

Research article

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Remarks on the genus *Perignamptus* Harold, 1877 with descriptions of two new species from Southwest Papua (Coleoptera: Hybosoridae, Ceratocanthinae)

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Abstract

The Melanesian genus *Perignamptus* Harold, 1877 (Coleoptera Scarabaeoidea Hybosoridae Ceratocanthinae) is redefined based on head capsule morphology. The genus *Macrophilharmostes* Paulian, 1978 is synonymised with it, resulting in *Perignamptus major* (Paulian, 1975) **n. comb.** and in further two new combinations, i.e., *Perignamptus granulatus* (Paulian, 1975) **n. comb.** and *Perignamptus loebli* (Paulian, 1981) **n. comb.** (both transferred from *Madrasostes* Paulian, 1975). As a result, the genus *Madrasostes* distributional range does not cross eastwards the Lydekker line. Two more species from Southwest Papua are described: *Perignamptus fungicola* **sp. nov.** (observed on fungi) and *Perignamptus waigeoensis* **sp. nov.**. For both species, photos of live specimens in habitat are provided, being the first time for the genus *Perignamptus*.

Key words: Australasian region, New Guinea, systematics, new combination, synonymy, *Macrophilharmostes*, *Madrasostes*, mycophagy.

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Introduction

The genus *Perignamptus* Harold, 1877 (Coleoptera Scarabaeoidea Hybosoridae Ceratocanthinae) belongs to the “*Perignamptus*” generic group, as defined by Ballerio (2009) based on mouthparts morphology. The group encompasses an extremely heterogeneous number of species, assigned to a total of four Oriental/Australasian genera (*Perignamptus*, *Madrasostes* Paulian, 1975, *Macrophilharmostes* Paulian, 1978 and *Oxymorostes* Ballerio, 2009) plus a few species currently placed in other genera, namely *Besuchetostes jaccoudi* Paulian, 1977, *B. howdeni* Paulian, 1979, *Cyphopisthes inexpectatus* Paulian, 1981, and *Eusphaeropeltis sabah* Paulian, 1989. The distinction between *Perignamptus* and *Madrasostes* is not clear, so that, in the key provided by Ballerio & Grebennikov (2016), they ended up in the same lead, lacking reliable characters to differentiate them. The first author has been working for about three decades on the problem and is preparing a synopsis of all species of the “*Perignamptus*” generic group,

illustrating type material, whenever available. The aim of this paper is to offer a first contribution to the definition of the genus *Perignamptus*, leading to the synonymization of *Macrophilharmostes* with it and to three new combinations. Two new species from Southwest Papua are also described, and the first photos of live specimens in their habitat are provided.

Methods and abbreviations

Methods and terminological conventions follow Ballerio & Grebennikov (2016) and Ballerio (2021) and references therein. Label data for holotypes are provided verbatim, with a double slash separating labels. The first author took photographs of mounted specimens and genitalia with a Canon EOS D5 MII with a phototube connected to a Leica MZ 12.5 stereoscope using steady light, or with a EOS D5 MII with a macro-objective MP 65 mm, moved with a Cognisys Stackshot rail, using flash. Multi-layer images

were then assembled using Helicon Focus software and cleaned and unmasked using a photo processing software. The second author took photographs of live specimens with a Nikon D850 with flash. Line drawings of heads (Fig. 1) have been generated using AI (FigureLabs) from the photos shown on the same plate.

A remark on colours. In this paper, photos taken in the laboratory and photos taken in the habitat are provided, and the differences in colouration of the same individuals under different lighting conditions are particularly noticeable. Caution is therefore needed when evaluating the colours indicated in descriptions.

Abbreviations:

EL: maximum elytral length; EW: maximum total elytral width; HL: maximum head length; HW: maximum head width; L: length; PL: maximum pronotal length at middle; PW: maximum pronotal width at middle; W: width.

- ABCB: Alberto Ballerio collection, Brescia, Italy;
- CASC: California Academy of Sciences collection, San Francisco, CA, U.S.A.;
- HNHM: Hungarian Natural History Museum collection, Budapest, Hungary;
- MCSN: Museo civico di Storia Naturale “Giacomo Doria” collection, Genova, Italy;
- MHNG: Muséum d’Histoire Naturelle collection, Genève, Switzerland.

Systematics

Hybosoridae Erichson, 1847

Ceratocanthinae Martínez, 1968

Ceratocanthini Martínez, 1968

Perignamptus Harold, 1877

Type species: *Perignamptus sharpi* Harold, 1877 by monotypy.

Perignamptus Harold 1877: 106 (description); Gestro 1898: 492, 495, 498 (new species added, key, checklist); Paulian 1978: 480, 491 (key, redescription, new species); Ocampo & Ballerio 2006: 188 (checklist); Ballerio & Grebennikov 2016: 30, 33, 52 (iconography, remarks, key); Ballerio 2021: 62 (fauna of Solomon Islands).

Macrophilharmostes Paulian, 1978 **n. syn.**

Type species: *Cyphopistes major* Paulian, 1975 by original designation.

Macrophilharmostes Paulian 1978: 480, 490 (description, key); Ocampo & Ballerio 2006: 187 (checklist); Ballerio & Grebennikov 2016: 30, 32, 52 (iconography, remarks, key).

Remarks. Harold (1877) and Gestro (1898), having no similar genera for comparison, defined the genus *Perignamptus* based on the lack of visible mesothoracic epimera (i.e., the apical portion of mesepisternum, see Ballerio 2000) in dorsal view, a character which is related to flightlessness and therefore is not useful for differentiating the genus from flightless species of other similar genera, such as *Madrasostes*.

The defining characters of the genus *Perignamptus* used by Paulian (1978), the first student who had to differentiate *Perignamptus* from genera having similar morphology, such as *Madrasostes*, are a) the “entire” genal canthus (supposedly Paulian used the term “entire” to indicate an almost complete genal canthus, although not fused with occipital area of head, since in all the involved species there is always a more or less small gap between the ending of the genal canthus and the occipital area of head), and b) the black body with simple punctation and a series of strong striae on elytral distal third. When Paulian wrote this, there were only 8 known species of *Madrasostes* and 4 of *Perignamptus* (of which Paulian had examined only two). Now 40 species are included in *Madrasostes* and 9 in *Perignamptus* (and the first author is aware of about other 40 undescribed species belonging to one or the other genus). However, the generic allocation of the species described subsequently has not always been made based on a sound morphological basis. Both characters used by Paulian do not seem to be useful for differentiating *Perignamptus* from *Madrasostes*: the genal canthus is always almost complete in *Perignamptus* and, in a group of species from Solomon islands (Ballerio 2021), is absent, i.e., the genal canthus is indistinct, without any dorsal ocular area visible, but the same happens in the genus *Madrasostes*, with the majority of species having an almost

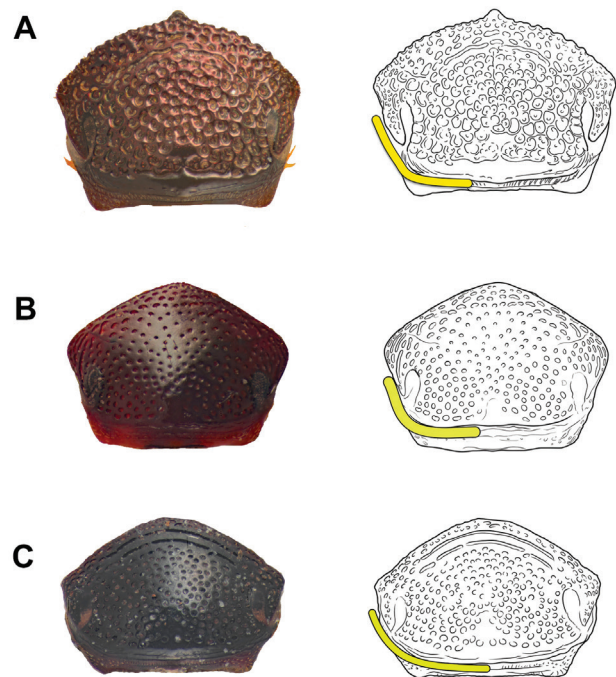


Fig. 1 – Dorsal view of the head of **A**, *Madrasostes variolosum* (Harold, 1874); **B**, *Madrasostes suzukii* Ochi, Tsai & Masumoto, 2005; **C**, *Perignamptus fungicola* **sp. nov.**, next to each photo an AI generated line drawing of the respective photo of head, highlighting the shape of the postoccipital suture (not to scale).

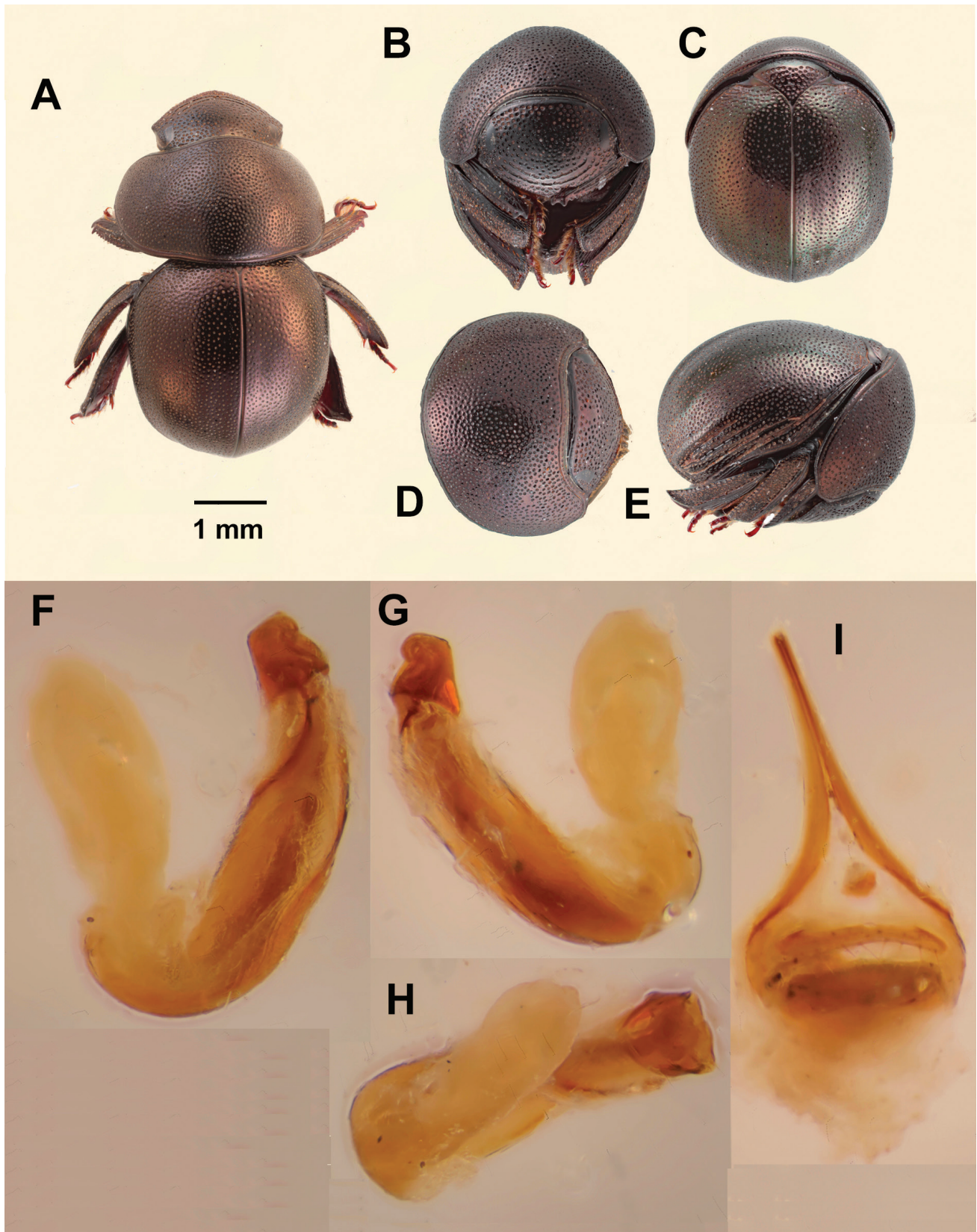


Fig. 2 – *Perignamptus fungicola* **sp. nov.** **A**, distended holotypus in dorsal view; **B**, rolled-up paratypus in ventral view; **C**, rolled-up paratypus in dorsal view; **D**, rolled-up paratypus: view of pronotum; **E**, rolled-up paratypus in lateral view; **F**, **G**, **H**, three views of aedeagus; **I**, spiculum gastrale (with manubrium likely damaged) (genitalia not to scale).

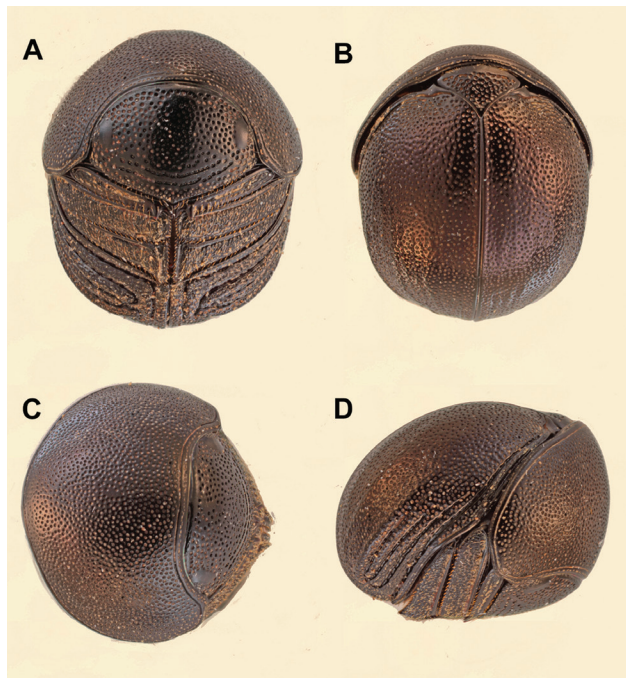


Fig. 3 – *Perignamptus fungicola* sp. nov. specimen from Waigeo excluded from type series, **A**, rolled-up adult in ventral view; **B**, rolled-up adult in dorsal view. **C**, rolled-up adult: view of pronotum; **D**, rolled-up adult in lateral view.

complete genal canthus and some species lacking a dorsal ocular area, hence with indistinct genal canthus. Finally, a distal striation of the elytra is present or absent in both *Perignamptus* and *Madrasostes*, depending on species. The first author has examined all types of *Perignamptus* plus several undescribed species; based on this, a good candidate character for defining the genus *Perignamptus* could be the morphology of the cephalic capsule, which in *Perignamptus* has the sides of the posterior border, more precisely the area which is here tentatively defined as postoccipital suture, broadly hemicircular (Fig. 1C). In contrast, in *Madrasostes* it is more or less angular (Figs 1A-B). Hemicircular sides of the postoccipital suture are also present in *Macrophilharmostes*.

Paulian (1975) described *Cyphopisthes major*, based on the holotype from Lae, Papua New Guinea (incorrectly spelt as Lue in the original description). The species was ranged in the genus *Cyphopisthes* Gestro, 1898 due to the shape of the protibia with a single sharp outer tooth (then incorrectly considered a character typical of *Cyphopisthes*). Later Paulian (1978) erected the genus *Macrophilharmostes* for that species, differentiating it from *Madrasostes* because of the sharp protibial apical tooth and the presence of a complete carina limiting the pseudoepipleure, and from *Perignamptus* because of the shorter genal canthus. Actually, by examining the holotype and some recently collected specimens in MHNG, it was possible to clarify that: a) the sharp protibial apical tooth is probably the result of wear or of a teratology,

since only the right protibia of the holotypus has a sharp tooth while the right one has the normal sculpturing found in *Perignamptus* (and this is confirmed by the additional specimens in MHNG, which have both protibiae ending with two larger apical teeth preceded by a row of irregular short blunt teeth), b) the carina, although blunt, weak and mostly appreciable only on distal third, is found in many species of *Madrasostes* (although absent or hardly appreciable in any of the 8 species included in *Madrasostes* by Paulian when describing *Macrophilharmostes*) and *Perignamptus*, c) the genal canthus is almost as long as ocular area, although not fused with occipital area (as happens in many species of *Perignamptus* and *Madrasostes*). Based on the outer morphology (in particular because of the head capsule shape) of the specimens examined by the first author (the female holotype and a series of specimens in MHNG), there are no characters differentiating *Macrophilharmostes* from *Perignamptus* and therefore the synonymy is here established, resulting in the new combination *Perignamptus major* (Paulian, 1975), as already informally suggested by Ballerio & Grebennikov (2016). According to the above new definition of *Perignamptus*, the genus *Perignamptus* occupies a range spanning Melanesia, from New Guinea to the Bismark archipelago and the Solomon Islands, while *Madrasostes* does not reach the Australasian region, lacking any records east of the Lydekker line.

***Perignamptus major* (Paulian, 1975) n. comb.**

Cyphopisthes major Paulian 1975: 152 (description and iconography);

Macrophilharmostes major Paulian 1978: 480, 490 (key and description); Ocampo & Ballerio 2006: 187 (listing); Ballerio & Grebennikov 2016: 30, 32 (iconography, remarks).

Material examined. Holotypus, ♀ (HNHM): // New Guinea /NE/ Lae 4-6.IX.1968 // No. NG-L-B.79./ Leg. Dr. J. Balogh // Holotypus 1974 *Cyphopisthes major* Paulian // Type // *Cyphopisthes major* n. sp. R. Paulian det. // *Macrophilharmostes major* (Paulian) det. A. Ballerio '97 ♀ //; 8 exx. (MHNG, ABCB): Papua New Guinea, Morobe, Wau, 1200 m, 26.V.1992, G. Cuccodoro.

Remarks. See above discussion under *Perignamptus*.

***Perignamptus granulatus* (Paulian, 1975) n. comb.**

Cloeotus granulatus Paulian 1975: 153;

Madrasostes granulatum Paulian 1978: 484, 489, 490 (key, new combination, iconography, redescription); Ocampo & Ballerio 2006: 187 (listing).

Material examined. Holotypus, ♂ (HNHM): // New Guinea /SE/ Mendi, Mt. Giluwe IX.1968 // No. NG-GB.161./ leg. Dr. N. Wilson // Holotypus 1974 *Cloeotus granulatus* Paulian // Type // *Cloeotus granulatus* n. sp. R. Paulian det. // *Madrasostes granulatum* (Paulian) det. A. Ballerio '97 //.

Remarks. The outer morphology (in particular the head morphology) clearly shows that the species shares the

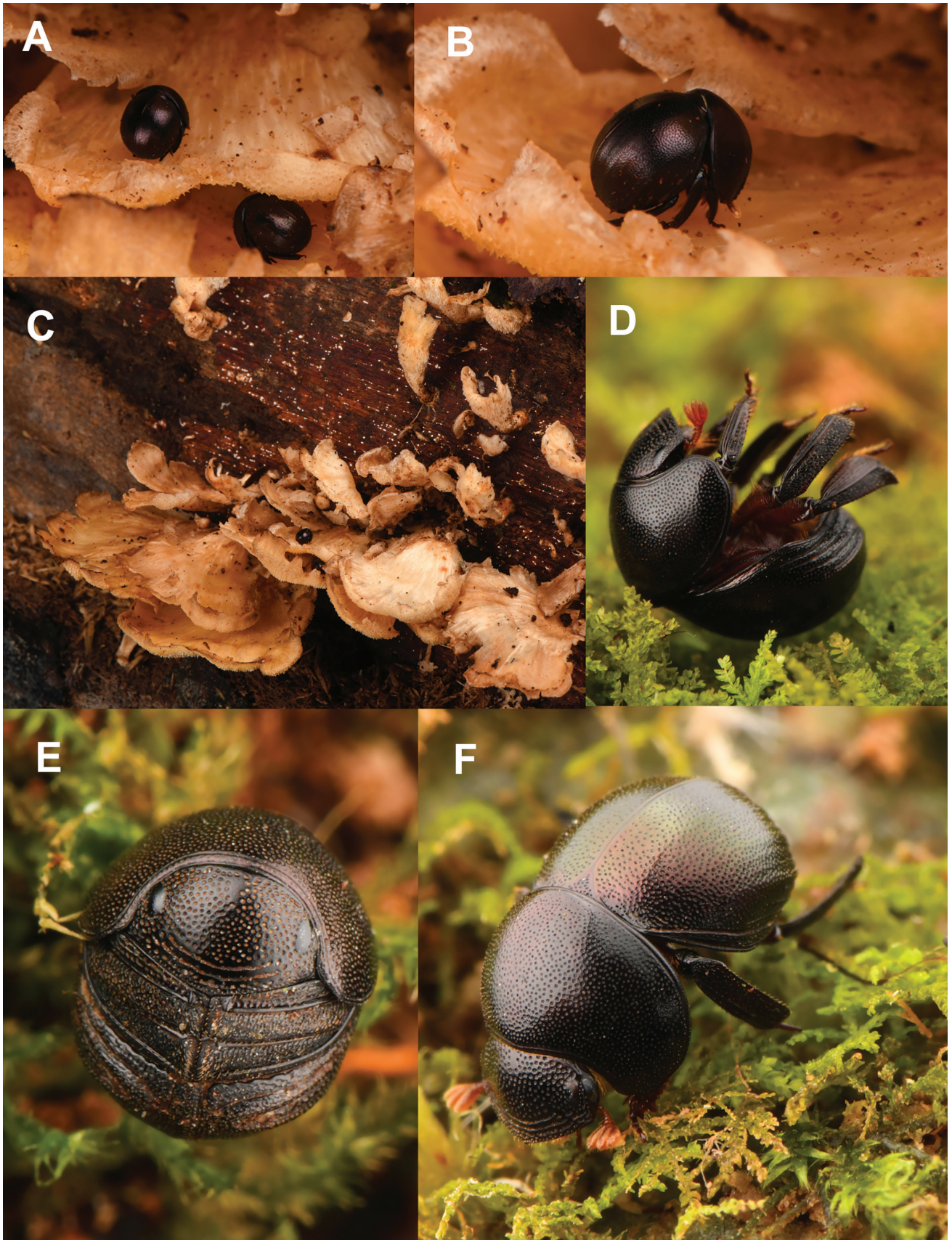


Fig. 4 – *Perignamptus fungicola* sp. nov. photos taken in habitat. **A, B, C, E**, specimens from Sorong, **D, F**, specimen from Waigeo excluded from type series.

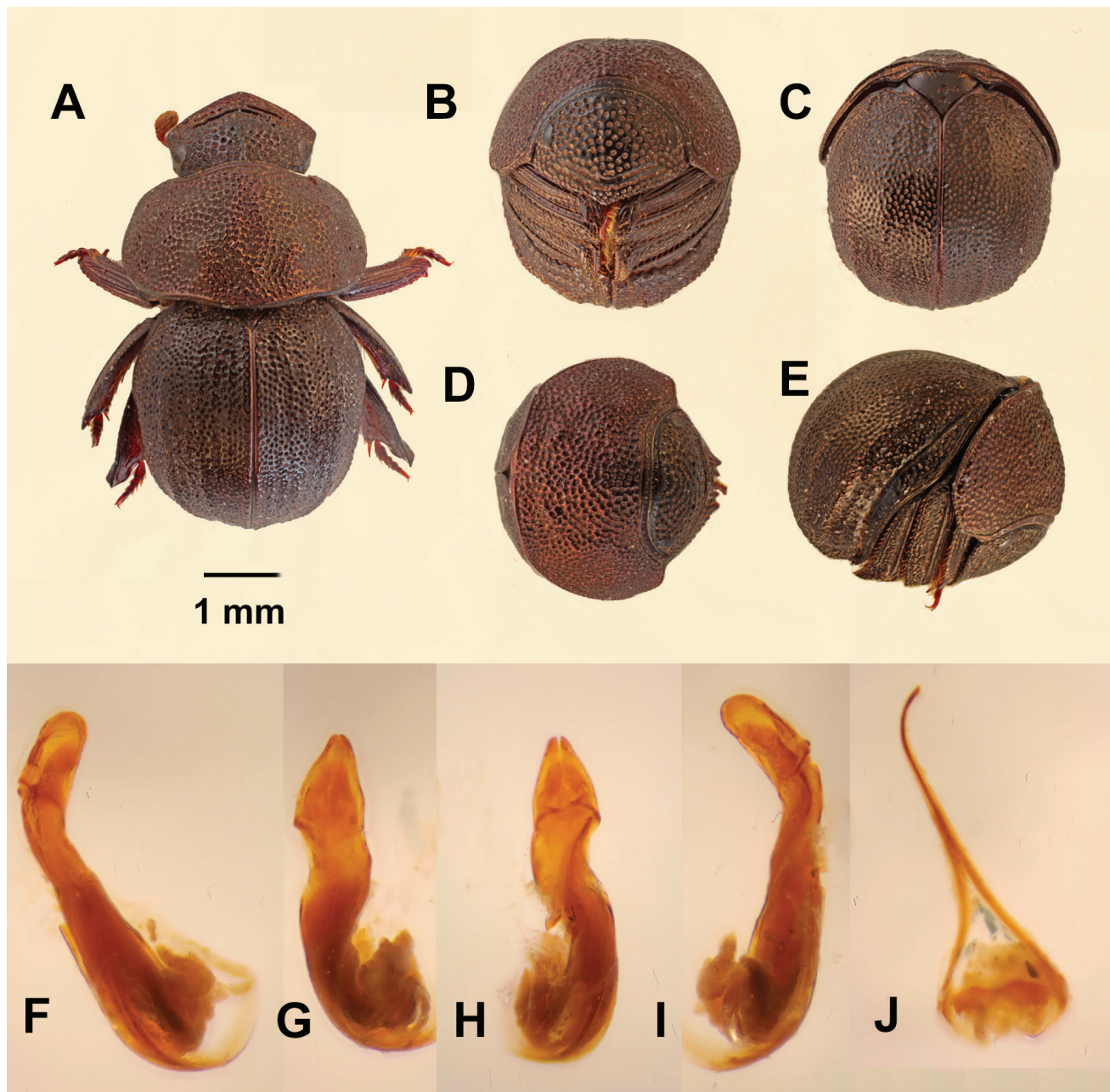


Fig. 5 – *Perignamptus waigeoensis* sp. nov. **A**, distended holotypus in dorsal view; **B**, rolled-up paratypus in ventral view; **C**, rolled-up paratypus in dorsal view; **D**, rolled-up paratypus: view of pronotum; **E**, rolled-up paratypus in lateral view; **F**, **G**, **H**, **I**, four views of aedeagus; **J**, spiculum gastrale (genitalia not to scale).

characters typical of the genus *Perignamptus* and therefore is transferred to it. Images of the holotype will be published in a forthcoming synopsis of the genus *Perignamptus*.

***Perignamptus loebli* (Paulian, 1981) n. comb.**

Madrasostes loebli Paulian 1981: 343 (description); Ocampo & Ballerio 2006: 188 (listing).

Material examined. Holotypus, ♀ (MHNG): // New Ireland Utu, 30.VII 79 entrée grotte Liga J. D. Bourne // Holotype // *Madrasostes löbli* n. sp. R. Paulian det. // *Perig-*

namptus loebli (Paulian) n. comb. ♀ Det. A. Ballerio '98 // [entrée grotte Liga = Liga cave entrance]

Remarks. The outer morphology (in particular the head morphology) clearly shows that the species shares the characters typical of the genus *Perignamptus* and therefore is transferred to it. Images of the holotype will be published in a forthcoming synopsis of the genus *Perignamptus*.

***Perignamptus fungicola* sp. nov.**

(Figs 1C, 2A-I, 4A-E)

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Type series. Holotypus, ♂, deposited in MCSN: // Indonesia, Southwest Papua: Sorong, 27.IX.2025 Leg. Fu-Sheng Huang -0.918972, 131.339528 // Collected at night on fungi growing on a large fallen log // *Perignamptus fungicola* n. sp. Det. Ballerio & Huang 2026 Holotypus ♂ // [dissected, distended, and glued on a card. Male genitalia glued in DMHF resin on a separate card, same pin]. Paratypes (ABCB): 1 ♀ and 1 ♂, same data as holotype. Further material examined (excluded from the type series) (ABCB): 1 ♀, Indonesia, Southwest Papua: Waigeo, 15.IX.2025 Leg. Fu-Sheng Huang -0.415194, 130.791722. Collected at night on the bark at the base of a living tree trunk.

Diagnosis. *Perignamptus fungicola* sp. nov. can be easily differentiated from all other species of *Perignamptus* by the following combination of characters: a) metallic color with green sheen, b) dorsal ocular area present, c) genal canthus present but not fused with occipital area of head, d) head dorsal surface uniformly covered by large impressed simple punctures with average interpunctural distance about the same size of punctural diameter, sometimes shorter, sometimes slightly longer, punctation present also on genal canthus and through fore margin, although before fore margin there are two long broadly curved irregular deep lines, e) pronotum uniformly covered by dense large impressed simple punctation with interpunctural distance more or less equal to punctural diameter, few fine simple punctures are also visible on interpunctural surface, f) pronotal bead on fore margin complete and narrow, g) elytra uniformly covered by dense large impressed simple setigerous punctures, with setae extremely short and thin (visible only with at least 50x) with interpunctural distance equal to larger than punctural diameter (50x), interpunctural surface with some fine simple punctures, h) elytra without carinae but with elytral sides with three deeply impressed longitudinal lines, starting from distal elytral third, the two inner ones shorter than the third one, which reaches median third, i) sutural stria absent.

Description. Size (measurements of holotypus): HL = 1.26 mm; HW = 1.90 mm; PL = 1.70 mm; PW = 3.00 mm; EL = 2.87 mm; EW = 2.80 mm. Large-sized *Perignamptus*, flightless, shiny, metallic copper with green sheen (under artificial lighting, the colour looks metallic bronze), antennae, tarsi and sternum reddish-brown. Dorsum with extremely short erect fine setation (50x).

Head subpentagonal, wider than long (W/L ratio = 1.42), clypeus subtriangular, with sides smooth and gently curved and clypeal apex obtuse (137°) with a very short apical acute projection; genae acute and slightly protruding outwards, genal canthus present and not fused with occipital area of head, dorsal ocular area large, interocular distance about 11 times the maximum width of dorsal ocular area. Ventral ocular area small-sized, elongate, visible only laterally, not extending on inferior side of head, head dorsal surface uniformly covered by large impressed sim-

ple punctures with average interpunctural distance about the same size of punctural diameter, sometimes shorter, sometimes slightly longer, punctation present also on genal canthus and through fore margin, although before fore margin there are two long curved irregular deep lines.

Pronotum wider than long (W/L ratio = 1.60), base widely rounded, fore angles weakly truncate, fore margin weakly bisinuate, pronotum completely margined with margin relatively wide and punctate all over its extension; pronotal sculpturing as follows: uniformly covered by dense, large, impressed, simple punctation with interpunctural distance more or less equal to puncture diameter, few fine, simple punctures are also visible on the interpunctural surface.

Scutellar shield wider than long (W/L ratio = 1.60), sides distinctly notched by elytral articular process, converging to form a triangle with elongate, acute apex and sides slightly curved inward. Surface slightly depressed in the middle, covered by irregular, strongly impressed, large, simple punctures, apart from a smooth transversal area through the scutellar base.

Elytra convex, rounded (in dorsal view), slightly longer than wide (W/L ratio = 0.97), sutural stria absent, humeral callus absent, whole surface uniformly covered by dense large impressed simple setigerous punctures, with erect setae extremely short and thin (visible only with at least 50x) with interpunctural distance equal to larger than punctural diameter (50x), interpunctural surface with some fine simple punctures. Pseudoepipleure absent, elytral sides with three deeply impressed longitudinal lines, starting from distal elytral third, the two inner ones connected apically and shorter than the third one which reaches median third, the innermost one is preceded by a weak subcariniform longitudinal process, marginal area narrow and smooth, inferior sutural stria present, deeply impressed and reaching humeral area, striated articular area not visible, elytral articular process developed, smooth and shiny, separated from remaining elytral surface by a deep narrow furrow. Protibiae ending with two outer teeth, outer margin finely and irregularly serrate. Meso- and metatibiae ending with two apical spurs. Metatibiae with “apical corbel” (sensu Ballerio & Grebennikov 2016) almost unnoticeable, marked only by a weak thickening marked by some recumbent short setae.

Male genitalia: aedeagus (L = 3.0 mm) as in Figs 2F-H, with parameres feebly asymmetrical, short, about 1/5 the length of the basal piece. Spiculum gastrale (L = 2.0 mm), as in Fig. 2I, the manubrium was damaged (and the manubrium was probably truncate and shortened) during extraction.

Sexual dimorphism and variability: the male has the inner apical spur of mesotibiae bent inwards at a right angle, while females mesotibiae have both apical spurs straight. The male has the apical spur of the protibiae stronger and bent inwards apically, while in the female it's straight, thin and sharp. The paratypes do not display any appreciable variation. The specimen from Waigeo (Figs 3A-D, 4D-F) excluded from type series has dorsal punctation deeper and slightly denser.

Etymology. Noun in apposition (hence not subject to gender agreement). From Latin *fungus* (=mushroom) and *cola* (=dweller), referring to the observations of adults walking on mushrooms.

Distribution and habitat. The type locality is near the town of Sorong (Southwest Papua) and falls within the Waigeo-Aru lowland rain forests ecoregion of New Guinea (Wikramanayake et al. 2002). The second author photographed and collected the type series at night in a lowland rainforest, on fungi growing on a large fallen log. Although no feeding behaviour was observed, this circumstance strongly suggests mycophagy, which has already been observed in other Ceratocanthinae species: Bates (1887) reports to have observed the Neotropical *Germarostes plicatus* Erichson in Germar, 1843 and another unspecified species feeding on old woody “boleti”, while Howden & Gill (2000) report about the Neotropical *Ceratocanthus* White, 1842 feeding on fungi. Bruce Gill (pers. comm.), in Colombia, observed some Ceratocanthinae feeding on a bracket fungus carpophore during the night. Ceratocanthinae have a strong diversity of mouthpart morphology (Ballerio & Grebennikov 2016). In the “*Perignamptus*” generic group, the mandibles are remarkable, among Ceratocanthinae, for lacking apicalis, having a strongly developed mesal brush, and having a basal pore, suggesting some kind of feeding specialisation. The photos here provided, together with the photos of the subsequent species, are the first photos of live *Perignamptus* taken in their natural habitat.

Remarks. *Perignamptus fungicola* sp. nov. is a typical *Perignamptus*, with a morphology similar to *P. rossi* Paulian, 1978, *P. major* and *P. loebli*, i.e., the other known species of *Perignamptus* having the dorsal surface covered by dense punctation. More precisely, it differs from *P. loebli* because the latter has the dorsal surface covered by shallow horse-shoe-shaped or comma-shaped punctation, from *P. major* because the latter has three irregular longitudinal lines, interrupted several times along the elytral suture, no simple fine punctures on the interpunctural area, and head punctation is sparser. From *P. rossi*, because the latter has much smaller, sparser and shallower dorsal punctation with a strong metallic sheen.

The female paratype had 8 fully developed eggs inside the abdomen.

***Perignamptus waigeoensis* sp. nov.**

(Figs 5A-J, 6A-C)

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Type series. Holotypus, ♂, deposited in MCSN: // Indonesia, Southwest Papua: Waigeo, 12.IX.2025 Leg. Fu-Sheng Huang -0.412417, 130.795972// Collected at night on leaf litter on the ground // *Perignamptus waigeoensis* n. sp. Det. Ballerio & Huang 2026 Holotypus ♂ // [dissected, distended, and glued on a card. Male genitalia glued in DMHF resin on a separate card, same pin]. Paratype (ABCB): 1 ♀, same data as holotypus.

Diagnosis. *Perignamptus waigeoensis* sp. nov. can be easily differentiated from all other species of *Perignamptus* by the following combination of characters: a) dark color with slight bronze sheen, b) dorsal ocular area present, c) genal canthus present but not fused with occipital area of head, d) head dorsal surface uniformly covered by deeply impressed large simple punctures with interpunctural distance mostly inferior than punctural diameter, e) pronotum uniformly covered by large deeply impressed simple punctures giving a coarse appearance to pronotal surface, with interpunctural distance about half punctural diameter, f) pronotal bead on fore margin complete and narrow, g) elytra uniformly covered by deeply impressed large punctures with interpunctural distance more or less equal to their diameter, h) elytra with three longitudinal weakly raised sharp carinae notched by elytral punctation, i) sutural stria absent, l) spiculum gastrale with manubrium long and thin.

Description. Size (measurements of holotypus): HL = 1.30 mm; HW = 1.80 mm; PL = 1.70 mm; PW = 3.06 mm; EL = 2.84 mm; EW = 2.80 mm. Large-sized *Perignamptus*, flightless, black with a slight bronze sheen (under artificial lighting, the pronotum looks metallic dark bronze while the elytra and head look black), antennae, tarsi and sternum reddish-brown. Dorsum glabrous (50x).

Head subpentagonal, wider than long (W/L ratio = 1.34), clypeus subtriangular, with sides smooth and gently curved and clypeal apex obtuse (40°); genae acute and slightly protruding outwards, genal canthus present and not fused with occipital area of head, dorsal ocular area large, interocular distance about 13 times the maximum width of dorsal ocular area. Ventral ocular area small-sized, elongate, visible only laterally, not extending on the inferior side of the head, head dorsal surface uniformly covered by deeply impressed large simple punctures with interpunctural distance mainly inferior to punctural diameter, punctation present also on the genal canthus and through the fore margin, although before the fore margin, there are two triangular, irregular, wide, deep lines.

Pronotum wider than long (W/L ratio = 1.82), base bisinuate, fore angles distinctly truncate, fore margin weakly bisinuate, pronotum completely margined with margin relatively wide and punctate all over its extension; pronotal sculpturing as follows: uniformly covered by large deeply impressed simple punctures giving a coarse appearance to the pronotal surface, with interpunctural distance about half the punctural diameter.

Scutellar shield wider than long (W/L ratio = 1.5), sides weakly notched by elytral articular process, converging to form a triangle with elongate, acute apex, and sides slightly curved inwards, mostly towards the scutellar apex, which is therefore distinctly narrowed. Surface slightly depressed in the middle, mostly smooth with only three irregular, extremely large (bigger than pronotal ones) deeply impressed simple punctures concentrated on the median and apical third.

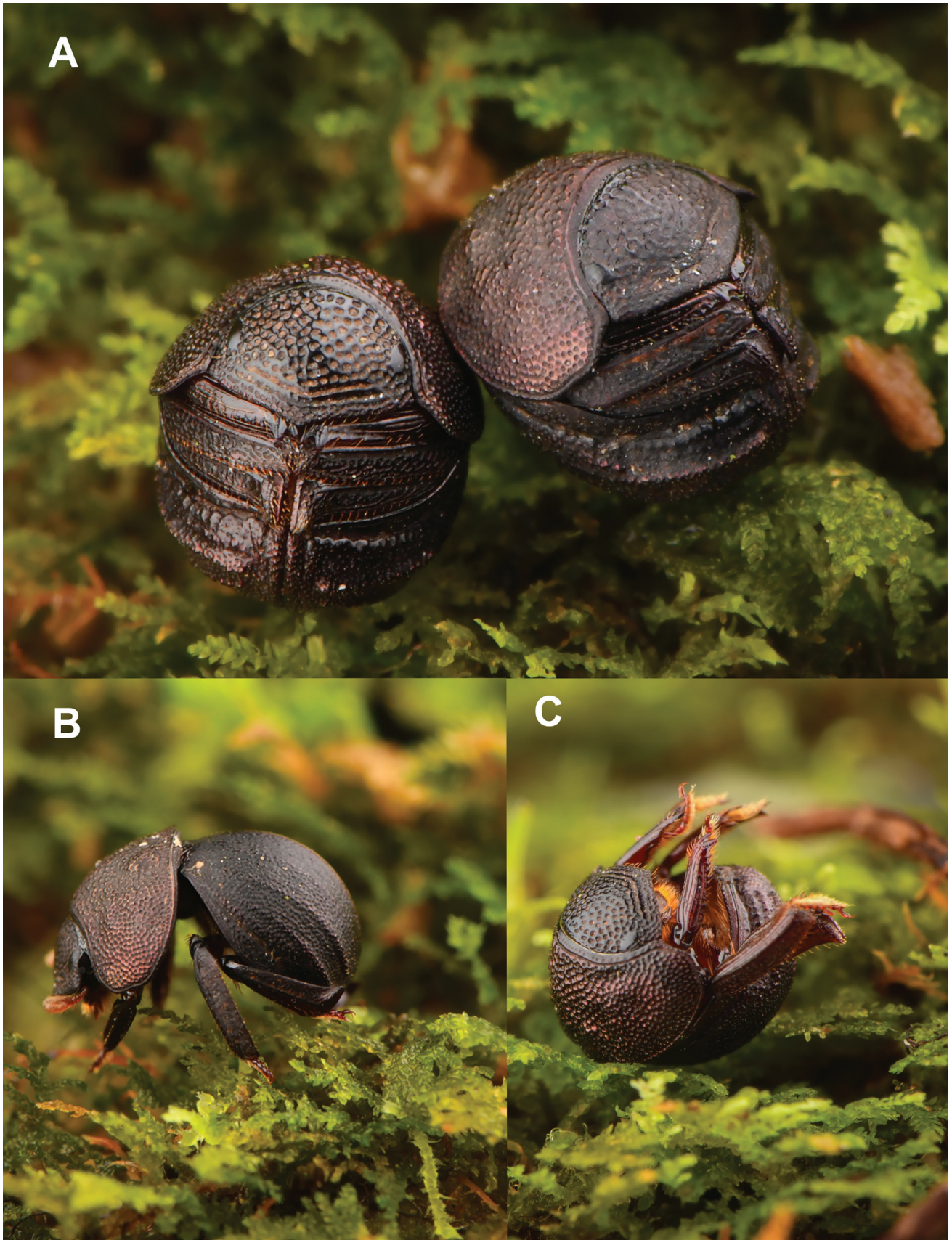


Fig. 6 – *Perignamptus waigeoensis* sp. nov., A, B, C, photos taken in its natural habitat.

Elytra convex, rounded (in dorsal view), about as long as wide (W/L ratio =1.00), sutural stria absent, humeral callus absent, whole surface uniformly covered by deeply impressed large punctures with interpunctural distance more or less equal to their diameter, with three longitudinal weakly raised, sharp carinae notched by elytral punctation. Pseudoepipleure absent, marginal area narrow and punctate, inferior sutural stria present, deeply impressed and reaching humeral area, striated articular area not visible, elytral articular process developed, smooth and shiny, separated from the remaining elytral surface by a deep, wide furrow.

Protibiae ending with two outer teeth, outer margin irregularly serrate. Meso- and metatibiae ending with two apical spurs. Metatibiae with “apical corbel” (sensu Ballerio & Grebennikov 2016) almost unnoticeable, marked only by a weak thickening.

Male genitalia: aedeagus (L= 3.2 mm) as in Fig. 5F-I, with parameres feebly asymmetrical, short, about 1/3 the length of the basal piece. Spiculum gastrale (L= 3.3 mm) as in Fig. 5J with manubrium long and thin.

Sexual dimorphism and variability: The male has the inner apical spur of mesotibiae that is strong and bent inwards at a right angle, while the female mesotibiae have both apical spurs that are straight. The male has the apical spur of the protibiae stronger and bent inwards apically, while in the female it's straight, thin and sharp.

Etymology. Latin adjective meaning “from Waigeo”.

Distribution and habitat. Known only from the type locality in the island of Waigeo (Southwest Papua), which falls within the Waigeo-Aru lowland rain forests ecoregion of New Guinea (Wikramanayake et al. 2002). The second author collected the type series at night on leaf litter on the ground in a lowland rainforest. The pair was mating at the time of collection. The photos here provided, together with the photos of the preceding species, are the first photos of live *Perignamptus* taken in their natural habitat.

Remarks. *Perignamptus waigeoensis* sp. nov. is a typical *Perignamptus*, with a morphology similar to *P. carinipennis* Gestro, 1898 from eastern Papua New Guinea, and the only other *Perignamptus* species known to have elytra with longitudinal carinae. It differs from *P. carinipennis*, because the latter has distally more elevated and sharper elytral carinae, sides of elytra covered by dense comma-shaped punctures mixed to horseshoe-shaped punctures, pronotal sides covered by a mixture of dense comma-shaped punctures mixed to few horseshoe-shaped punctures, elytral simple punctures smaller and shallower, scutellum with median and apical third covered by dense impressed punctures, pronotal punctation less deep, not giving a coarse appearance, elytral punctures setigerous, with very short erect setae.

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