

## Five new species and one new subspecies of *Schizorhinina* (Coleoptera: Scarabaeidae: Cetoniinae) from Australian Region of Indonesia

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**Taxonomy, new species, new subspecies, Coleoptera, Scarabaeidae, Cetoniinae, Australian region**

**Abstract.** *Trichaulax arfakensis* sp. nov., *Tafaia tembagapuraensis* sp. nov., *Digenethle bhaskarai* sp. nov., *Poecilopharis pygidialis* sp. nov., *Poecilopharis femorata bicolorata* ssp. nov. from West Papua and *Poecilopharis babarica* sp. nov. from Babar archipelago in southern Moluccas, Indonesia are described, illustrated and compared.

### INTRODUCTION

All newly described species belong to *Schizorhinina*, subtribe of Lomapterini. Most of the representatives of *Schizorhinina* are distributed in Australia and are endemical to its mainland, smaller part belongs to islands of east Indonesia, New Guinea with all nearby islands, Solomon Islands, Vanuatu (New Hebrides) until Rotuma Island (with one species of *Poecilopharis* Kraatz, 1880 only), which fauna is actually more close to fauna of Vanuatu, even administrationally it belongs to Fiji. This easternmost point of the distribution of *Schizorhinina* representatives is at the time the easternmost border for all the Cetoniinae, with exception of some introduced species such as *P. (Heteroprotactia) fusca* Herbst, 1790 from French Polynesia or *Gametis versicolor* F. 1775 from Samoa.

### HISTORY

**Genus *Trichaulax*.** The genus was established by Kraatz in 1880 with the type species *Cetonia philipsii* Schreibers, 1802. Seven species belong to the genus at this moment, and except *Trichaulax sericea* Janson, 1905, all its representatives were described in the 19<sup>th</sup> century. Six species inhabit Australia and the *T. sericea* Janson occurs in Papua New Guinea. Allard (1995) listed the species from Aseki in east of Papua New Guinea and I have also studied specimens from Aru Islands in SE Mollucas. The newly described species is the second known species from Papua New Guinea; it flies at altitudes over 1000 m in westernmost tip of Indonesian West Papua province in Arfak Mountains.

**Genus *Tafaia*.** The genus was established by Valck Lucassen in 1939 with the type species *Tafaia viridiaenea* Valck Lucassen, 1939. In 1971, Krikken added 4 other species and in 1982, Arnaud added one more species. Allard (1995) in his *Schizorhinini* 1, described 3 new

species. Since then, Rigout et Allard (1997), Antoine (2004), Legrand (2006) 3 other species has been described and thus, the recent number stays on 12 known species. All of them inhabit Papua New Guinea mainland, most of them being high-altitude insects. The newly described species *Tafaia tembagapuraensis* sp. nov. also flies at very high altitudes, above 1500 m.

**Genus *Digenethle*.** The genus was established by J. Thomson in 1877 with the type species *Digenethle ramulosipennis* J. Thomson, 1877 (= *Digenethle caelata* Gestro, 1874). After Allard's Schizorhinini 1 (1995), who added 9 new species, the amount of valid taxa stayed at 14 species and one subspecies. Since then, 3 new species were described, Rigout et Allard (1997), Antoine (2005), Legrand (2006) and *Digenethle raffrayi* Lansberge, 1880 was raised from synonymy with *Digenethle spilophora* Gestro, 1879. With the newly described species, the recent amount of taxa in the group will stay at 18 species and one subspecies.

**Genus *Poecilopharis*.** Kraatz established the genus in 1880 with the type species *Schizorrhina bouruensis* Wallace, 1867. Before Allard's Schizorhinini 1, 21 species and 2 subspecies were known. Allard (1995) added 8 species and 2 subspecies. Rigout et Allard (1997) added 4 species and 3 subspecies. With the newly described taxa, the recent amount of taxa will stay at 35 species and 8 subspecies.

## MATERIAL AND METHODS

All specimen sizes are from the anterior margin of clypeus to the apex of elytra. Types are provided with red printed labels that give the name of the taxon, HOLOTYPUS or PARATYPUS, gender symbol and St. Jákl det. 2008. Genitalia of majority of the males were dissected. Type material deposited in the author's collection.

## DESCRIPTIONS

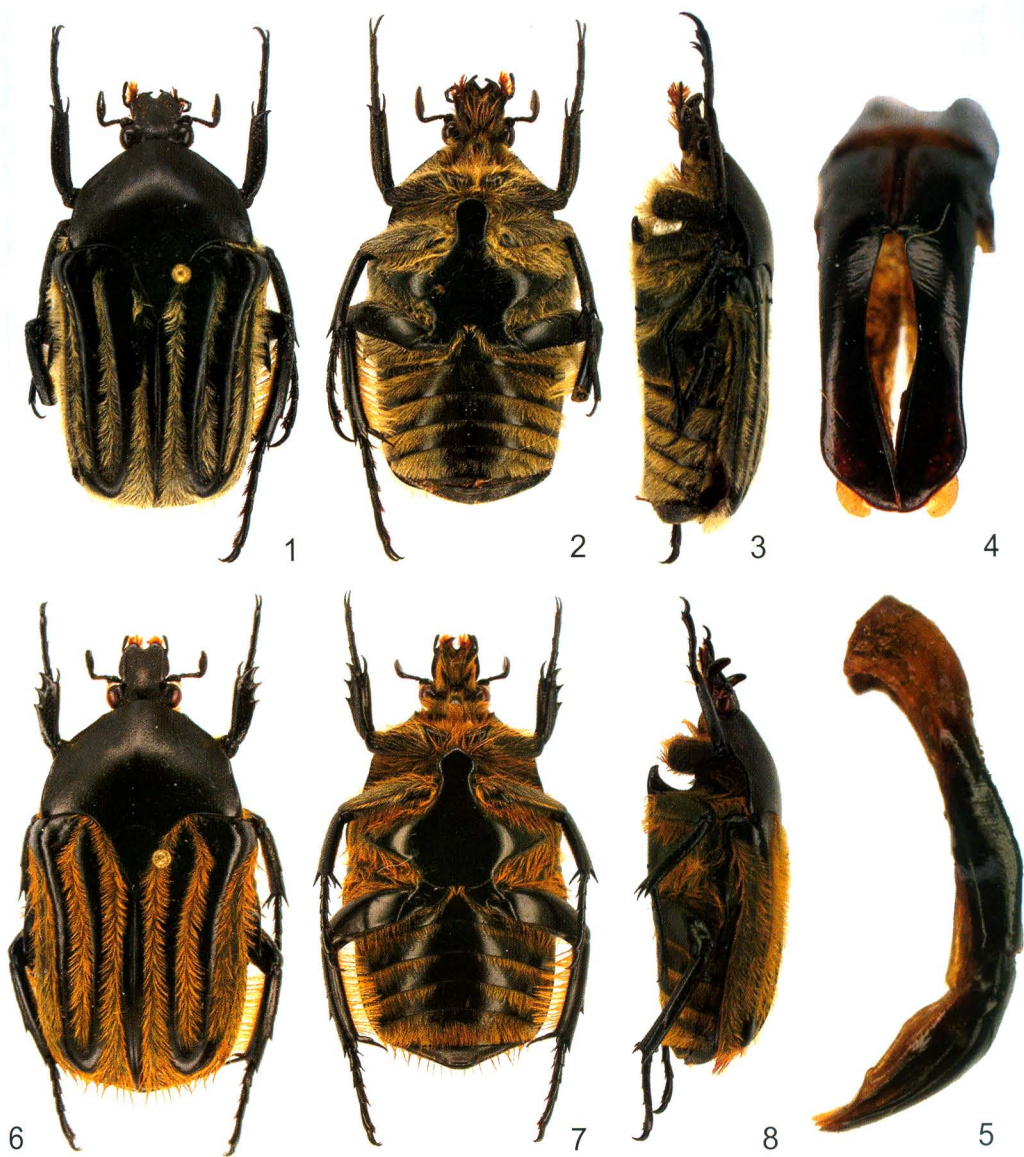
### *Trichaulax arfakensis* sp. nov.

(Figs 1-8)

**Type material.** Holotype (♂) labelled: Indonesia, NNW Irian Jaya, ARFAK MOUNTAINS, v.2005, local collectors lgt. Paratypes: (No. 1 ♀) labelled: Indonesia, West Papua pr., ARFAK MTS., 10-28.ii.2008, Duebei env., cca 20 km S of Warmere, 1200 m alt., St. Jákl lgt; (No. 2 ♀) labelled: Indonesia, West Papua pr., ARFAK MTS., 21.i.-8.ii.2008, Duebei env., cca 20 km S of Warmere, 1200 m alt., St. Jákl lgt.

**Description.** Holotype length 28.1 mm, maximum humeral width 16.3 mm. One of the largest species in the group, completely black with whitish abundant pilosity.

Head. Frons black, medially simply punctated. Rather narrow, paralell-sided, not bordered. Clypeus with similar punctation, narrow, deeply incised, laterally broadly bordered. Antenna black, club slightly shorter than stalk. Antennal pilosity yellowish, short and abundant at club, thinner and longer at stalk.



Figs 1-8. *Trichaulax arfakensis* sp. nov.: 1- habitus dorsal aspect of male; 2- habitus ventral aspect of male; 3- habitus lateral aspect of male; 4- aedeagus; 5- aedeagus lateral aspect; 6- habitus dorsal aspect of female; 7- habitus ventral aspect of female; 8- habitus lateral aspect of female.

Pronotum. Completely black, reflected. Punctuation much thinner than at the frons and clypeus. Mid part impunctate, near basal margin very finely and sparsely punctated, laterally punctures larger, lateroapical margins not densely, but rugulously punctated. Laterally

bordered along the first 2/3 the pronotum length. Anterior and posterior margins without any border. Pilosity not developed.

Scutellum. Black, triangled, at the sides rounded. Punctuation reduced to few fine punctures near lateral margins.

Elytra. Completely black, ribs and sutura reflected. Grooves densely, finely punctated, each punctate bearing whitish-ochre hairs, adjoining to characteristic stripes of pilosity. Apical and lateral margins completely covered with hairs, pilosity of the rest of elytral surface limited to punctated grooves. The pilosity thinner and stripes narrower anteriorly, nearly reaching elytra base (3 lateral stripes), inner sutural pilosity stripe reaching mid part of scutellum. Pilosity stripe beside lateral margin divided by the longitudinal rib arch into two narrower pilosity stripes. The outer rib adjoined with next two inner ribs at humeral calli. Humeral and apical calli moderately developed, reflected, finely microsculptured. Other black parts of elytral surface also with fine microsculpture. Sutural ridge flattened, at the second half of elytra length slightly elevated.

Pygidium. Black, medially reflected, transversally, uniformly wrinkled. Especially the base covered with longer yellow hairs.

Abdomen. Black, all segments covered with rather long ochre hairs, except the mid part, which is reflected. This mid section with wide, rather deep, longitudinal furrow.

Metasternum. Covered with long ochre hairs, except black, glabrous mid part and mesometasternal process. Mesometasternal process rather long and flat, finely punctated, straight, protruding in front, at the end rounded.

Legs. Slender and long. Protibia unidentate, mesotibia normally developed, posterior part of metatibia curved inward. Inner side of metatibia with brushes of long ochre hairs. Tarsi black and long, mesotarsi and metatarsi longer than protarsi.

Genitalia. Parameres slender and long, resembling those of *T. macleayi* Kraatz, 1894 and entirely also *T. sericea* Janson, 1905 and *T. marginipennis* MacLeay, 1863, but the tip is regularly rounded (Figs 4-5).

**Variation and sexual dimorphism.** Female. Length 29.5 mm and 31.0 mm (paratypes No. 1 and No. 2). Larger and more robust. Dorsal and ventral colour of the pilosity yellowish, not ochre as in male. Lateral pilosity stripe not split by black longitudinal rib as in, so females only with 3 longitudinal black ribs (stripes) on each elytron. (males with four ones). Pilosity of abdominal segments reduced to anterior margins, pilosity of the metasternum also less abundant. Protibia tridentate, shorter and wider, mesotibia and metatibia also more robust. Punctuation of the head and pronotum slightly coarser.

**Differential diagnosis.** *Trichaulax sericea* Janson, 1905 and *Trichaulax macleayi* Kraatz, 1894 are the closest allies of the newly described species. *T. sericea* Janson, inhabiting same island as *T. arfakensis* sp. nov., differs by much thinner elytral pilosity, by the coloration of this pilosity (*T. sericea* Janson with both dorsal and ventral hairs deeply yellow to orange), by the finer punctuation of the pronotum, especially its lateroapical part (*T. arfakensis* sp. nov. with rugulose, confluying punctures - *T. sericea* Janson, only with fine punctuation). Then finally by the differently shaped parameres with the incised tip (*T. arfakensis* sp. nov. with

regularly rounded tip of parameres). *T. macleayi* Kraatz differs from the newly described taxa by the yellowish to ochre colour of the pilosity (*T. arfakensis* sp. nov. with whitish pilosity), by the different termination of the mesometasternal process, which is sharply terminated in the *T. macleayi* Kraatz, but roundly terminated in the *T. arfakensis* sp. nov. and also by the slightly incised tip of the parameres (rounded in the *T. arfakensis* sp. nov.).

**Ethymology.** Named after Arfak Mountains of West Papua province, Indonesia (former Irian Jaya).

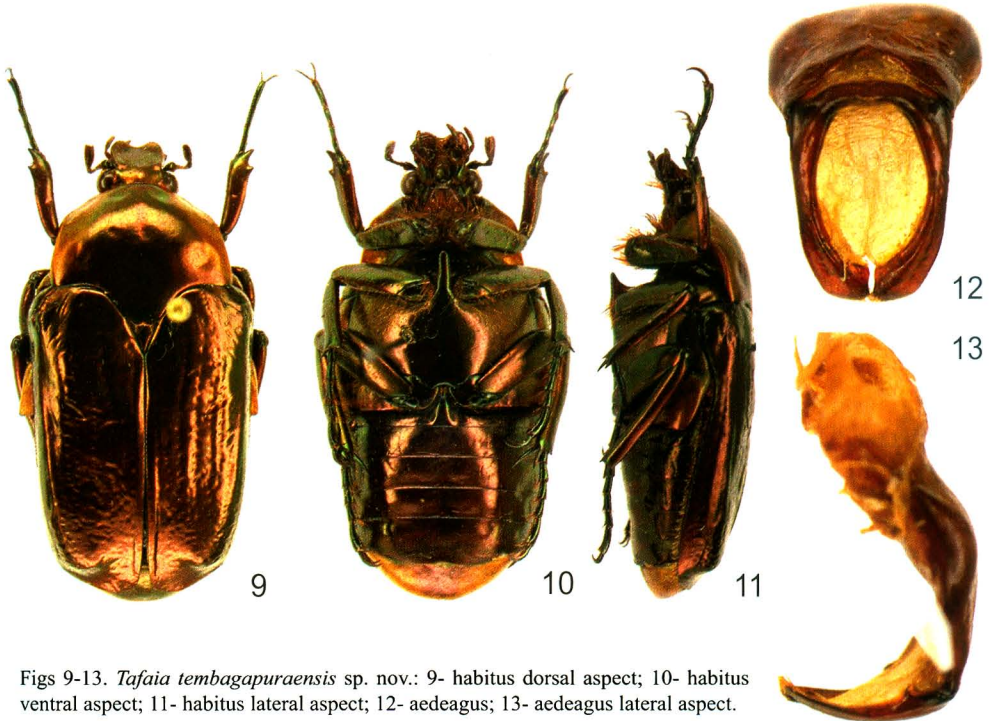
**Distribution.** Indonesia, West Papua, Arfak Mts.

*Tafaia tembagapuraensis* sp. nov.

(Figs 9-13)

**Type material.** Holotype (♂) labelled: Ind. S. Irian jaya, TEMBAGAPURA, 1500 m, nr. Freeport, vi. 2001, Local collector. Paratypes (Nos. 1-2 ♂♂) labelled: same as the holotype; (paratype No. 2 damaged at the pronotum).

**Description.** Holotype length 21.4 mm, maximum humeral width 12.0 mm. Parallel-sided, colour chestnut brown with a strong copper-purpureous reflection.



Figs 9-13. *Tafaia tembagapuraensis* sp. nov.: 9- habitus dorsal aspect; 10- habitus ventral aspect; 11- habitus lateral aspect; 12- aedeagus; 13- aedeagus lateral aspect.

**Head.** Widening to the apex, widest approximately at its 5/6. Regularly finely microsculptured. Lateral margins obtusely bordered. Clypeus with mid line, its anterior border emarginate, lateral lobes rounded. Antenna brown, club not elongated. Surface of the head glabrous, whitish hairs present only at the antenna.

**Pronotum.** Bicoloured. Lateral margins yellow-brown, rest chestnut brown with a strong copper reflection. General shape widest at the base, narrowing to its 2/3 of the length, at the last apical third narrowing sharply. Surface glabrous, with regular microreticulation. Mid section with the short, shallow impression. Lateral margins indistinctly, obtusely bordered at its mid part, the rest unbordered. Basal lobe deeply coppery coloured.

**Scutelum.** As typical for other representatives of the genus, major part (approximately 4/5 covered by the pronotal lobe). The visible part of the rest of the scutellum surface triangled, with fine microreticulation, copper-violet and shining. Base covered with yellowish hairs.

**Elytra.** Chestnut brown with very strong copper-violet reflection. Parallel-sided. Each elytron with five striolate lines, which are many times interrupted. Interspaces with very fine, dense punctation. Humeral calli not present, apical calli distinct, but small and obtuse. Elytral apex coppery coloured as pronotal basal lobe. Pilosity not developed, except of the apical margin of each elytron, which bears few black setae.

**Pygidium.** Conical, clearly visible from above. Yellow-brownish, except of basal and apical margins, chestnut brown here. Glabrous, thinly wrinkled at the base.

**Abdomen.** Glabrous, chestnut brown, with copper reflection. Each sternite with shallow mid impression. Anal sternite present and rather large.

**Metasternum.** Chestnut brown. Irregularly and not densely covered by long yellowish hairs. Mesometasternal process tapering and rather long, exceeding posterior mesocoxae width. Indistinctly directed downwards, its termination sharp. Metepisternum and mesocoxa yellowish.

**Prosternum.** Chestnut brown at the mid, yellowish brown near lateral margins. Covered with abundant reddish hairs.

**Legs.** Tibiae brown, tarsi black. Protibia bidentate with copper reflection. Metatibia spurs normally developed, sharply terminated. Tibia with reddish setae at inner side. Tarsi black with brownish setae.

**Genitalia.** (Figs 12-13). Similar to other representatives of the genus, but parameral inner tongue completely missing and parameral flaps reduced and almost indistinct.

**Variation.** Size: paratype No. 1, 21.5 mm, paratype No. 2, 20.5 mm. Pronotal yellow lateral margin darker, having almost the same colour as the rest of pronotum surface.

**Sexual dimorphism.** Female unknown.

**Differential diagnosis.** *Tafaia tembagapuraensis* sp. nov. can be separated from other species by the complex of following characters: chestnut colour with very strong copper-purpureous reflection, mesometasternal process tapering and exceeding mesocoxal width, pronotum bicolorous, pygidium protruding and clearly visible from above, antennal club not elongated, elytral and pronotal (discal part) colours not different, protibia of males bidentate, abdominal

surface glabrous, abdominal sternites of males impressed medially, parameral inner tongue completely missing, parameral flaps reduced and almost indistinct.

**Etymology.** Named after the place of the catch, Tembapura village - entrance to Freeport, highest situated copper mine in the world.

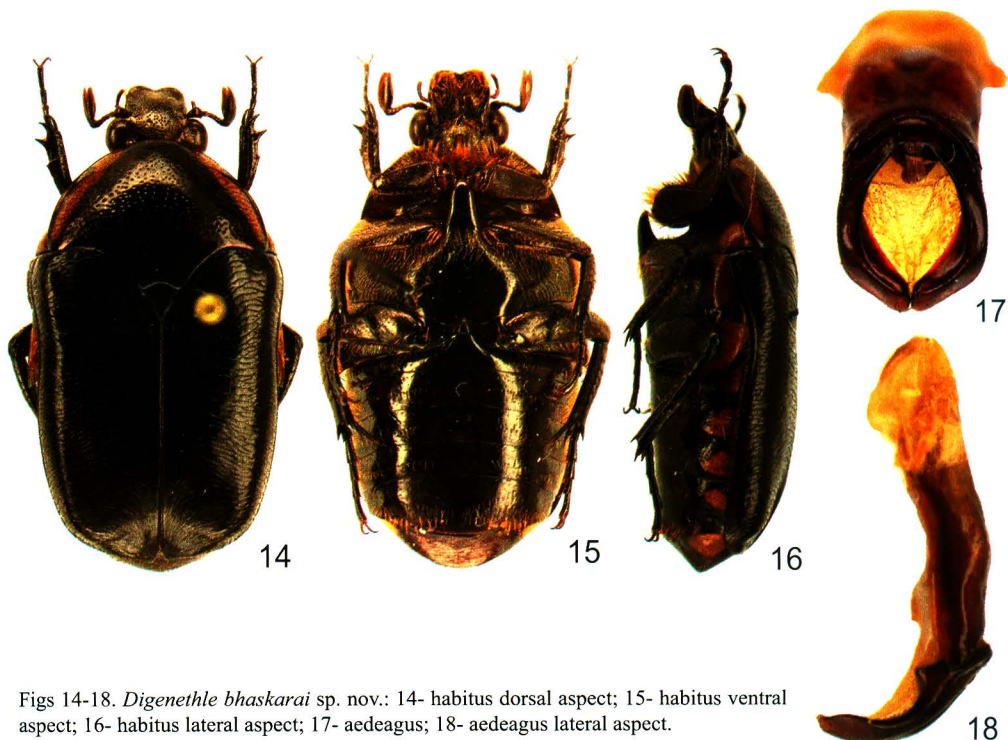
**Distribution.** Indonesia, New Guinea, West Papua province.

*Digenethle bhaskarai* sp. nov.

(Figs 14-18)

**Type material.** Holotype (♂) labelled: Indonesia, SE Irian Jaya, TIMIKA ENV., iii. 2003, Local collectors. Paratype (No. 1 ♀) labelled: IND., IRIAN JAYA, FAK FAK REGION, 12. 00 (handwritten), Local collector.

**Description.** Holotype length 17.7 mm, maximum humeral width 11.0 mm. Small, oval, strongly reflected.



Figs 14-18. *Digenethle bhaskarai* sp. nov.: 14- habitus dorsal aspect; 15- habitus ventral aspect; 16- habitus lateral aspect; 17- aedeagus; 18- aedeagus lateral aspect.

Head. Black, reflected, widest at 3/4 of the length. Punctuation simple, but rather deep, denser in front of clypeus. Most punctures circular. Clypeus shallowly emarginated. Antennae dark brown, stalk with yellowish pilosity.

Pronotum. Black, strongly reflected. Lateral margins reddish, except a black spot placed in front of anterolateral margin. Punctuation rather dense, especially on posterior part, most of punctures circular. Laterally simply wrinkled and bordered throughout its length. Pronotal lobe almost impunctate.

Elytra. Black, shining, almost parallel. Striation densely developed. Most of striolae lines running horizontally, except those between humeral calli, which are almost parallel and striolae lines beside the scutellum running at angle 45°. Elytral suture simple and flat, its termination obtuse, not protruding over elytra apex. Humeral calli not developed, apical calli small and obtuse. Apex of elytra not haired (with only few short setae).

Pygidium. Bicoloured, dark brown with yellowish maculae at the lateral sides. Densely, regularly, circularly striolated. Pilosity absent.

Ventrum. Abdomen black to dark brown, reflected. Segments 2-5 with yellowish macula near lateral margin and horizontal line of semicircular punctures bearing yellowish setae at the mid part of each segment. 1st segment with longer setae placed posteriorly. Metasternum with horizontal striolation at apical part, longitudinal striolation near lateral margins. Striolated parts with long yellowish hairs. Mesometasternal process glabrous, reflected, protruding anteriorly where it is sharply terminated, the base with yellowish hairs. Metepimeron, metepisternum, mesepimeron yellowish with horizontal striolation. Prosternum and mentum black with long reddish hairs.

Legs. Black, moderately long. Protibia tridentate, posterior tooth short. Meso- and metatibia with a row of ginger pilosity at inner side. Femurs striolated, with reddish short setae.

Genitalia. (Figs 17-18). Unique in the group.

**Sexual dimorphism.** Except protibia, which are slightly robuster, all other aspects as in male. Size 18.7 mm.

**Differential diagnosis.** Combination of the small size, horizontally running striolation of the elytra and shape of the parameres distinguish the species from other representatives of the group.

**Distribution.** Indonesia, West Papua, Timika, Fak Fak.

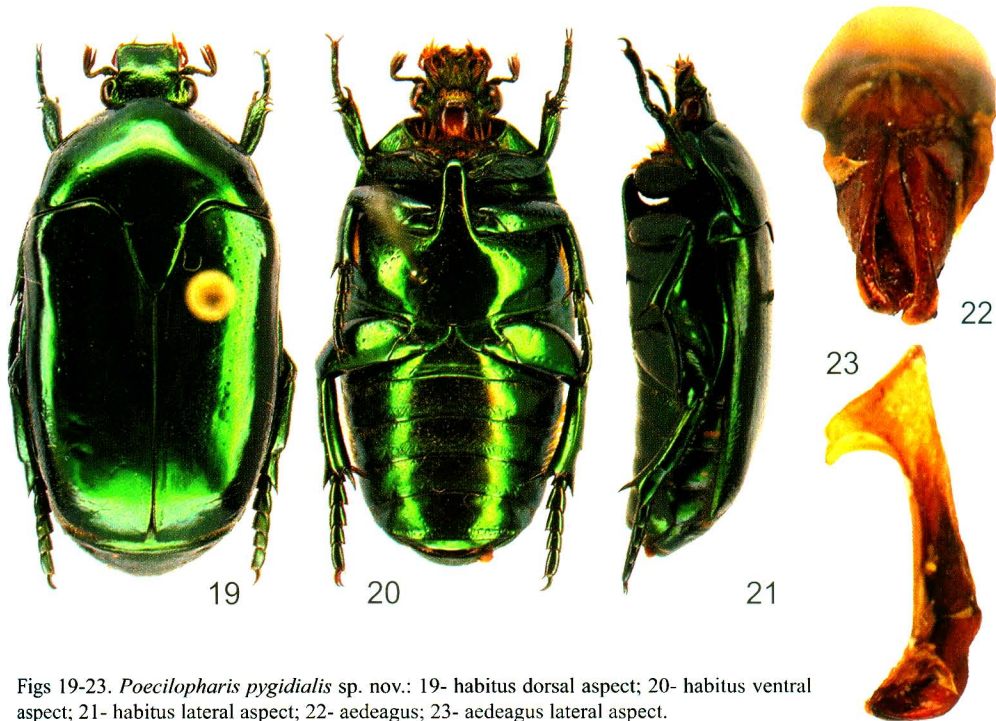
**Etymology.** Named after my friend Edy Bhaskara (Malang, Java), who organized several expeditions to various parts of West Papua.

*Poecilopharis pygidialis* sp. nov.

(Figs 19-23)

**Type material.** Holotype (♂) labelled: (handwritten) Biak island, Sepse, 3.x.1990, A. Riedel lgt.





Figs 19-23. *Poecilopharis pygidialis* sp. nov.: 19- habitus dorsal aspect; 20- habitus ventral aspect; 21- habitus lateral aspect; 22- aedeagus; 23- aedeagus lateral aspect.

**Description.** Length 17.1 mm, maximum humeral width 9.7 mm. Grassy green with golden reflection.

**Head.** Green, reflected. Punctuation simple, rather dense. Widest at the apical  $\frac{1}{4}$  of the length. Clypeus shallowly emarginated. Antennae brown, stalk with short yellowish setae.

**Pronotum.** Grassy green with golden reflection. Punctuation composed of bigger and deeper circular placed laterally and smaller, simple punctures throughout pronotum surface, but especially at the discal and basal part. Lateral border running almost throughout the length. Base of basal lobe with purplish lustre.

**Elytra.** Colour same as that of pronotum, except apical calli, epipleuras and lateral ridge, which are dark green. Surface impunctate, except 3 lines of punctures running longitudinally in basal half of each elytron. Apical half of the lateral ridge with simple, almost horizontally running striation. Each elytron also with one striola line parallel with sutural ridge, this striola deeply developed in prescutellar area, indistinct along mid part and deep again in apical half. Sutural ridge flat and simple. Humeral calli obtuse, dark green coloured, apical calli very obtuse, almost indistinct, also dark green coloured. Surface completely without any pilosity.

**Pygidium.** Dark grassy green, reflected. Completely, circularly wrinkled. Decorated with two pairs of reddish spots, one smaller near the base, second approximately 3 times larger placed laterally. Pilosity not developed.

**Ventrum.** Abdomen grassy green, reflected. Segment 2-3 decorated with one small reddish macula placed beside lateral margin. Segment 1 with horizontal striola line bearing short

setae. As in other representatives of the group, discal impression not developed. Completely impunctate. Colour of Metasternum same as that of abdomen, reflected. Its anterior part with semicircular punctures and some wrinkles, both bearing yellowish setae. Mesepisternum and mesepimeron impunctate. Mesometasternal process glabrous, shining, protruding in front, beyond level of procoxae. Prosternum and mentum densely wrinkled bearing longer ginger hairs.

Legs. Dark green with golden reflection. Protibia tridentate, distance of posterior tooth about twice as longer as that between anterior and mid ones. Meso and metatibia with long reddish setae at inner side. Metatibia carinated at posterior third.

Genitalia. (Figs 22-23) similar to *Poecilopharis femorata* Waterhouse, 1894, tip of parameres wider and shorter.

**Sexual dimorphism.** Female unknown.

**Differential diagnosis.** The closest allied species is *Poecilopharis femorata* Waterhouse flying in Arfak Mountains (West Papua). Smaller size, reddish maculation of pygidium and abdomen, green colour of the legs, egg shape (*P. femorata* Waterhouse elongated and almost parallell) and shape of parameres tip distinguish the species.

**Etymology.** Named after the reddish maculation of the pygidium, one of aspects distinguishing the species.

**Distribution.** Indonesia, West Papua, Schouten Islands, Biak Island.

*Poecilopharis femorata bicolorata* ssp. nov.

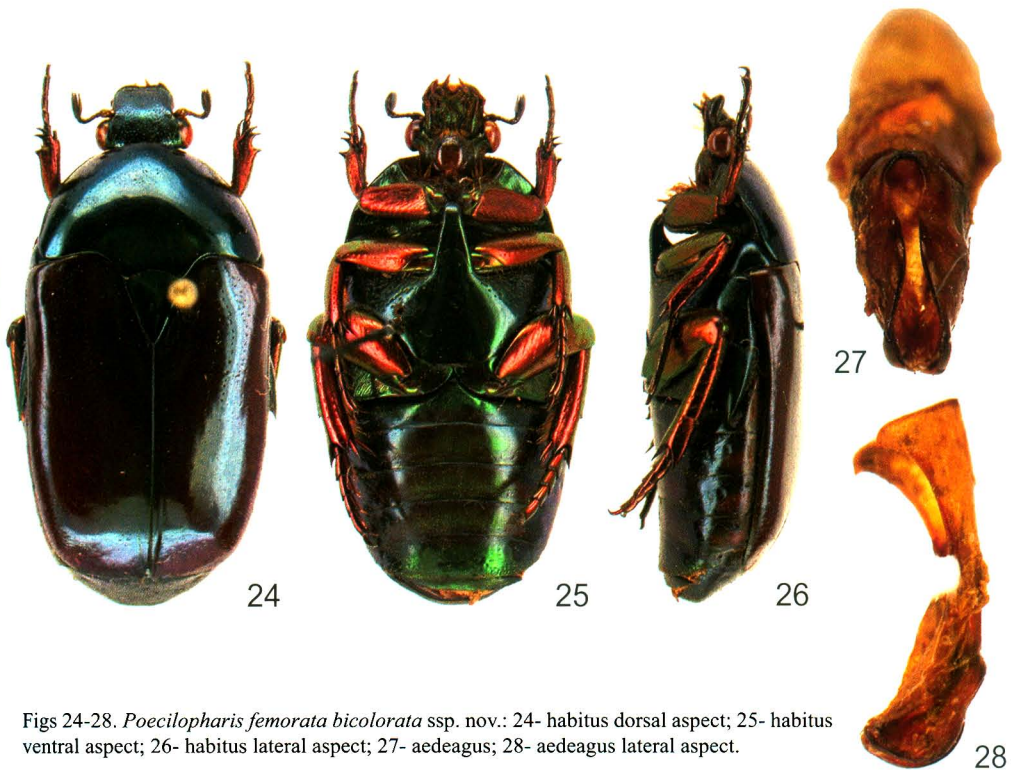
(Figs 24-28)

**Type material.** Holotype (♂) labelled: IND. IRIAN JAYA, TIMIKA, iii. 2001 (handwritten), Local collector. Paratype (No. 1 ♂) labelled: IND. IRIAN JAYA, TIMIKA, iii. 2001 (handwritten), Local collector; (Nos. 2-4 ♂♂) labelled: Indonesia, SE Irian Jaya, TIMIKA ENV., iii.2001, Local collectors; (Nos. 5-10 ♀♀) labelled: the same data as holotype, paratypes (Nos. 11-12 females) labelled: the same data as paratypes Nos. 2-4.

**Description.** Bicolorous, oval, shining. Length 18.6 mm, maximum humeral width 10.2 mm.

Head. Dark blue-green with metallic reflection. Widest at the apical  $\frac{1}{4}$  of the length. Punctuation rather dense, composed of circular simple punctures with various diameters and dency micropunctuation throughout the surface. Clypeus regularly rounded with indistinct emargination at the mid of anterior margin. Antennae with brown setation, stalk brown, club almost black.

Pronotum. Uniformly dark blue-green with metallic reflection (from the top view above). Laterally bordered almost throughout the length. Punctuation much finer than that of head, composed of very fine, simple, thin punctures and very dense micropunctures regularly throughout the surface. Beside that few bigger punctures placed near lateral margins.



Figs 24-28. *Poecilopharis femorata bicolorata* ssp. nov.: 24- habitus dorsal aspect; 25- habitus ventral aspect; 26- habitus lateral aspect; 27- aedeagus; 28- aedeagus lateral aspect.

**Scutellum.** Triangular, colour and type of punctuation same as that of pronotum. Near apex with small longitudinal impression.

**Elytra.** Oval. Colour chestnut brown with metallic reflection. Three simple lines of punctures running at basal half of each elytron. The rest of the surface glabrous with just occasional, very fine, isolated punctures. Simple striolation limited to posteroapical margins. Sutural ridge mildly elevated in apical half, shortly protruding beyond elytron apex. Humeral and apical calli almost indistinct.

**Pygidium.** Black, circularly, densely wrinkled. From upper view with greenish reflection.

**Ventrum.** Abdomen chestnut brown at mid part, laterally black, except posterolateral margin of each segment - this part also chestnut brown. Discal part with very strong green lustre. Metasternum and anterior part of 5th segment colour same as that of head and pronotum - dark blue-green. Anterolateral part of metasternum with mixture of semicircular punctures and short wrinkles, both bearing reddish setae. Mesometasternal process dark blue to black, finely punctated, protruding in front. Metepisternum with same colour as pronotum, mesepimeron blackish. Prosternum and mentum dark blue with dense striolation.

**Legs.** Tibia, coxae golden-red, tarsi darker, femurs with greenish lustre. Protibia tridentate. Metatibia carinated at the posterior third. Meso and metatibia with row of reddish setosity at inner side.

**Genitalia.** (Figs 27-28) similar to nominotypical subspecies.

**Sexual dimorphism.** Body slightly broader, protibia indistinctly more robust. Other aspects same as in males. Size 16.5-18.8 mm.

**Differential diagnosis.** Completely different colour of pronotum, elytra and ventrum distinguish the newly described subspecies from the nominotypical one.

**Etymology.** Named after bicolourous body, dark blue-green pronotum and chestnut elytra.

**Distribution.** Indonesia, West Papua, Timika.

*Poecilopharis babarica* sp. nov.

(Figs 29-33)

**Type material.** Holotype (♂) labelled: Indonesia, S. Moluccas, WETANG ISL., iv. 2009, Rumalewan Besar vill. env., Babar archipelago, local collectors lgt. Paratypes (Nos. 1-19 ♂♂) labelled: the same data; (Nos. 20-57 ♀♀) labelled: the same data.

**Description.** Holotype length 18.6 mm, maximum humeral width 10.5 mm. Green with golden-red reflection. Body oval.

Head. Almost parallel-sided, green with golden metallic reflection. Laterally with obtuse border. Apical margin of the clypeus elevated, incision broad, but shallow. In front of apical margin with rather deep impression. Frons with simple punctures, clypeus reticulated. Antennae brown, the club lighter than stalk, both bearing yellowish setae.

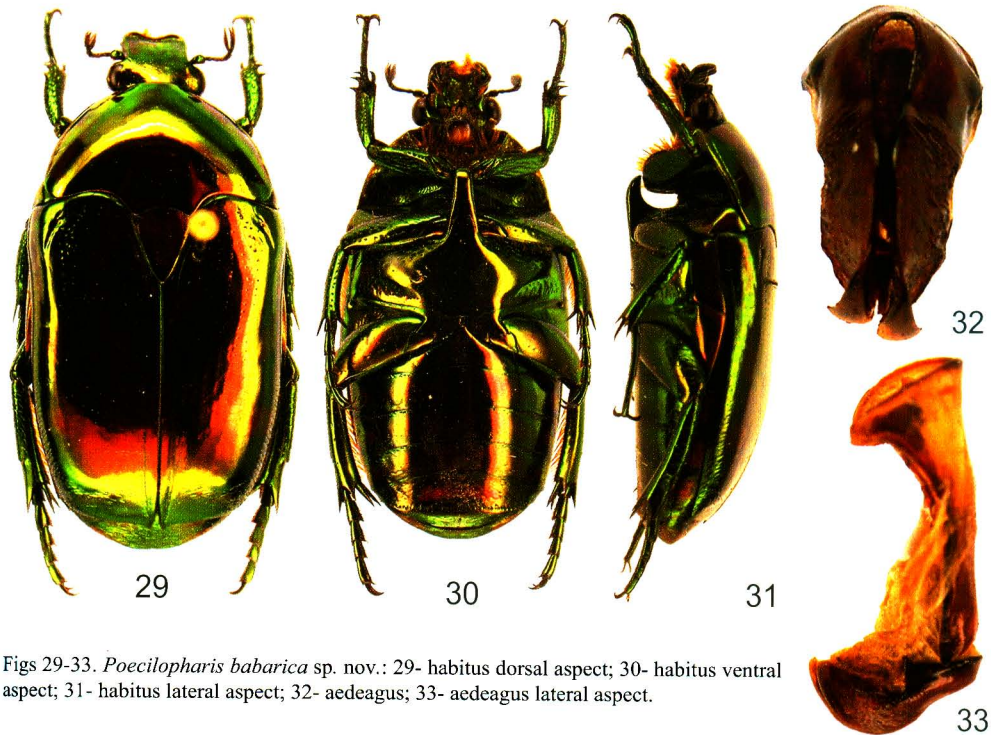
Pronotum. Green with very strong golden-red reflection. Laterally bordered, the border not reaching posterolateral margin. Lateral border and longitudinal band connecting apical margin with posterolateral margin reddish, between this reddish band and lateral border a small area as green as the rest of pronotum. Punctuation very fine and thin. Micropunctuation also present, much denser.

Scutellum. Colour and lustre same as those of pronotum. With microscopic punctures only.

Elytra. Colour and reflection same as in pronotum and scutellum. Each elytron with 7 reddish maculae. Six reddish maculae placed between elytral ridge and lateral margins, first is small, laying on edge of epipleura and basal margin of elytron, other 4 maculae almost adjoining each other are laying at basal half of elytron, beside lateral margin. Those 4 smaller spots separated from larger one, situated at apical half, also beside lateral margin, but its shape is more transversal than in upper 4 spots. The 7<sup>th</sup> transversal spot placed at apex, between sutural ridge and apical calli. From upper view, reddish maculae almost invisible due to very strong reflection. Simple punctuation limited to basal first 1/4, creating four punctate lines. Simple striolation limited to apical calli and apical third of lateral margins. The rest of surface impunctate.

Pygidium. Green, reflected, with horizontal striolation. Decorated with two pairs of adjoining reddish spots placed at the mid of basal and lateral margins.

Ventrum. Abdomen green to brown green with strong lustre. First segment with transversal reddish spot placed at the mid part. Other segments with pair of reddish maculae placed



Figs 29-33. *Poecilopharis barbarica* sp. nov.: 29- habitus dorsal aspect; 30- habitus ventral aspect; 31- habitus lateral aspect; 32- aedeagus; 33- aedeagus lateral aspect.

beside lateral margins. Lateral and anterior parts of each segment simply striolated. Pilosity not developed. Metasternum green, reflected, its posterior, anterior and lateral margins wrinkled, some wrinkles bear setae. Mesometasternal process green to olive green, reflected, protruding in front, sharply pointed posteriorly. Metepimeron, metepisternum, mesepimeron entirely reddish. Prosternum and mentum with dense striolation and abundant ginger hairs, beside lateral margins also reddish, the rest green.

Legs. Tibiae coppery green, tarsi darker. Protibia tridentate. Distance of posterior tooth from mid one about twice as long as that between anterior and mid ones. Metatibia with carina at posterior third. Meso- and metatibia with the row of ginger pilosity at the inner side.

Genitalia. (Figs 32-33). The tip of parameres straight, not curved, very wide at apex.

**Variation.** Size of males 16.5-20.2 mm. Few specimens just with green-metallic lustre (not with golden-red lustre); pronotal and elytral maculation much better visible than in specimens with golden-red lustre. In some specimens, 2-4 elytral maculae confluent, in some specimens 1 elytral lateral spot missing.

**Sexual dimorphism.** Size of females 16.2-19.7 mm. In other aspects same like males.

**Differential diagnosis.** The closest species in the group is *Poecilopharis curtisi* Waterhouse, 1884 inhabiting Tanimbar archipelago. Both species have very strong golden-red reflection

and approximately same position of protibia dents. The newly described species differs mainly by the presence of the elytral, pygidial and ventral reddish maculation, by the presence of punctation of the basal third of elytra (missing or almost missing in the *P. curtisi* Waterhouse), by the finer pronotal punctation and also by the differently shaped tip of parameres of males. There is also *Poecilopharis moana* Moser, 1908 inhabiting Moa Island, west of Babar Islands group. The species is missing strong golden-red lustre, its reddish maculation of elytra is much more abundant and differently composed, lines of elytral punctures almost reaching the apex, posterior dent of protibia is more close to mid dent and also the tip of parameres is widened very sharply (by the *Poecilopharis babarica* sp. nov. the tip of paramere is widened more gradually).

**Etymology.** Named after the Babar archipelago.

**Distribution.** Indonesia, S. Moluccas, Babar archipelago, Wetang Island.

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