINER, J. 1937: Pars 159: Malachiidae. – In Schenkling, S. (ed.): Coleopterorum Catalogus. – 's-Gravenhage: W. Junk, 199 pp.
- MAYOR, A.J. 2007: Family Malachiidae, pp. 415–454. – In Löbl, I. & Smetana, A. (eds.): Catalogue of Palaearctic Coleoptera, Vol. 4. – Stenstrup: Apollo Books, 935 pp.
- PIC, M. 1907: Coléoptères exotiques nouveaux ou peu connus. – L'Échange, Revue Linnéenne 23: 190–191.
- PLONSKI, I.S. 2013: Studies on the genus *Intybia* Pascoe (Coleoptera: Malachiidae). I. Some nomenclatorial acts and faunistic records. – Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen 65: 61–68.
- WALKER, F. 1858: Characters of some apparently undescribed Ceylon Insects. – The Annals and Magazine of Natural History (3rd Series) 2: 280–286.
- WITTMER, W. 1957: 20. Beitrag zur Kenntnis der indo-malayischen Malacodermata (Col.). – Mitteilungen der Schweizerischen Entomologischen Gesellschaft 30 (1):25–47.
- WITTMER, W. 1986: *Laius plagiatus* (Walker) und verwandte Arten (Coleoptera, Malachiidae). (39. Beitrag zur Kenntnis der indo-malaiischen Fauna), pp. 215–232. – In Ueno, S.I. (ed.): Entomological papers presented to Yoshihiko Kurosawa on the occasion of his retirement. – Tokyo: Coleopterists Association of Japan, 342 pp.
- WITTMER, W. 1989: 42. Beitrag zur Kenntnis der indo-malaiischen Cantharidae und Malachiidae (Coleoptera). – Entomologica Basiliensia 13: 207–237.
- WITTMER, W. 1994: Neue Malachiidae (Coleoptera) aus dem palarktischen und indomalayischen Faunengebiet. – Mitteilungen der Entomologischen Gesellschaft Basel 44 (1): 2–26.
- WITTMER, W. 1997: Zur Kenntnis der Gattungen *Intybia* Pascoe und *Stenolaius* Wittmer (Coleoptera, Malachiidae). – Japanese Journal of Systematic Entomology 3 (2): 181–211.

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