FOUR NEW SPECIES OF PACHYRHYNCHINI FROM SOUTHERN LUZON, PHILIPPINES (COLEOPTERA, CURCULIONIDAE, ENTIMINAE)

Anita Rukmane-Bārbale*

Rukmane-Bārbale A. 2024. Four new species of Pachyrhynchini from Southern Luzon, Philippines (Coleoptera, Curculionidae, Entiminae). *Acta Biol. Univ. Daugavp., 2024(2): 349-358.*

Abstract

Four new species of the tribe Pachyrhynchini, genera *Pachyrhynchus* Germar, 1824 and *Metapocyrtus* Heller, 1912 has been described and illustrated from Gabaldon and Quezon province, Southern Luzon Island: *Pachyrhynchus pseudojaysoni* sp. nov., *Pachyrhynchus chrysocyaneus* sp. nov., *Metapocyrtus pseudojaysoni* sp. nov. and *Metapocyrtus biflavus* sp. nov. A diagnosis of each taxon is provided. Habitus photographs and illustrations of male genitalia for these taxa are also included. The similarities in body pattern among *Pachyrhynchus* and *Metapocyrtus* species inhabiting Quezon and Marinduque suggest an evolutionary dispersal pathway from the Sierra Madre through Quezon to Marinduque, highlighting biogeographic and adaptive links within this beetle lineage.

Keywords: Coleoptera, Pachyrhynchus, Metapocyrtus, taxonomy, Philippines, Quezon.

*Corresponding author: Anita Rukmane-Bārbale. Daugavpils University, Institute of Life Sciences and Technology, Coleopterological Research Center, Vienības Str. 13, LV-5401, Daugavpils, Latvia. E-mail: anita.rukmane@du.lv

INTRODUCTION

The Quezon Protected Landscape, located in the southern Sierra Madre Mountain range, Philippines, is a region of ecological diversity shaped by its tropical climate, mountainous landscapes, and extensive coastlines. This area encompasses a range of ecosystems—from lush lowland dipterocarp forests to mountainous mossy forests, as well as mangroves and coral reefs along its coastal edges. These distinct ecosystems provide habitats for an impressive number of endemic species, reflecting Luzon's reputation as a biodiversity hotspot (Posa et al. 2008, Fernando et al. 2008). Species richness and evenness are high, with notable trees such as *Parashorea malaanonan*, *Diospyros pyrrhocarpa*, *Leucaena leucocephala*, and *Cocos nucifera* dominating distinct forest areas (Paclibar & Tadiosa 2020).

The Sierra Madre Mountain Range, extending along the eastern part of Luzon, is a critical ecological backbone that directly influences the environmental structure and biodiversity of Quezon Province. This mountain range serves as a watershed, channelling freshwater through numerous river systems that nourish the lowland and coastal ecosystems in Quezon. The beetle diversity in the Sierra Madre suggests a notable influence on the species composition observed in Quezon, with numerous mimetically similar species now documented in both regions, for example, Pachyrhynchus dohrni Behrens, 1887 and Pachyrhynchus barsevskisi Rukmane, 2016 both present in Sierra Madre, suggesting potential dispersal or shared evolutionary histories. This connection extends to Marinduque, where the color pattern of Pachyrhynchus rukmaneae Barsevskis, 2016, previously unique to Marinduque, has now been identified in Quezon populations of Pachyrhynchus masatoshii Yoshitake & Yap, 2017 (Rukmane 2016, Barsevskis 2016, Yoshitake & Yap 2017). Such mimicry and colour pattern convergence across these geographically connected areas underscore the role of environmental pressures in shaping regional beetle diversity and provide insight into biogeographical links within the Philippine archipelago.

Several new species have been already described from the area: *Pachyrhynchus masatoshii* Yoshitake & Yap, 2017, *Pachyrhynchus yuukae* Yoshitake, 2019, *Pachyrhynchus caeruleus* Yoshitake, 2019, *Metapocyrtus jaysoni* Bollino, 2023 (Yoshitake & Yap 2017, Yoshitake 2019, Bollino 2023).

After careful examination of Pachyrhynchini specimens from Quezon Province, four new species, two of the genus *Pachyrhynchus* and two of *Metapocyrtus*, has been identified as new species. Description of these four species are presented in this article.

MATERIAL AND METHODS

The study was based on specimens deposited at the Daugavpils University Beetle Collection (DUBC).

The laboratory research and measurements have been carried out using Nikon SMZ 745T and NIS-Elements 6D software. The illustrations were made using digital camera Canon EOS 6D with Canon MP-E 65mm macro lens, using stackshot system and Helicon Focus auto montage, subsequently was edited using Photoshop.

Label data are cited verbatim. In the text the following symbols and abbreviations were used:

/ = different lines;

// = different labels;

LB = body length, from apical margin of pronotum to the apex of elytra;

LE = elytral length;

LP = pronotal length;

LR = length of the rostrum;

- WE = maximum width of the elytra;
- WP = maximum width of the pronotum;
- WR = maximum width of the rostrum

RESULTS

Pachyrhynchus masatoshiensis sp. nov. (Fig. 1A-B; 3F, L; 4D, I)

Type material. Holotype, male (Fig. 1A): PHILIPPINES / Luzon, Bicol, Albay, Tabaco, Mt. / Mayon Volcano / IX. 2022 / local collector leg. (white printed label) // HOLOTYPE / *Pachyrhynchus masatoshiensis* / Rukmane-Barbale, 2024 (typed on red card).

Paratypes $(4\bigcirc)$: $3\bigcirc$ same data as holotype; $1\bigcirc$ PHILIPPINES / Luzon, Quezon, Gen Nakar / III. 2024 / local collector leg. The additional label: "PARATYPE / *Pachyrhynchus masatoshiensis* / Rukmane-Barbale, 2024" (typed on red card) was added to all paratypes (DUBC).

Diagnosis. Pachyrhynchus masatoshiensis sp. nov. is similar to *P. masatoshii* Yoshitake & Yap, 2017 and *P. rukmaneae* Barševskis, 2016. The new species can be distinguished by 1) thick band markings on prothorax, that lacks in both similar species: prothorax of *P. masatoshii* Yoshitake & Yap, 2017 is without markings (Fig. 2C-D) while prothorax of *P. rukmaneae* Barševskis, 2016 is with narrow transverse band of scales along anterior margin and triangular shape band along posterior margin medially (Fig. 2G, H, I); 2) rostrum of *P. masatoshiensis* sp. nov. longer, with moderate bulge at apical half while without bulge in *P. rukmaneae* Barševskis, 2016 and smaller bulge in *P. masatoshii* Yoshitake & Yap, 2017 (Fig. 3B, C, F); 3) eyes ovate in *P. masatoshiensis* sp. nov. while globular in *P. masatoshii* Yoshitake & Yap, 2017 (Fig. 3H, I, L).

Description. Holotype. Male. Dimensions: LB: 13.0; LE: 8.7; LP: 4.0; WE: 5,8; WP: 3.9; LR: 2.2; WR: 1.9. N = 1.

Integument black, glossy, underside with weaker luster. Body subovate, with glossy orange, green, yellow, pink and purple scales. Rostrum without scally patch dorsally, moderate patch of green, orange and yellow elongated scales on genae.

Prothorax with the following yellow to orange scales: 1) broad band of scales along anterior margin in all length; 2) large triangular medial patch along posterior margin, peak connected with anterior band; 3) large lateral patch at each lateroventral part. Each elytron with the following scale markings: 1) longitudinal band of pink scales along suture from middle to apex; 2) longitudinal band along interval II – III in all length, pink scales interrupted by purple scales in middle of band; 3) two additional longitudinal bands, each interrupted by gap from one another, redirected to lateral margin. Each femur with wide band of orange to yellow scales on subapical part.

Head smooth; forehead flattish, without medial furrow; more than two times as wide as eye width; eyes relatively small, slightly convex from outline of the head. Rostrum longer than wide (LR/WR 1.16); deep sub ovate impression at basal half; dorsum smooth, apical half moderately bulging; dorsal contour of rostrum nearly straight, incurved before middle, raised to apex; lateral contour with expressed apical bulge. Antennal scape shorter than funicle; funicular segment 1.5 times as long as wide, longer than II; segment II 1.5 times as long as wide, moderately longer than III; segments III– VII subequal in length, as long as wide; club sub ellipsoidal, two times as long as wide.

Pronotum sub spherical, as wide as long (WP/ LP 1.02); dorsal contour widest just before the middle; lateral contour widest at middle; without sub basal groove, subapical groove interrupted at middle.

Elytra ovate (LE/WE 1.5), wider than prothorax (WE/WP 1.48), more than twice as long as prothorax, (LE/LP 2.18), smooth, without puncture rows; dorsal contour highest at middle; lateral contour widest at middle. Male genitalia as illustrated (Fig. 4D, I).

Figure 1. Pachyrhynchus masatoshiensis sp. nov. habitus of holotype, male (A), female (B); *P. chrysocyaneus* sp. nov. habitus of holotype, male (C), female (D). Image courtesy A. Rukmane-Bārbale.

Female. (Fig. 1B) Dimensions: LB: 13.3 - 15.6 (mean 14.37); LE: 9.2 - 11.0 (mean 9.95); LP: 3.8 - 4.6 (mean 4.1); WE: 7.4 - 7.8 (mean 7.62); WP: 3.9 - 4.3 (mean 4.12); LR: 2.0 - 2.1 (mean 2.075); WR: 1.9 - 2.0 (mean 1.95). N = 4.

Distribution. The new species is known from two provinces of Luzon Island: General Nakar, Quezon and Bicol, Albay.

Etymology. The species name *masatoshiensis* means false *rukmaneae*, due toits similarity to its *P. masatoshii Yoshitake & Yap, 2017*

Comments. The new species is relatively variable in colour and is proposed to be involved in mimicry complex with *P. masatoshii* Yoshitake & Yap, 2017, *P. yuukae* Yoshitake, 2019 (Fig. 2C, D, E, F) and *M. pseudojaysoni* sp. nov.



Figure 2. Dorsal habitus of selected species: *Pachyrhynchus caeruleus* Yoshitake, 2019, male (A), female (B); *P. masatoshii* Yoshitake & Yap, 2017, male (C), female (D); *P. yuukae* Yoshitake, 2019, male (E), female (F); *P. rukmaneae* Barševskis, 2016, male (G), female (H), *P. rukmaneae* ssp. *pauscignitus* Yoshitake, 2017, male. Images courtesy A. Rukmane-Bārbale.





Figure 3. Head and rostrum in lateral and dorsal view. *Pachyrhynchus caeruleus* Yoshitake, 2019 (A, G); *P. masatoshii* Yoshitake & Yap. 2017 (B, H); *P. rukmaneae* Barševskis, 2016 (C, I); *P. yuukae* Yoshitake, 2019 (D, J); *P. chrysocyaneus* sp. nov. (E, K); *P. pseudorukmaneae* sp. nov. (F, L). Images courtesy A. Rukmane-Bārbale.

Pachyrhynchus chrysocyaneus sp. nov. (Fig. 1C, D; 3E, K; 4C, H)

Type material. Holotype, male (Fig. 1C): PHILIPPINES / Luzon, Nueva Ecija, Gabaldon / VIII. 2023 / local collector leg. (white printed label) // HOLOTYPE / *Pachyrhynchus chrysocyaneus* / Rukmane-Barbale, 2024 (typed on red card).

Paratypes (2^{\bigcirc}) : Same data as holotype. The additional label: "PARATYPE / *Pachyrhynchus chrysocyaneus* / Rukmane-Barbale, 2024" (typed on red card) was added to both paratypes (DUBC).

Diagnosis. The new species is similar to *P. chlorites* Chevrolat, 1881 from general Luzon, but is different by following characters: 1) black integument in *P. chrysocyaneus* sp. nov. but metallic purple to coppery in *P. chlorites* Chevrolat, 1881; 2) unique scally markings in *P. chrysocyaneus* sp. nov.; 3) rostrum with round impression at basal half in *P. chrysocyaneus* sp. nov. while with triangular impression in *P. chlorites* Chevrolat, 1881.

Description. Holotype. Male. Dimensions: LB: 11.8; LE: 7.9; LP: 3.8; WE: 5.5; WP: 4.1; LR: 2.1; WR: 2.1. N = 1.

Integument black, glossy. Body subovate, with glossy green and blue scales. Rostrum dorsally without scally markings, each side with few light hairs on lateral part near apex, few single green and blue elongated scales on genae.

Prothorax with the following green scale markings: 1) two round patches along anterior margin, each redirected laterally; 2) one medial triangular patch along posterior margin; 3) ovate patch on each latero-ventral part.

Each elytron with the following green and blue scale markings: 1) two large ovate patches at basal ¹/₂, one dorsal, one redirected laterally; 2) three medial patches of blue scales, rounded, sub-connected from interval II to lateral margin; 3) two sutural patches of green scales, rounded, one after the midline, one along apex; 4) three round patches of green scales at apical half. Fore coxae with band of scales along internal margin; tibiae with few brown hairs along internal margin, with rare black setae. Vertex with two lateral round patches along integument II and III.

Head smooth; forehead flattish, without furrow; eyes slightly convex from outline of the head, 2.5 times as wide as forehead. Rostrum equal in length and width (LR/WR 1.0); dorsum smooth, edges slightly rounded, without medial groove, with deep round impression at basal half, slightly bulging along apical half; dorsal contour of rostrum and forehead continuous, gradually increasing from forehead, slightly incurved along middle of rostrum, slightly raised to apex (Fig. 3E, K).

Antennal scape flattened, subequal with funicle; funicular segment I 1.5 times as long as wide, slightly longer than II; segment II longer than wide, longer than III; segments III– VII subequal in length, slightly wider than long, gradually increasing to club, club sub ellipsoidal, two times as long as wide.

Pronotum subspherical, wider than long (WP/ LP 1.07); dorsum smooth, convex, without medial groove; dorsal contour widest before the middle; lateral contour widest before the middle; sub basal groove interrupted at middle, subapical groove indistinct.

Elytra ovate (LE/WE 1.43), wider than prothorax (WE/WP 1.34), two times longer than pronotum, (LE/LP 2.07), smooth, without expressed punctured rows; dorsal contour highest at middle; lateral contour widest at middle. Male genitalia as illustrated (Fig. 4C, H).

Female. Dimensions: LB: 12.0 - 12.8 (mean 12.4); LE: 8.0 - 8.6 (mean 8.3); LP: 3.8 - 4.0 (mean 3.9); WE: 6.0 - 6.7 (mean 6.35); WP: 3.6 - 4.1 (mean 3.85); LR: 2.1 - 2.2 (mean 2.15); WR: 2.0 - 2.2 (mean 2.1). N = 2. Elytra wider than prothorax (WE/WP 1.64) otherwise, essentially as in males (Fig. 1D).

Distribution. The new species is known only from type locality at Gabaldon Province, Luzon Island.

Etymology. *Pachyrhynchus chrysocyaneus* – combining "chryso" for golden yellow and "cyaneus" for blue symbolising spots on elytra of the new species.

Comments. The new species is similar by colour pattern to *P. yuukae* Yoshitake, 2019 and *M. jaysoni* Bollino, 2023 which suggest their mimicry relationship.



Figure 4. Aedeagus of selected species. Pachyrhynchus caeruleus Yoshitake, 2019 (A, F); P. masatoshii Yoshitake & Yap, 2017 (B, G); P. chrysocyaneus sp. nov. (C, H); P. masatoshiensis sp. nov. (D, I); P. rukmaneae Barševskis, 2016 (E, J). Images courtesy A. Rukmane-Bārbale.

Metapocyrtus jaysoniensis sp. nov. (Fig. 5C, D; 6C, D; 7A, D)

Type material. Holotype, male (Fig. 5C): PHILIPPINES / Luzon, Bicol, Albay, Tabaco, Mt. / Mayon Volcano / IX. 2022 / local collector leg. (white printed label) // HOLOTYPE / *Metapocyrtus pseudojaysoni* / Rukmane-Barbale, 2024 (typed on red card). Paratypes (2♀): 1♀ same data as holotype; 1♀ PHILIPPINES / Luzon, Quezon, Gen Nakar / III. 2024 / local collector leg. The additional label: "PARATYPE / *Metapocyrtus*

pseudojaysoni / Rukmane-Barbale, 2024" (typed on red card) was added to both para-types (DUBC).

Diagnosis. Metapocyrtus jaysoniensis sp. nov. is similar to Metapocyrtus jaysoni Bollino, 2023 (Fig. 5A, B) by general scale pattern on prothorax. M. jaysoni Bollino, 2023 so far is known only from Quezon Province, while M. jaysoniensis sp. nov. is recorded both from Quezon and Bicol. The new species can be distinguished by the following characters: 1) distinct elytral and pronotal scales of green, yellow and orange colour in *M. jaysoniensis* sp. nov. instead of monotone sky-blue scale markings in M. jaysoni Bollino, 2023; 2) rostrum in dorsal contour with rounded ventro-lateral edges in M. jaysoniensis sp. nov. (Fig. 6C, D), resulting in a smoother, more gradual contour on the underside; M. jaysoni Bollino, 2023 has sharp, non-rounded ventro-lateral edges, resulting in a more angular, defined appearance along the underside of the rostrum (Fig. 6A, B). This can be linked to different functional or adaptive roles depending on the species ecological niche or feeding habits.

Description. Holotype. Male. Dimensions: LB: 11,4; LE: 7,3; LP: 3,8; WE: 5,1; WP: 4,3; LR: 2,0; WR: 1,8. N = 1.

Integument glossy black, underside with weaker luster. Body subglabrous, with glossy yellow, green or orange scales. Rostrum with a moderate basal subtriangular patch of orange and green scales along midline, each side covered with few light hairs on lateral part in all length, moderate patch of green and orange elongated scales on genae.

Prothorax with the following yellow and green scales: 1) broad band of round scales along anterior groove, merging with a 2) lateral patch on the basal margin, which ascends

along approximately one-third of the posterior groove; 3) anterior band projects posteriorly as a sublateral band, constricting medially and markedly widening in the posterior region.



Figure 5. *Metapocyrtus jaysoni* Bollino, 2023, male (A), female (B); *M. pseudojaysoni* sp. nov. habitus of holotype, male (C), female (D); *M. biflavus* sp. nov. habitus of holotype, male (E), female (F). Images courtesy A. Rukmane-Bārbale.

Each elytron with the following scale markings: 1) narrow, longitudinal band of blue scales along suture, from medial portion to apex; 2) wide longitudinal band of orange scales in all length, from interval III to medial portion; 3) narrow, longitudinal band of blue scales in all length along midline; 4) longitudinal band of range scales in all length along lateral margin. Each femur moderately covered with fine hairs, with band of green to yellow scales on subapical part. Tibiae covered with fine brown hairs along internal margin, with rare black setae. Head minutely punctured; forehead flattish with moderate median furrow, starting from base of rostrum to exceeding posterior ocular edge; eyes slightly convex from outline of the head. Rostrum slightly longer than wide (LR/WR 1.11); transverse basal groove with sides curved downwards; dorsum moderately wrinkled, edges rounded, with deep median groove from base to middle of apical half, weakly bulging along medial part; dorsal contour of rostrum nearly straight, slightly widened at apex.

Antennal scape flattened, shorter than funicle; funicular segment I more than twice as long as wide, slightly longer than II; segment II twice as long as wide, twice as long as III; segments III– VII subequal in length, as long as wide; club sub ellipsoidal, 2.5 times as long as wide. Pronotum spherical, wider than long (WP/LP 1.13); dorsum minutely punctured, convex, with shallow medial longitudinal groove; dorsal contour widest at middle; lateral contour widest at middle; apical and basal margin subtruncate; sub basal groove interrupted at middle, subapical groove indistinct.

Elytra ovate (LE/WE 1.43), wider than prothorax (WE/WP 1.18), nearly two times longer than pronotum, (LE/LP 1.92), minutely punctured in weak puncture rows; dorsal contour highest at middle; lateral contour widest at middle, without subapical constriction.

Legs slender; femora strongly clavate; tibiae moderately incurved, strongly serrate along internal

margins, with small mucrones at apices. Male genitalia as illustrated (Figs. 7A, D).

Female. Dimensions: LB: 12.0 - 12.8 (mean 12.4); LE: 7.3 - 7.5 (mean 7.4); LP: 4.0 - 4.1 (mean 4.05); WE: 6.1 - 6.3 (mean 6.2); WP: 4.6 - 4.6; LR: 2.1 - 2.2 (mean 2.15); WR: 1.8 - 2.0 (mean 1.9). N = 2 for all measurements. Larger, elytra wider than prothorax (WE/WP 1.32) otherwise, essentially as in males (Fig. 5D).

Distribution. The new species is known from two provinces of Luzon Island: General Nakar, Quezon and Bicol, Albay.

Etymology. The epithet jaysoniensis to point on the similarity of this species with its similarity to M. jaysoni Bollino, 2023.

Comments. The new species appear sympatric and is a new mimicry pair example with *Pachyrhynchus masatoshiensis* sp. nov.



Figure 6. Head and rostrum in lateral and dorsal view. *Metapocyrtus jaysoni* Bollino, 2023 (A, B); *M. pseudojaysoni* sp. nov. (C, D); *M. biflavus* sp. nov. (E, F). Images courtesy A. Rukmane-Bārbale.

Metapocyrtus biflavus sp. nov. (Fig. 5E, F; 6E, F; 7C, F) **Type material.** Holotype, male (Figs. 5E): PHILIPPINES / S Luzon, Quezon / Gen. Nakar / X. 2023 / local collector leg. (white printed label) // HOLOTYPE / *Metapocyrtus biflavus* / Rukmane-Barbale, 2024 (typed on red card). Paratypes (1^Q): Same data as holotype, but IX. 2023. The additional label: "PARATYPE / *Metapocyrtus biflavus* / Rukmane-Barbale, 2024" (typed on red card) (DUBC).

Diagnosis. Metapocyrtus biflavus sp. nov. is similar to Metapocyrtus jaysoniensis sp. nov. by scale pattern on prothorax and elytra of the same colour. The new species can be distinguished by the following characters: 1) Scale bands on elytra of M. jaysoniensis sp. nov. continuous, with additional two bands of blue scales on each elytron while scally markings on elytra of *M. biflavus* sp. nov. interrupted along midline, without additional blue scale bands; 2) elytra of *M. biflavus* sp. nov. shorter, sub globular while ovate in *M. jaysoniensis* sp. nov.; 3) rostrum of *M. biflavus* sp. nov. dorsally with deep triangular impression at basal half that lacks M. jaysoniensis sp. nov.; 4) transverse groove at base of rostrum shallow in M. biflavus sp. nov. while deep in M. jaysoniensis sp. nov.

Description. Holotype. Male. Dimensions: LB: 9.9; LE: 5.9; LP: 3.8; WE: 4.8; WP: 4.0; LR: 2.1; WR: 1.8. N = 1.

Integument glossy black, underside with weaker luster. Body subglabrous, with glossy yellow, green to orange scales. Rostrum without scally markings dorsally, with short brown setae at apical half; each side covered with brown setae at apical half, small patch of green and orange elongated scales on genae.

Prothorax with the following orange scales: 1) triangular patch of round scales along anterior margin, each redirected laterally; 2) lateral patch on each side connected to underside; 3) two longitudinal bands from posterior margin to middle, each redirected laterally.

Each elytron with the following scale markings: 1) longitudinal band of green, yellow and orange scales along suture from before the middle to apical 1/2; 2) longitudinal band of orange scales along interval III in all length, stripe interrupted along middle of apical half; 3) two elongated bands of green, yellow and orange scales along interval V, one at medial portion, one before apex; 4) band of green and yellow scales before lateral margin along basal half; 5) band of orange scales along lateral margin in all length.



Figure 7. Aedeagus of selected species. Metapocyrtus jaysoniensis sp. nov. (A, D); M. jaysoni Bollino, 2023 (B, E); M. biflavus sp. nov. (C, F). Images courtesy A. Rukmane-Bārbale.

Head smooth at base, minutely apically; forehead flattish with deep median furrow, starting from base of rostrum to posterior ocular edge; eyes not convex from outline of the head. Rostrum slightly longer than wide (LR/ WR 1.16); transverse basal groove at base of rostrum straight; dorsum moderately wrinkled, edges slightly rounded, with deep median groove from base to before middle of apical half, with deep triangular impression at basal half; dorsal contour of rostrum nearly straight, slightly widened along middle, constricted to apex, in lateral contour nearly straight, slightly raised along middle (Fig. 6E, F).

Antennal scape slightly shorter than funicle; funicular segment I three times as long as wide, longer than II; segment II twice as long as wide, twice as long as III; segments III– VII subequal in length, as long as wide; club sub ellipsoidal, nearly three times as long as wide.

Pronotum spherical, equal in width and length (WP/LP 1.05); dorsum minutely punctured, convex, without medial longitudinal groove; dorsal contour widest at middle; lateral contour widest at middle; sub basal and subapical groove indistinct.

Elytra sub globular (LE/WE 1.22), wider than prothorax (WE/WP 1.2), 1.5 times longer than pronotum (LE/LP 1.55), nearly smooth, without expressed puncture rows; dorsal contour highest at middle; lateral contour widest at middle. Hind femora without scally markings; hind tibiae nearly without serrate along internal margins, without mucrones at apices.

Male genitalia as illustrated (Fig. 7C, F).

Female. LB: 11.3; LE: 7.2; LP: 4.0; WE: 5.9; WP: 4.3; LR: 2.3; WR: 1.9. N = 1 for all measurements. Elytra elongate, with scale band along interval III continuous, otherwise, essentially as in males (Fig. 5F).

Distribution. The new species is known exclusively from type locality General Nakar, Quezon.

Etymology. *Metapocyrtus biflavus* – from "bi" (two) and "flavus" (yellow/orange), indicating the two-toned colour pattern characterise for the new taxon.

Comments. The new species appear sympatrically and is a new mimicry pair example with *Pachyrhynchus masatoshiensis* sp. nov. and *Metapocyrtusjaysoniensis* sp. nov.

ACKNOWLEDGEMENTS

Thanks to two anonymous reviewers for help with manuscript improvement.

REFERENCES

- Barševskis A. 2016. New species of Pachyrhynchus Germar, 1824 and Macrocyrtus Heller, 1912 (Coleoptera: Curculionidae) from the Marinduque Island (Philippines) as a new example of mimetic species pair. Acta Biologica Universitatis Daugavpiliensis 16(1): 1–6.
- Bollino M. 2023. Two new species of Pachyrhynchini from Eastern Luzon, Philippines (Coleoptera, Curculionidae, Entiminae). *Zootaxa* 5239(1): 135–143. https://doi. org/10.11646/zootaxa.5239.1.7
- Fernando E.S., Co L.C., Lagunzad D.A., Gruezo W.S., Barcelona J.F., Madulid D.A., Lapis A.B., Taxon G.I., Manila A.C., Zamora P.M. 2008. Threatened plants of the Philippines: a preliminary assessment. *Asia Life Sciences* 3: 1–52.

- Paclibar G.C.B., Tadiosa E.R. 2020. Plant species diversity and assessment in Quezon Protected Landscape, Southern Luzon, Philippines. *Philippine Journal of Systematic Biology* 14(3): 1–19. https://doi. org/10.26757/pjsb2020c14010
- Posa M.R.C., Diesmos A.C., Sodhi N.S., Brooks T.M. 2008. Hope for Threatened Tropical Biodiversity: Lessons from the Philippines. *BioScience* 58: 231–240. https://doi.org/10.1641/B580309
- Rukmane A. 2016. Six new species of the genus Pachyrhynchus Germar, 1824 (Coleoptera: Curculionidae) from the Philippines. Acta Biologica Universitatis Daugavpiliensis 16(1): 81–92.
- Yoshitake H., Yap S.A. 2017. Four Pachyrhynchini weevils exhibiting allopatric convergence in color and markings, with descriptions of three new taxa from Luzon, the Philippines. *Elytra, Tokyo, New Series* 7(2): 331–341.
- Yoshitake H. 2019. Two new species of the jewel weevil genus *Pachyrhynchus* Germar (Coleoptera: Curculionidae: Entiminae) from Luzon, the Philippines. *Gekkan-Mushi* 576: 22–27.

Received: 31.10.2024 *Accepted:* 28.11.2024