

Five new species of the genus *Indocurculio* PAJNI et al., and three new combinations (Coleoptera: Curculionidae: Curculioninae)

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Abstract

The genus *Indocurculio* PAJNI, SINGH & GANDHI is a ditypic genus originally described from India. In this treatise five new species are described: *I. jaegeri* sp.n. [Philippines], *I. klassi* sp.n., [Indonesia, Borneo], *I. limbourgi* sp.n. [Papua New Guinea], *I. nami* sp.n. [Vietnam], and *I. schoedli* sp.n. [Indonesia, Sulawesi]. Three new combinations are presented: *I. minusculus* (HELLER) comb.n., *I. nigromarginalis* (HELLER) comb.n., and *I. wolterecki* (HELLER) comb.n., all transferred from *Balaninus* GERMAR. A key to the species of *Indocurculio* of the world is presented.

Key words: Coleoptera, Curculionidae, Curculioninae, Curculionini, *Indocurculio*, taxonomy, new species, new combinations.

Introduction

The genus *Indocurculio* PAJNI, SINGH & GANDHI, 1994 was originally described from India. However, while visiting the museums listed below a number of new species and new combinations were discovered from Indonesian Borneo, Sulawesi, Papua New Guinea, Philippines, and Vietnam.

Indocurculio is distinguished from *Curculio* by the small size, the very short antennal scape ($\frac{1}{2}$ or less than the length of the funiculus), the incrassate base of the rostrum from frons to insertion of scape, large round or oval eyes, rostrum continuous with frons, and the short, stubby median lobe of the aedeagus. The most distinguishing character separating *Indocurculio* from other genera of the Curculionini is the short scape. Some species of the Curculionini have the incrassate base of the rostrum, as in *Curculio breviscapus* (HELLER) (PELSUE & ZHANG 2002), large eyes, rostrum continuous with the frons (see PELSUE & ZHANG 2000b), and a short, stubby median lobe of the aedeagus; but all the characteristics of the *Indocurculio* listed above in their totality separate them from the remainder of the Curculionini.

The only notes on the biology of *Indocurculio* were that the type species of the genus, *I. minutus*, was collected from the fruits of *Ficus infectoria* ROXBURGH, and *I. chandigarhensis* was collected sweeping bushes in the type locality (PAJNI, SINGH & GANDHI 1994).

Material & Methods

Type specimens are deposited in the Bernice P. Bishop Museum (S. Myers), Frank W. Pelsue Collection, Institut Royal Des Sciences Naturelles De Belgique (P. Gootaert), Naturhistorisches Museum Wien (H. Schönmann), and Staatliches Museum für Tierkunde, Dresden (K. Klass).

I would like to thank the following: Mr. P. Limbourg, Dr. H. Schönmann, Dr. K. Klass, O. Jäger, Dr. S. Lingafelter and Dr. A. Samuelson for the loan of specimens. I would like to thank my

anonymous reviewer for the many insightful comments and suggestions for improvement of the manuscript.

Abbreviations:

BPBM	Bernice P. Bishop Museum, Honolulu
FWPC	Frank W. Pelsue Collection, Corona
ISNB	Institut Royal des Sciences Naturelles de Belgique, Brussels
NMW	Naturhistorisches Museum Wien, Vienna
SMTD	Staatliches Museum für Tierkunde, Dresden

Photographs were taken with a Canon D30 digital camera through a Leica MZ16 stereoscopic microscope and edited with Adobe Photoshop 2.0. See PELSUE & ZHANG (2000a) for measurement criteria.

Key to the species of the species of *Indocurculio* of the World

- | | | |
|---|--|------------------------|
| 1 | Apex of metafemur extending beyond apex of elytra..... | 3 |
| – | Apex of metafemur not extending beyond apex of elytra | 2 |
| 2 | Thorax with lateropleuromacula of clavate ochroleucus scales ♂ 2.40–2.70 mm. | <i>minutus</i> |
| – | Thorax without lateropleuromacula of clavate ochroleucus scales ♀ 3.14 mm. | <i>chandigarhensis</i> |
| 3 | Metafemur extending beyond apex of elytra by margin as great or greater than dorsal thickness of femoral clava. | 4 |
| – | Metafemur reaching or slightly extending beyond apex of elytra, but by less than dorsal thickness of femoral clava | 5 |
| 4 | Apex of elytra emarginate where it joins at apex; elytral intervals with two fulvus scales abreast for length of interval (Fig. 2) ♂ 2.5 mm..... | <i>klassi</i> |
| – | Apex of elytra truncate where it joins at apex; elytral intervals with three fuscous scales abreast for length of interval (Fig. 3) ♂ 3.15–3.80 mm..... | <i>limbourgi</i> |
| 5 | Mesoventral intercoxal process prominently visible in lateral view. (Fig. 4) ♀ 3.6 mm..... | <i>schoedli</i> |
| – | Mesoventral intercoxal process not visible or feebly visible in lateral view..... | 6 |
| 6 | Pro-, meso-, and metafemoral teeth small (Fig. 13a)..... | 7 |
| – | Pro- and mesofemoral teeth small, metafemoral tooth medium | 8 |
| 7 | Antennomere 1 as long as 2, 3 as long as 2 (Fig. 8) ♀ 2.8 mm..... | <i>nami</i> |
| – | Antennomere 1 as long as 2, 3 more than ½ as long as 2 (Fig. 1) ♀ 3.0 mm..... | <i>jaegeri</i> |
| 8 | Rostrum less than ½ body length; sternum I with median callus just before suture between sternum I and II (Fig. 5) ♂ 2.4–3.0 mm. | <i>minusculus</i> |
| – | Rostrum more than ½ body length; sternum I without median callus..... | 9 |
| 9 | Elytra with large macula of fulvus scales laterally bordered by fuscous scales (Fig. 6) ♂ 3.5 mm..... | <i>nigromarginalis</i> |
| – | Elytra without large macula of fulvus scales, with white scales; white scales 3–4 abreast on intervals against fuscous derm giving grey appearance (Fig. 7) ♂ 3.7–4.0 mm | <i>wolterecki</i> |

Indocurculio jaegeri sp.n.

TYPE MATERIAL: **Holotype** ♀ (SMTD): “Catanduanes=Catanduanes Island Philippines\Virac\W. Schultze Ig”, “Coll. W. Schultze\Ankauf 1942”, “Staatl. Museum für Tierkunde Dresden”.

DESCRIPTION: ♀ Habitus (Fig. 1). Length: 3.0 mm. Width: 1.6 mm. Head: large; glabrous; gena with small recumbent dirty white scales; frons 0.07 as broad as head across eyes; with

median carinae extending to rostrum. Rostrum: 1.4 mm long, 0.46 as long as body; derm piceous; dorsal median carinae continuous with carinae from frons, lateral carinae to insertion of scape; almost straight to midpoint then slightly deflexed to apex. Antennal scape 0.3 mm, funicle 1.1 mm, club 0.3 mm long; scape 0.3 as long as scape; antennomere 1 as long as 2, 3 sub-equal to 2, 4–7 same length sub-equal to 3, clothed with few long sub-erect setiform scales; club not as long as antennomeres 4–7 sub-equal to 5–7. Thorax: 0.9 mm long, 1.4 mm wide, 0.64 as long as broad; derm piceous; disc punctures with raised margins, with short decumbent fuscopiceous scales; pleuron rugose with broad, clavate, striated, white scales; disc slightly convex in lateral view; mesepimeron, mesepisternum, metepisternum, and ventrosternum clothed with broad, clavate, striate white scales; scutellum small, round, sparsely clothed with small elongate white scales; mesoventral intercoxal process not visible in lateral view; disc with basolateral fascia reaching interval 3 of elytra. Elytral striae narrow, shallow, with small elongate testaceous scales; shallow scutellary declivity; humeri rounded; intervals broad, flat, clothed with small sub-erect piceous scales in rows of three across; short vittae on intervals 1–2 flanking scutellum of clavate white scales; approximately midway from base white fascia on intervals 1–2, 4–9; crosshatched setae suberect forming white vittae from fascia to apex. Legs: all femoral teeth small; clothed with narrow elongate white scales; femur moderately clavate; metafemur exceeds apex of elytra; tibiae linear, sub-sinuous, pro-, meso-, and metauncus small; right metatarsus missing. Abdomen: sternum I longer than II behind coxal cavity; sterna III+IV as long as V; sternum V with truncate apex; all sterna clothed with narrow, elongate, white scales. Pygidium: small, with short testaceous setiform scales. Genitalia: spermatheca 0.5 mm long; ramus short; collum slightly broad with cornu arched to narrow, rounded apex.

DISTRIBUTION: Known only from type locality.

DIFFERENTIAL DIAGNOSIS: This species appears unique to the genus due to the broken basal fascia on the pronotum, short vittae flanking the scutellum, and median fascia on the elytra all of white scales. *Indocurculio limbourgi* has a somewhat similar scale pattern, but is larger in size, and has median vittae of white scales on the disc of the pronotum with two fascia of white scales on the elytra.

ETYMOLOGY: This species was discovered in the collection of the SMTD and named for Dr. Olaf Jäger.

Indocurculio klassi sp.n.

TYPE MATERIAL: **Holotype** ♂ (SMTD): “Indonesia\S. Kalimantan Prov.\Loksado 17 km NE 1000m\3-22-IX-1997\St. Jakl lg”. **Paratype** ♀ same locality as holotype (FWPC).

DESCRIPTION: ♂ Habitus (Fig. 2). Length: 2.5 mm. Width: 1.4 mm. Head: large, broad with large oval eyes; punctures rather large, ridged, with small elongate testaceous scales; gena with small, clavate, striate, white scales with truncate apex; frons 0.2 as broad as head across eyes; median carinae flanked by ridged punctures. Rostrum: 1.3 mm long; 0.52 as long as body; derm piceous; two lateral carinae from frons to insertion of scape, with large punctures between small punctures and carinae; dorsally set with punctures from frons to smooth area beyond incassate base with smaller oval punctures on tubular portion and broad at base, lateral sulcus, narrowing to past midpoint to slightly enlarged apex; evenly deflexed from base to apex. Antennal scape 0.3 mm, funicle 0.6 mm, club 0.2 mm long; scape 0.3 as long as funicle; antennomeres 1 and 2 same length, 3 and 4 sub-equal, 5–7 same length but becoming slightly broader apically; antennomere 1 of club longer than 7th funicular antennomere; club as long as antennomeres 4–7. Thorax: 0.4 mm long; 0.9 mm wide; 0.4 as long as broad; disc punctures moderately large, ridged, with narrow elongate, truncate apex, testaceous scales; pleuron with striate, clavate, white scales; base sub-sinuate with central peak pointing to scutellum; mesoventral intercoxal

process not visible in lateral view, as broad as diameter of mesocoxae; scutellum very small, circular, with few small narrow white scales; mesepimeron, mesepisternum, metepisternum and ventrosternum with small, clavate, striated, testaceous and white scales. Elytral striae narrow, deep with very narrow elongate testaceous scales; scutellary declivity somewhat deep; humeri rounded, intervals broad with narrow, clavate, striate, testaceous scales, running side by side from base to apex; crosshatched setae erect, piceous. Legs: metafemoral tooth small, pro-, and mesofemoral teeth very small; derm piceous, clothed with narrow, elongate, acute, white scales; tibiae sub-sinuate; pro-, meso-, and metauncus small; tarsomere 1 longer than 2; metafemur exceeds apex of elytra. Abdomen: sternum I longer than II behind coxal cavity; sternum III+IV longer than II and V; sternum V with truncate apex and large median declivity; vestiture of clavate, striated, white scales with truncate apices. Genitalia: median lobe 0.4 mm long, 0.3 mm; apodeme 0.7 mm long (Fig. 9).

Female: length: 2.8 mm; 1.7 mm wide. Rostrum: 1.4 mm long; Antennal scape 0.25 mm, funicle 0.52 mm, club 0.3 mm long. All other details same as male except for slightly larger scutellum. Genitalia: spermatheca 0.4 mm long with ramus and collum undifferentiated; cornu about same width to slightly turned up pointed apex.

DISTRIBUTION: Known only from type locality.

DIFFERENTIAL DIAGNOSIS: No other species in the genus can be confused with this species due to the apex of metafemur extending beyond the apex of the elytra by a distance greater than the dorsal width of the femoral clava and the unicolorful fulvus scales on pronotum and elytra.

ETYMOLOGY: This species was discovered in a group of weevils purchased by the author and is named for Dr. Klaus Klass, curator of Coleoptera at the SMTD.

Indocurculio limbourgi sp.n.

TYPE MATERIAL: **Holotype** ♂ (ISNB): "Coll. I. R.Sc. N. B.\Canopy mission P. N. G.\Madang province\Beiteta 20-V-1996\light E AR52\CCL-73556\Lg. O. Missa". **Paratypes**: (7 exs.) 4 ♂♂, with same data as holotype except for the following: "13.V.1993\FOG XB-07\CCL-2278", "04.VIII.1995\FOG AR 23-9\CCL-8076", "GLU 405\WK4\CCL-11567", "FOG AR 58-72\CCL-75304" (3 exs.) ♀♀, with same data as holotype except for the following: "FOG AR 54-7\CCL 15744", "18.VII.1996\Light AR 34\CCL 74403", "13.VI.1995\FOG AR 19-20\CCL-7650" (2 ♂♂ 2 ♀♀ ISNB) (2 ♂♂ 1 ♀ FWPC).

DESCRIPTION: ♂ **Habitus** (Fig. 3). Length: 3.3–3.8 mm (mean = 3.4 mm). Width: 1.9–2.0 mm (mean = 1.9). Head: rather broad, small punctures, densely clothed with small, narrow fuscous scales; with small narrow cretaceous scales around margin of eye; gena clothed with same scales as around eye; frons 0.21 as broad as head across eyes; slightly narrower than maximum width of rostrum at insertion of scape, invested with same scales as head. Rostrum: 1.5–1.8 mm (mean = 1.7 mm), 0.47 as long as body; derm fuscopiceous; median carinae from frons to insertion of scape; incrassate portion with lateral punctures and small white scales above scrobe; slightly deflexed from base to apex, scrobe ventral, scape inserted at apex of incrassate portion. Antennal scape 0.4 mm, funicle 0.9 mm, club 0.4 mm long; scape 0.4 as long as funicle; antennomere 1 and 2 same length, 3 sub-equal to 2, longer than 4, 5–7 same length with 7, broader than 6; antennomeres clothed with narrow, elongate, decumbent, cretaceous scales; club longer than antennomeres 5–7, subequal to 4–7. Thorax: length 0.9 mm; width 1.4 mm; 0.64 as long as broad; derm piceous; disc with median vittae of small clavate cretaceous scales, base with fascia broader on lateral margins, then narrowing towards median vittae of small clavate cretaceous scales; punctures small with defined margins and small, narrow, fuscous scales; pleuron with continuation of basal fascia forming V-shaped pattern of same cretaceous scales with anterior margin, apices visible in dorsal view, dark scales on pronotum small, narrow, elongate, decumbent, piceous; mesoventral intercoxal process feebly visible; scutellum small, shield-

shaped, clothed with cretaceous scales; mesepimeron, mesepisternum, metepisternum, and sternum evenly clothed with clavate striated cretaceous scales with truncate apices. Elytra: striae narrow with small punctures and small narrow, elongate, fuscous scales; derm piceous; deep scutellary declivity; humeri rounded; intervals broad, flat, clothed with narrow, elongate, decumbent, piceous scales staggered three abreast; short vittae on intervals 1 and 2 extends from scutellum to midpoint of clavate striated cretaceous scales with truncate apices; two fascia consisting of same cretaceous scales, one located just before midpoint, second located just past midpoint; decumbent, cretaceous, crosshatched setiform scales extend from fascia 2 to apex. Legs: pro- and mesofemoral teeth small, metafemoral tooth medium, all thorn-shaped; clava somewhat incrassate, clothed with small narrow elongate white scales, with few piceous scales; tibiae subsinuate, pro-, meso-, and metauncus small; metafemur exceeds apex of elytra. Abdomen: sternum I longer than II behind coxal cavity; sterna III+IV longer than sternum II, as long as sternum V; all sterna clothed with clavate cretaceous scales with truncate apices; apex of sternum V truncate. Pygidium: small, clothed with few narrow, elongate cretaceous scales and few longer testaceous hair-like scales. Genitalia: median lobe 0.3 mm in length broader basally and apically than middle in dorsal view, deflexed in lateral view to broad apex, 0.2 mm in width; apodeme 0.4 mm in length (Fig. 10).

Female: Length: 3.4 mm Width: 1.9 mm Rostrum: 1.8 mm in length. Genitalia: spermatheca, ramus and collum undifferentiated, cornu deflexed from union with collum to broadly acute apex, 0.9 mm in length.

DISTRIBUTION: Known only from the type locality.

DIFFERENTIAL DIAGNOSIS: This species is very distinct from the other species in the genus and can not be confused with any other members of the Curculionini due to the pattern of white scales on the elytra of two broken fasciae, vittae posterior to scutellum on intervals 1 and 2 and median vittae on pronotum. Also, it can be differentiated from other members of the genus by the median lobe being longer and with the apex divided into large lobes in dorsal view and in lateral view becoming broader toward deflexed apex.

ETYMOLOGY: This species was discovered in the collection of the ISNB and is named for Pol Limbourg, curator of Coleoptera.

Indocurculio schoedli sp.n.

TYPE MATERIAL: **Holotype** ♀ (NMW): "Sulawesi\1992\Umg. Malino (27) Ö Ujung Padang\lg. Schödl\29.IV".

DESCRIPTION: ♀ Habitus (Fig. 4). Length: 3.6 mm. Width: 1.9 mm. Head: moderately large; punctures small, somewhat reticulate with small narrow elongate testaceous scales arising from each puncture; gena clothed with small subclavate recumbent white scales; frons 0.07 as broad as head across eyes, narrower than base of rostrum with median carinae and oval punctures; with small, elongate, testaceous scales along margin of eyes. Rostrum: 1.8 mm long; 0.5 as long as body; derm fuscopiceous at incrassate base becoming fuscous beyond insertion of scape; punctures at base large, oval, moderately deep; median carinae, extension of those found on frons, punctures on tubular portion very small in line on each side of smooth midline, laterally also in line; gradually deflexed from base to apex. Antennal scape 0.4 mm, funicle 0.9 mm, club 0.4 mm in length; scape 0.4 as long as funiculus; antennomeres 1 and 2 same length, 3–7 subequal with 7 at base; club, oval, compact, as long as antennomeres 4–7; left antennal club missing. Thorax: Length: 1.1 mm. Width: 1.5 mm. 0.73 as long as broad; disc with base subsinuate, punctures small, numerous with defined raised margins and single narrow elongate testaceous scales, slightly convex in lateral view; pleuron with larger, clavate, testaceous scales; anteroventrally same scales; mesoventral intercoxal process prominent in lateral view; scutellum

small, sub-circular, glabrous (however appears denuded); mesepimeron, mesepisternum, metepisternum, and metaventrite with recumbent clavate testaceous scales. Elytra: striae narrow with very small, narrow, elongate, testaceous scales; scutellary declivity shallow; humeri rounded; intervals moderately broad, flat, clothed with clavate decumbent testaceous scales with truncate apices, with scattered light testaceous scales; crosshatched setae suberect, short, not prominent. Legs: profemoral tooth minute, barely visible, meso-, and metafemoral tooth small, larger than profemoral tooth; vestiture of narrow, elongate, testaceous scales with acute apex; tibiae sub-sinuate; pro-, meso-, and metauncus small; protibiae, tarsus, mesotarsus missing on left side, tarsomeres 2–4 on right metatarsus; metafemur exceeds apex of elytra. Abdomen: sternum I longer than II behind coxal cavity; sterna III+IV longer than II; sternum V longer than II and about same length as III+IV, truncate; all sterna partly denuded, remaining scales clavate and testaceous. Pygidium: small, clothed with short testaceous setiform scales. Genitalia: spermatheca 0.9 mm in length; ramus and collum undifferentiated, cornu gradually narrowing from union with collum to rounded apex.

DISTRIBUTION: Known only from type locality.

DIFFERENTIAL DIAGNOSIS: This species looks very similar to *I. chandigarhensis*, but differs in the lack of white scales on the pronotum, elytra and in the smaller size.

ETYMOLOGY: Named for the collector of the specimen, the late Dr. Stefan Schödl (NMW curator).

Indocurculio nami sp.n.

TYPE MATERIAL: **Holotype** ♀ (BPBM): “Viet Nam/Delat 1550m/11.IX.1960/J. L. Gressitt Coll”.

DISCRIPTION: ♀ Habitus (Fig. 8). Length 2.7 mm. Width: 1.5 mm. Head: large, derm piceous; clothed with small, narrow, elongate, fulvus scales set in shallow punctures; eyes large, sub-circular; gena clothed with same scales; frons 0.21 as broad as head across eyes, clothed with longer scales than head (of same color). Rostrum: 1.5 mm long, 0.55 as long as body; derm fuscopiceous at base, becoming rubiginose past incrassate base; dorsally with two rows of large ridged punctures on each side of median glabrous area of base; evenly deflected. Antennal scape 0.25 mm; funicle 0.7 mm; club 0.6 mm; scape 0.36 as long as funicle; antennomeres 1 and 2 same length, 3 equal to 2, 4 subequal to 3, 5–7 same length, 6 and 7 broaden toward apex; club not as long as antennomeres 5–7; all antennomeres clothed with erect, narrow, elongate scales with acute apex. Thorax: 0.7 mm long, 1.3 mm wide, 0.54 as long as broad; derm piceous; disc with small punctures densely clothed with clavate fulvus scales with truncate apex oriented with apex pointing toward midline; pleuron clothed with same scales as disc with few white scales dorsad of procoxae; disc flat in lateral view; mesepimeron densely clothed with broad clavate fulvus scales with truncate apex; mesepisternum densely clothed with clavate fulvus scales dorsally and white scales ventrally; metepisternum clothed with same scales; ventrosternum clothed with fulvus scales dorsoventrally and white scales anterioventrally; scutellum small, round, clothed with small white scales; mesoventral intercoxal process feebly visible in lateral view. Elytra: striae narrow, deep, glabrous; rather deep scutellary declivity; humeri rounded; intervals broad, flat, clothed with decumbent, broad, clavate, sculptured, fulvus scales; crosshatched setae short; scales 2 abreast on intervals 1 and 10, 3 on intervals 5–8, 5 abreast on 9. Legs: derm of all coxae, trochanter, and femoral base piceous; femur beyond base and tibiae fuscous with piceous twinges at apex of femur and base of tibiae; pro- and mesofemoral teeth very small (Fig. 13a) metafemoral tooth small (Fig. 13b); coxae, femur, tibiae clothed with narrow, elongate, decumbent, acute apex, white scales; unci small on all tibiae; metafemur exceeds apex of elytra in lateral view. Abdomen: sternum I longer than II behind coxal cavity; sternum II ascending to III; sternum III longer than IV together longer than V; sterna I and II

clothed with clavate white scales with few testaceous scales on mid sternum II; sternites III–V clothed with clavate testaceous scales with few white scales. Pygidium: small; derm piceous; clothed with short testaceous hair-like scales. Genitalia: not dissected.

DISTRIBUTION: Known only from type locality.

DIFFERENTIAL DIAGNOSIS: This species can be separated from the other species in the genus by the uniform fulvus scales on the thorax and elytra, and by the antennomere 3 being as long as 2.

ETYMOLOGY: Named for the type locality (Vietnam).

***Indocurculio minusculus* (HELLER) comb.n.**

Balaninus minusculus HELLER 1927: 237

Curculio minusculus HELLER: DALLA TORRE & SCHENKLING 1932: 26

TYPE LOCALITY: Philippines, Luzon, Mt. Banahao.

TYPE MATERIAL: **Holotype** ♂ (SMTD) “Mt. Banahao\p. I. Baker”.

ADDITIONAL MATERIAL EXAMINED:

PHILIPPINES: Luzon: “Mt. Banahao\p. I. Baker”, 3 ♂♂ (USNM).

DIAGNOSIS: ♂ Habitus (Fig. 5). Length: 2.5–3.0 mm. Derm piceous; pronotal disc with short median vittae of clavate striated cretaceous scales with truncate apices and small anterior and basal lateral patches of same scales; scutellum small, round, flanked by short vittae, interval 2 with few scales (same as on interval 1 and pronotum); elytra with median macula on interval 2 and short fascia on intervals 6–8 of same cretaceous scales; beyond median macula short vittae on interval 1 of cretaceous crosshatched setae ending before apex with small lateral macula on intervals 4–6 before apex; crosshatched setae suberect becoming fuscopiceous after cretaceous setae; sternum I of male with small basal median callus; metafemur slightly exceeds apex of elytra. Genitalia: median lobe 0.35 mm long, with parallel margins, endophallus emarginate in dorsal view, lateral view abruptly deflexed to acute apex; apodeme 0.5 mm long (Fig. 11).

DISTRIBUTION: Known only from the Philippines.

DIFFERENTIAL DIAGNOSIS: *Indocurculio minusculus* could be confused with *Curculio albopictus* (HELLER), but the scale pattern of *C. albopictus* is different, lacking an incrassate rostral base and short scape.

***Indocurculio nigromarginalis* (HELLER) comb.n.**

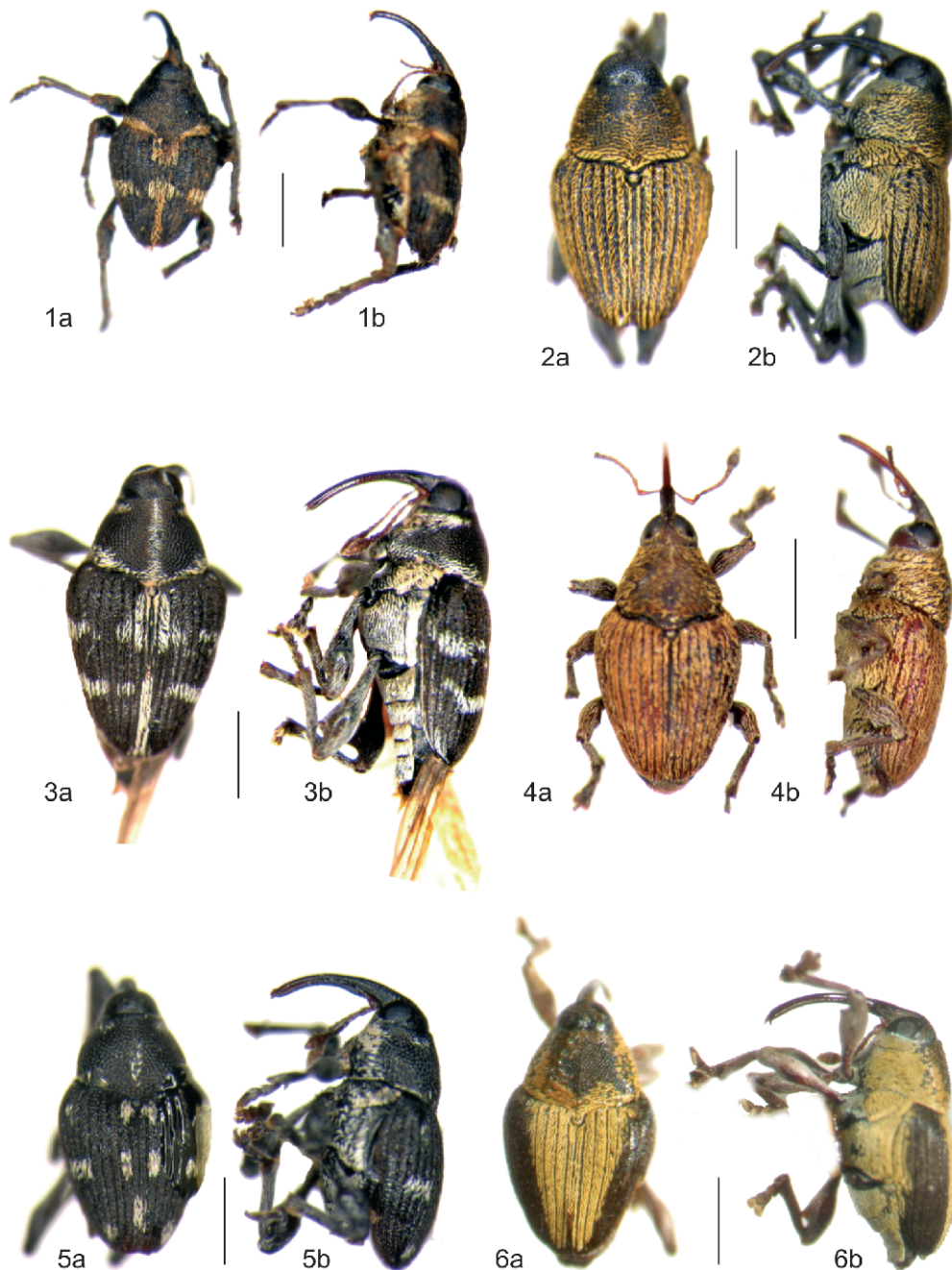
Balaninus nigromarginalis HELLER 1927: 257

Curculio nigromarginalis HELLER: DALLA TORRE & SCHENKLING 1932: 27

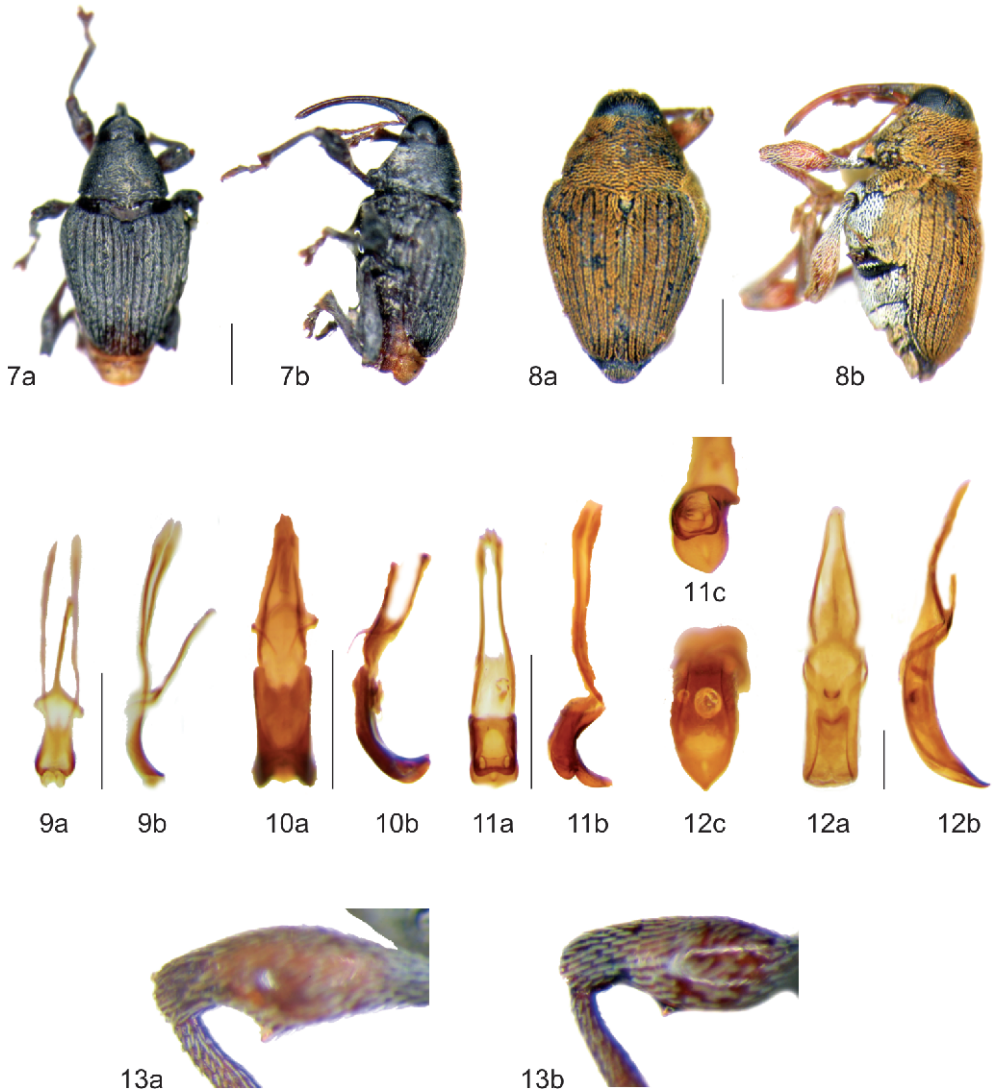
TYPE LOCALITY: Philippine Islands, Mindanao, Surigao.

TYPE MATERIAL: **Holotype** ♂ (SMTD) “Mindanao: Surigao\lg. C. F. Baker”.

DIAGNOSIS: ♂ Habitus (Fig. 6). Length: 3.5 mm. Derm fuscous; pronotal disc with scale pattern of decumbent clavate fulvus scales on basal, lateral, and anterior margins surrounding macula of fuscous scales in confused pattern; scutellum small, clothed with fulvus scales; elytra with large macula of clavate fulvus scales bordered by margin of fuscous scales reaching interval 10 of elytra with fulvus scales; ventral thorax and abdomen densely clothed with fulvus scales; crosshatched setae beginning fulvus in color then fuscous to apex; metafemur exceeds apex of elytra. Genitalia not dissected.



Figs. 1–6: Habitus photographs of *Indocurculio* in dorsal (a) and lateral (b) view: 1) *I. jaegeri*, holotype (♀); 2) *I. klassi*, holotype (♂); 3) *I. limbourgi*, holotype (♂); 4) *I. schoedli*, holotype (♀); 5) *I. minusculus* ♂; 6) *I. nigromarginalis* ♂. Scale bars: 1 mm.



Figs. 7–8: Habitus photographs of *Indocurculio* in dorsal (a) and lateral (b) view: 7) *I. wolterecki* ♂; 8) *I. nami*, holotype (♀). Scale bars: 1 mm.

Figs. 9–12: Aedeagi of *Indocurculio* in dorsal (a), lateral (b), apical (c) view: 9) *I. klassi*; 10) *I. limbourgi*; 11) *I. minusculus*; 12) *I. wolterecki*. Scale bars: 0.5 mm.

Fig. 13: Femora of *Indocurculio nami*, a) profemur, b) metafemur.

DISTRIBUTION: Known only from the type locality.

DIFFERENTIAL DIAGNOSIS: Appears very similar to *Curculio rhombus* (HELLER) even though *C. rhombus* has an incrassate basal rostrum the scape is too long to fit the *Indocurculio* character, but both *C. rhombus* and *I. nigromarginalis* have similar dorsal scale patterns. *Curculio rhombus* venter has white scales rather than the fulvus scales found in *I. nigromarginalis*. The disc of the pronotum of *C. rhombus* has a W-shaped scale pattern of clavate

testaceous scales which *I. nigromarginalis* lacks, and *C. rhombus* is found in Sumatra and Borneo.

***Indocurculio wolterecki* (GÜNTHER) comb.n.**

Balaninus wolterecki GÜNTHER 1938: 47

TYPE LOCALITY: Indonesia, Sulawesi.

TYPE MATERIAL: **Holotype** ♂ (SMTD) “N. O. Celebes [= Sulawesi]lg. Woltereck”, “1939/35”, “Cotyplus\ woltereck”, “Staaliches Museum für Tierkunde Dresden”.

ADDITIONAL MATERIAL EXAMINED:

INDONESIA: Sulawesi: 3 ♂♂, same data as holotype.

DIAGNOSIS: ♂ Habitus (Fig. 7). Length: 3.6–4.0 mm (mean = 3.75 mm). Width: 2.0 mm. Derm piceous; general color appears gray due to clavate, white scales on pronotum and elytra against piceous background; rostrum 2.0 mm in length; antennomere 2 longer than 1, almost two times as long as 3; metafemur exceeds apex of elytra. Genitalia: median lobe rather longer than usual 0.7 mm in length, aedeagal apodeme 0.7 mm long (Fig. 12).

DISTRIBUTION: Known only from type locality.

DIFFERENTIAL DIAGNOSIS: This species is the largest of the group and can not be confused with any of the other species in the genus. It can be separated from the other species in the genus by the median lobe of the aedeagus being longer and without an abrupt apex in dorsal view.

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