# Six New Taxa and a New Synonym of the Genus *Pachyrhynchus* GERMAR (Coleoptera, Curculionidae, Entiminae) from the Philippines

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**Abstract** Five new species and a new subspecies of the genus *Pachyrhynchus* GERMAR are described from the Philippines: *P. conformis* sp. nov. (Samar), *P. gilvomaculatus* sp. nov. (Mindanao), *P. notocruciatus* sp. nov. (Mindanao), *P. sakaii* sp. nov. (Samar), *P. sumptuosoides* sp. nov. (Luzon), and *P. orbifer striatomaculatus* subsp. nov. (Luzon). The diagnosis of each taxon is provided. Habitus photographs and illustrations of male genitalia for these new taxa are also included. In addition, a new synonym is proposed in *Pachyrhynchus*: *P. rukmaneae* BARŠEVSKIS, 2016 = *P. takakuwai* YOSHITAKE, 2016, syn. nov.

#### Introduction

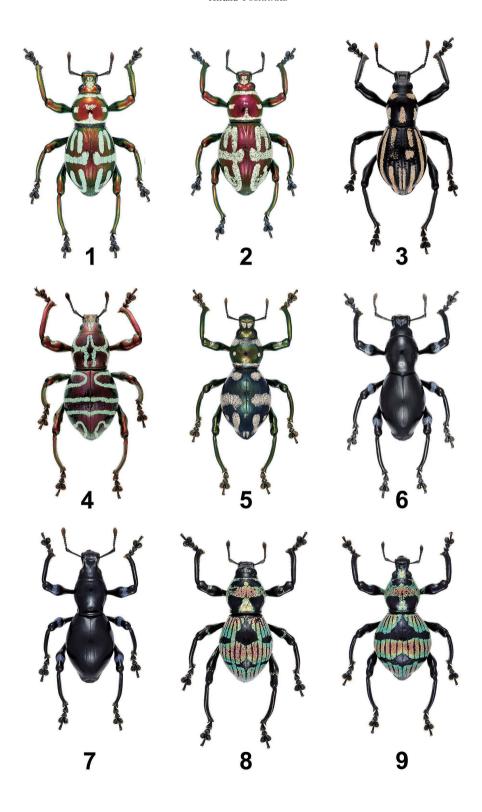
In the tribe Pachyrhynchini comprising wingless weevils, the genus *Pachyrhynchus* GERMAR, 1824, most of the members possess some remarkable features in color and body pattern, is characterized mainly by the head lacking a distinct transverse groove between forehead and rostrum, dorsally swollen rostrum on apical half, simple antennal scrobes, antennal scape not reaching posterior margin of eye, and entire episternal suture (SCHULTZE, 1923).

To date, 127 *Pachyrhynchus* species have been known mostly from the Philippines (Yoshitake, 2012; Yunakov, 2013; Bollino & Sandel, 2015; Barševskis, 2016; Rukmane & Barševskis, 2016; Rukmane, 2016; Cabras & Rukmane, 2016; Yoshitake, 2016 a, b; Yoshitake, 2017).

As the *Pachyrhynchus* fauna have not yet been thoroughly investigated, however, it still contains not a few unknown members to science, as well as many ill-defined species-group taxa in the current classification system of the genus. In an attempt to improve our knowledge of this genus, here I describe five new species and a new subspecies from the Philippines. In addition, I propose a new synonym in the genus according to the principle of priority.

## Material and Methods

This study was based on specimens deposited at the Kyushu University Museum, Fukuoka (KUM), Natural History Museum, London (NHML), Naturhistoriska riksmuseet, Stockholm (NHRS), Institute for Agro-Environmental Sciences, NARO, Tsukuba (NIAES), and Senckenberg Naturhistorische Sammlungen, Museum für Tierkunde, Dresden (SMTD). In addition, concerned specimens in private collections of Maurizio Bollino, Lecce, Italy (MBLI) and Franco Sandel, Miane, Italy (CFS) were examined by themselves on behalf of myself. The methods used in this study were almost the same as those explained in Yoshitake (2011), except that external structures were observed under a Leica M50 steroscopic microscope, photographs of the holotype male of the new species were taken with a Pentax K-5IIs digital camera, and male genitalia was studied with a Nikon Eclipse Ci optical microscope. The holotypes of the new species and subspecies described herein are preserved mostly in NIAES, except a new species, *Pachyrhynchus sumptuosoides*, whose holotype is preserved in KUM.



## **Taxonomy**

## Pachyrhynchus conformis sp. nov.

(Figs. 1, 2, 10–15)

Diagnosis. Pachyrhynchus conformis may have some relation to *P. amabilis* SCHULTZE, 1922 and its relatives known from Mindanao, but *P. conformis* is readily distinguishable from all of them mainly by its stouter body with characteristic scaly markings (Figs. 1 & 2) and gently arched apices of anterior margins of fore femora. It should be noted that this new species shows a superficial similarity in color and body pattern characteristics to *Pachyrhynchus cumingi* WATERHOUSE, 1841, which was described from "the Philippine Islands".

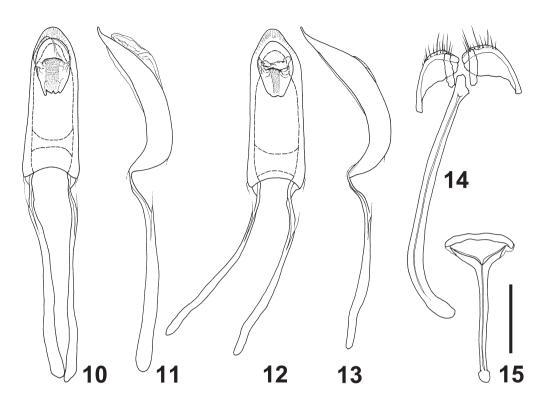
*Description.* M a 1 e. Dimensions: LB: 12.05-13.00 (holotype 12.05). LR: 2.15 (holotype 2.15). WR: 1.90-1.95 (holotype 1.90). LP: 4.05-4.15 (holotype 4.05). WP: 4.30-4.35 (holotype 4.35). LE: 8.35-9.10 (holotype 8.35). WE: 6.00-6.15 (holotype 6.00). N = 2 for all measurements. Dorsal habitus as shown in Fig. 1.

Integument mostly glossy coppery red with green tinge; antennae black except scape with green sheen; tarsi bluish black. Body surface mostly strongly shiny, except underside with weaker luster.

Body with glossy pale green markings of round recumbent scales, which sometimes become much paler. Head dorsally subglabrous, only sparsely minutely pubescent; forehead with broadly elliptic scaly patch on middle; lateroventral parts below eyes moderately covered with short pale hairlike scales. Rostrum moderately minutely pubescent, sometimes subglabrous, with elliptic scaly patch on middle of basal half; scaly patch bisected along midline, connected basally with that on forehead; lateroventral parts just behind antennal scrobes densely covered with elliptic to short hair-like scales, which form longitudinally subreniform patch on each side; lateroventral parts before antennal scrobes moderately covered with long golden hairs, mingled with lanceolate to hair-like scales, which form short oblique median stripe on each side. Prothorax dorsally mostly glabrous, with the following five scaly markings: 1) transverse band along subbasal constriction, 2) obreniform patch on middle of disc, which sometimes becomes small and obscure, 3) a pair of smaller subquadrate patches arranged on sides of median patch, 4) transverse band along apical margin, and 5) broad lateroventral stripe on each side; subbasal band sharply produced apically in middle; subapical band with anterior margin shallowly arched posteriorly in middle; lateroventral stripe shallowly arched ventrally; squamose parts not pubescent. Each elytron subglabrous, except with the following eight linear scaly markings: 1) short stripe extending from behind base to just before middle of interval III, 2) short stripe extending from behind base to before middle of interval V, 3) short stripe extending from just behind base to basal quarter of interval VII, 4) longer, broad oblique stripe extending from just behind base of interval VIII to antemedian part of interval X and basally confluent with stripe on interval VII, 5) median transverse band extending from external half of interval I to external margin of interval VIII, roundly produced anteriorly on intervals I and II, 6) large U-shaped marking arranged on apical half of elytra between intervals III and X, well-separated from median band on interval III, but laterally subconfluent with it on interval IX, 7) short stripe extending from postmedian to subapical parts of interval V,

Figs. 1–9. Dorsal habitus of *Pachyrhynchus* spp. —— 1, *Pachyrhynchus conformis* sp. nov., holotype male; 2, ditto, paratype female; 3, *P. gilvomaculatus* sp. nov., holotype male; 4, *P. notocruciatus* sp. nov., holotype male; 5, *P. sakaii* sp. nov., holotype female; 6, *P. sumptuosoides* sp. nov., holotype male; 7, ditto, paratype female; 8, *P. orbifer striatomaculatus* subsp. nov., holotype male; 9, ditto, paratype female.

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Figs. 10–15. Male genitalia of *Pachyrhynchus conformis* sp. nov. —— 10, 11, 14, 15, holotype male; 12, 13, paratype male. —— 10, 12, Aedeagus in dorsal view; 11, 13, ditto in lateral view; 14, sternite IX in dorsal view; 15, tegmen in dorsal view. Scale bar: 1.00 mm.

apically confluent with U-shaped marking on interval IV in varying degrees, and 8) short stripe extending from postmedian to subapical parts of intervals VII; squamose parts not pubescent. Coxae mostly finely pubescent; fore coxae densely covered with general scales on anterior parts, mingled with light-colored fine pubescence, each internally with obscure patch of light-colored fine pubescence and elliptic to hair-like scales. Femora sparsely minutely pubescent, partially with markings of light-colored round to hair-like scales. Fore femora fringed with sparse scales on basal parts along posterior margins, each with obscure patch of scales and minute hairs on subapical part; anterior surface on each leg basally covered with scales and minute hairs, which form linear marking along midline, and with longitudinally subrectangular patch of dense general scales on middle of subapical part. Posterior surfaces of mid and hind femora with similar vestiture to that on anterior surfaces of fore femora, except hind femora each with basal linear marking elongate, reaching subapical patch. Tibiae subglabrous; interomarginal and apical parts moderately covered with fine hairs which become longer apically; internal margins fringed with suberect light-colored hairs, sparsely mingled with darker setae. Mesepisterna mostly densely covered with general scales except glabrous periphery. Sterna mostly densely covered with general scales and furnished with fine subrecumbent light-colored hairs on squamose parts, though prosternum entirely hairless and scaleless on middle of intercoxal part. Venter partially with markings of general scales; ventrite I moderately pubescent, with a pair of large transverse scaly patches on sides along apical margin; ventrite II minutely pubescent, with a pair of smaller scaly patches on sides of disc along apical margin; ventrites III and IV minutely pubescent, devoid of scales; ventrite V mostly moderately pubescent, with a pair of small scaly patches on sides of disc, fringed with long suberect hairs along apical margin.

Body relatively stout. Head somewhat sparsely finely punctured; forehead depressed on squamose part, moderately raised along internal margin of each eye, slightly less than three times as wide as eye width; eyes relatively large, strongly prominent from lateral contour of head; outline of each eye highest behind middle. Antennae relatively short and stout, with scape slightly shorter than funicle, strongly clavate; funicle with segment I slightly less than twice as long as wide, 1.50 times as long as II; segment II slightly longer than wide, 1.60 times as long as III; segments III-V subequal in length, slightly wider than long, nearly as long as but slightly narrower than VI; segment VI wider than long, slightly shorter and narrower than VII; segment VII 1.50 times as wide as long; club subovoid, slightly less than twice as long as wide. Rostrum slightly longer than wide, LR/WR 1.10-1.13 (holotype 1.13); dorsum moderately finely punctured, with deep obtriangular concavity on basal half, weakly bulging on apical half; apical bulge dorsally flattish, simple, not sulcate; dorsal contour of forehead and rostrum discontinuous; dorsal contour of rostrum weakly arched in basal half, then gradually raised from middle to apical third, and finally gradually declined to apex; sides weakly widened apically; ventral surface simple, not convex along midline. Prothorax subspherical, nearly as long as wide, WP/LP 1.04-1.07 (holotype 1.07); dorsum smooth, moderately finely punctured, moderately convex; dorsal contour highest at middle; lateral contour somewhat strongly dilated from moderately constricted base, widest at middle, then strongly convergent apicad, and finally slightly constricted just behind apex; basal margin subtruncate; apical margin shallowly arched anteriorly; subbasal groove well-separated from basal margin, entirely distinct; subapical grooves laterally narrowly separated from apical margin, becoming obscure dorsally. Elytra subellipsoidal, LE/WE 1.39-1.48 (holotype 1.39), moderately wider than prothorax, WE/WP 1.38–1.43 (holotype 1.38), nearly twice as long as prothorax, LE/LP 2.06-2.19 (holotype 2.06), moderately striate-punctured, with intervals evenly flat; dorsum moderately convex; dorsal contour highest at middle; lateral contour weakly gradually dilated apicad from base, widest behind middle, then somewhat strongly narrowed to moderate subapical constrictions, and finally gently rounded at apices. Metasternum flat on disc. Ventrite I flat on disc. not depressed. Ventrite V flattish, widely truncate at apex. Legs stout; femora strongly clavate; apices of anterior margins of fore femora and those of posterior margins of mid and hind femora gently arched, respectively; tibiae weakly incurved apically, bluntly finely serrate along internal margins, mucronate at apices; fore tibiae shallowly but evidently emarginate in apical third of external margins; tibial mucrones vestigial on hind legs. Genitalia as illustrated (Figs. 10–15).

F e m a l e. Dimensions: LB: 12.35–12.90. LR: 2.10. WR: 1.95–2.00. LP: 3.90–4.05. WP: 4.20–4.35. LE: 8.75–9.15. WE: 6.50–6.60. N = 2 for all measurements. Dorsal habitus as shown in Fig. 2.

Rostrum LR/WR 1.05–1.08. Prothorax WP/LP 1.04–1.12. Elytra more strongly convex dorsally, LE/WE 1.33–1.41, much wider than prothorax, WE/WP 1.52–1.55, elongate apically, LE/LP 2.24–2.26; sides widest at middle. Ventrite I flattish on disc. Ventrite V mostly depressed except basomarginal part flat, shallowly rounded at apex. Otherwise, essentially as in males.

Type material. Holotype: male (NIAES), "[PHILIPPINES: Visayas] / Eastern Visayas region, / Samar Is., Province of / (Western) Samar, IV. 2010, / native collector leg." (typed on a white card); "HIRAKU YOSHITAKE / COLLECTION" (typed on a white card); "[HOLOTYPE] Male / Pachyrhynchus / conformis / YOSHITAKE, 2017 / det. Hiraku YOSHITAKE, 2017" (typed on a red card). Paratypes: 3 males and 4 females from Samar Is. (NIAES & CFS) and 1 male and 6 females from Hinabangan, Samar Is. (MBLI).

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Distribution. Philippines (Visayas: Eastern Visayas region: Samar Is.). Etymology. This species is named after its superficial similarity to Pachyrhynchus cumingi.

# Pachyrhynchus gilvomaculatus sp. nov.

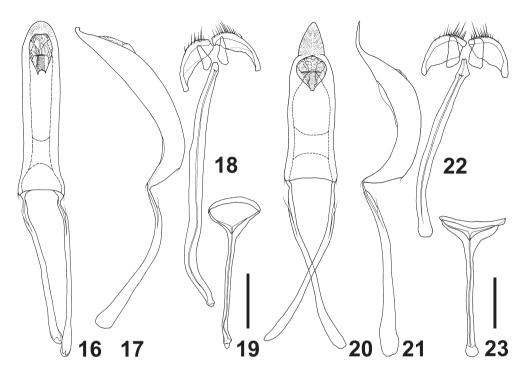
(Figs. 3, 16-19)

Diagnosis. Pachyrhynchyus gilvomaculatus is similar in general appearance to *P. caeruleovittatus* Yoshitake, 2012 from Mt. Parker, South Cotabato, Soccsksargen region, Mindanao, the Philippines. However, *P. gilvomaculatus* is readily distinguishable from *P. caeruleovittatus* mainly by its unique elytral markings of dull pale yellow scales (Fig. 3). Also, *P. gilvomaculatus* differs from *P. caeruleovittatus* in having the entirely black body with a weaker luster, smaller antennal club that is as long as funicular segments V to VII combined, moderately convex prothorax, whose dorsal contour is gently raised from base to the highest point just before middle, obviously shorter elytra (LE/WE 1.41–1.44), and gently arched apices on anterior margins of fore femora and on posterior margins of mid and hind femora. In contrast, *P. caeruleovittatus* possesses the glossy black body with castaneous elytra, larger antennal club that is as long as funicular segments IV to VII combined, prothorax whose dorsal contour is rather rapidly raised from the base to the highest point at apical quarter, elongate elytra (LE/WE 1.53–1.59), and more deeply arched apices on anterior margins of fore femora and on posterior margins of mid and hind femora.

*Description.* M a l e. Dimensions: LB: 10.60-10.95 (holotype 10.95). LR: 1.75-1.85 (holotype 1.85). WR: 1.60-1.70 (holotype 1.70). LP: 3.30-3.35 (holotype 3.35). WP: 3.15-3.30 (holotype 3.30). LE: 7.35-7.50 (holotype 7.50). WE: 5.20 (holotype 5.20). N = 2 for all measurements. Dorsal habitus as shown in Fig. 3.

Integument black. Body surface weakly shiny except subopaque underside.

Body mostly subglabrous, with dull pale yellow markings of recumbent round scales. Head subglabrous. Rostrum sparsely minutely pubescent, with narrow elliptic scaly patch on basal half along midline; lateroventral parts covered with dense general scales and sparse short pale blue hairs and hair-like scales from below eyes to behind antennal scrobes, moderately covered with pale blue hairlike scales and darker fine hairs before antennal scrobes, furnished with long dark setae near apex. Prothorax glabrous, except with the following seven scaly markings: 1-3) a trio of longitudinal patches on basal half, 4, 5) a pair of transverse elliptic patches along apical margin, and 6, 7) a pair of broad lateroventral stripes extending from subbasal groove to apical margin. Each elytron with the following six scaly markings: 1) short stripe extending from postmedian to subapical parts of interval I, 2) small round patch on antemedian parts of intervals II and III, 3) stripe extending from just behind base to before apex of interval III but once widely interrupted on median part, 4) long stripe extending from just behind base to subapical part of interval V, 5) long stripe extending from behind base to subapical part of interval VII, and 6) long stripe extending from just behind bases to subapical parts of intervals IX and X; patch on intervals II and III sometimes confluent with stripe on interval III. Coxae sparsely covered with fine dark hairs. For femora mostly covered with sparse minute hairs which become longer apically, rather densely covered with dark short hairs on basal and subapical parts along anterior margins, sparsely mingled with pale blue hair-like scales. Mid and hind femora covered with sparse minute hairs which become larger apically, rather densely covered with dark short hairs on basal and subbasal parts along posterior margins, sparsely mingled with pale blue hair-like scales. Tibiae sparsely minutely pubescent; each tibia fringed with long suberect golden hairs along internal margin, sparsely mingled with dark setae; vestiture becoming longer apically. Intercoxal parts of pro- and mesosterna mostly densely covered with general scales. Metasternum mostly covered with general



Figs. 16–23. Male genitalia of *Pachyrhynchus* spp. —— 16–19, *Pachyrhynchus gilvomaculatus* sp. nov., holotype male; 20–23, *P. notocruciatus* sp. nov., holotype male —— 16, 20, Aedeagus in dorsal view; 17, 21, ditto in lateral view; 18, 22, sternite IX in dorsal view; 19, 23, tegmen in dorsal view. Scale bars: 1.00 mm.

scales, sparsely pubescent. Venter sparsely pubescent; ventrite I with a pair of large transverse scaly patches along apical margin, with longer hairs in patches; ventrite II with a pair of smaller scaly patches along apical margin, with longer hairs in patches; ventrite V sparsely furnished with long suberect hairs along margins.

Head faintly minutely punctured; forehead flattish, 2.60 times as wide as eye width; eyes relatively large, strongly convex from lateral contour of head. Antennae moderately slender, with scape nearly as long as funicle, moderately clavate; funicle with segment I slightly longer than wide, slightly longer than II; segment II slightly longer than wide, 1.65 times as long as III; segments III–VI subequal in length, nearly as long as wide, slightly shorter and narrower than VII; segment VII nearly as long as wide; club subellipsoidal, nearly twice as long as wide, relatively small, as long as funicular segments V to VII combined. Rostrum slightly longer than wide, LR/WR 1.09; dorsum moderately minutely punctured, with shallow obcordate concavity on basal half, weakly bulging on apical half; apical bulge dorsally flattish, basally faintly depressed along midline; dorsal contour of forehead and rostrum subcontinuous; dorsal contour of rostrum weakly arched in basal half, then weakly raised from basal half to before apex, and finally gradually declined to apex; sides moderately widened apically; ventral surface weakly convex on middle near base. Prothorax subspherical, nearly as long as wide, WP/LP 0.95–0.99 (holotype 0.99); dorsum smooth, lacking obvious punctures, slightly depressed on squamose parts, dorsally moderately convex; dorsal contour gently raised apicad from base, highest just before middle; lateral contour gently dilated apicad from moderately constricted

base, widest at apical third, then gradually convergent apicad, and faintly narrowly constricted just before apex; basal and apical margins subtruncate; subbasal groove entirely distinct; subapical groove obscure dorsally. Elytra subellipsoidal, relatively short, LE/WE 1.41–1.44 (holotype 1.44), much wider than prothorax, WE/WP 1.58–1.65 (holotype 1.58), more than twice as long as prothorax, LE/LP 2.23–2.24 (holotype 2.24), deeply striate-punctured; intervals more or less convex except squamose parts slightly depressed; dorsum moderately convex; dorsal contour highest before middle; lateral contour gradually dilated from base, widest before middle, then strongly convergent to strong subapical constriction, and finally widely rounded at apices. Metasternum and ventrite I widely conjointly depressed on disc; discal depression large, circular, and reaching apical margin of ventrite I at apex. Ventrite V subtruncate at apex. Legs very slender; femora moderately clavate; apices of anterior margins of fore femora and those of posterior margins of mid and hind femora gently arched, respectively; tibiae sparsely acutely serrate along internal margins, weakly incurved apically, and mucronate at apices; tibial mucrones vestigial on hind legs. Genitalia as illustrated (Figs. 16–19).

Female. Unknown.

*Type material.* Holotype: male (NIAES), "[ PHILIPPINES: Mindanao ] / South Cotabato, Mt. Matutum / II. 2013" (typed on a white card), "HIRAKU YOSHITAKE / COLLECTION" (typed on a white card), "[ H O L O T Y P E ] Male / *Pachyrhynchus* / *gilvomaculatus* / YOSHITAKE, 2017 / det. Hiraku YOSHITAKE, 2017" (typed on a red card). Paratypes: 3 males from the same locality as the holotype (KUM & MBLI).

Distribution. Philippines (Mindanao: Soccsksargen region).

Etymology. This species is named after the remarkable markings of dull pale yellow scales.

*Notes*. This new species was described in comparison with the type series of *Pachyrhynchus caeruleovittatus* preserved in NIAES.

# Pachyrhynchus notocruciatus sp. nov.

(Figs. 4, 20-23)

Diagnosis. Pachyrhynchus notocruciatus is very similar in general appearance including the pubescent elytra to *P. postpubescens* Schultze, 1922, which was described based on two specimens collected from "Lindabon" (= Lindaban) located in north-central part of the Kitanglad Mountain Range, Bukidnon, Northern Mindanao, the Philippines. In addition to the unique scaly markings on prothorax (Fig. 4), however, *P. notocruciatus* is easily distinguishable from *P. postpubescens* by the male ventrite I with a wider and deeper concavity on disc and aedeagal body that is more strongly narrowed apically and produced in a narrower lamina at the apex (Fig. 20).

Description. M a 1 e. Dimensions: LB: 12.80. LR: 2.50. WR: 1.95. LP: 4.20. WP: 4.35. LE: 8.60. WE: 6.20. N = 1 for all measurements. Dorsal habitus as shown in Fig. 4.

Integument dark coppery red; antennae and mandibles darker. Body surface mostly strongly shiny except underside with weaker luster.

Body mostly minutely pubescent, with glossy pale green markings of recumbent round scales. Head dorsally subglabrous, except with narrow elliptic scaly patch along midline from vertex to apex of forehead; lateroventral parts below eyes densely covered with general scales, mingled with hair-like ones. Rostrum dorsally very minutely pubescent; lateroventral parts except antennal scrobes densely covered with general scales, mingled with hair-like ones, and furnished with long golden setae near apex. Prothorax with a pair of median stripes extending from subbasal to subapical grooves, narrowly separated from each other, gradually approximated apically, and finally merged at apices, and with transverse band across middle of pronotum, which is interrupted by paired stripes in middle

and bifid laterally in dorsal view; scales on each side of prothorax arranged to form inverted turnip-shaped ring marking in lateral view. Each elytron with longer, suberect hairs, which are conspicuous on apical half, with the following three scaly markings: 1) transverse narrow elliptic ring marking on basal third, which extends from interval II to lateral margin, 2) two transverse median bands, which arise from suture and are entirely well-separated from each other, and 3) distorted subtriangular ring marking on apical third, which extends from interval II to lateral margin; anterior band extending to interval IX and connected laterally with apical marking by marginal scaly stripe; posterior band extending to interval VIII and then merged with apical marking by short incurved scaly stripe. Fore coxae covered with general scales on anterior parts, mingled with short light-colored hairs. Mid and hind coxae rather densely covered with longer hairs, sparsely mingled with hair-like scales. Fore femora each with transverse patch of general scales and short light-colored hairs on basal part of anterior margin, in addition to another larger patch on subapical part except posterior half. Mid and hind femora rather densely covered with general scales and short hairs along posterior margins, mingled with hairlike scales, each with scaly patch on subapical part except anterior half. Tibiae mostly sparsely pubescent, partially furnished with long hairs; each tibia fringed with long hairs along internal margin, mingled with darker setae; vestiture slightly denser on apical parts. Prosternum mostly densely covered with general scales. Intercoxal part of mesosternum mostly densely covered with general scales, mingled with short hairs and hair-like scales. Metasternum mostly covered with general scales, which become denser on sides, mingled with short hairs and hair-like scales. Venter mostly moderately pubescent; ventrite I with a pair of transverse scaly patches on sides along apical margin; ventrite II with a pair of larger scaly patches on sides along apical margin; ventrites III and IV more sparsely pubescent, furnished with long hairs along apical margins; ventrite V covered with longer suberect hairs on apical third.

Head moderately finely punctured; forehead slightly depressed along midline, 2.55 times as wide as eye width; eyes moderate in size, moderately prominent from lateral contour of head. Antennae relatively short and stout, with scape slightly shorter than funicle, strongly clavate; funicle with segment I nearly twice as long as wide, slightly longer than II; segment II 1.30 times as long as wide, 1.50 times as long as III; segments III-V subequal in length and width, slightly wider than long, nearly as long as, but slightly narrower than VI; segment VI slightly wider than long, nearly as long as, but obviously narrower than VII; segment VII much wider than long; club subellipsoidal, 1.75 times as long as wide, slightly longer than funicular segments IV-VII combined. Rostrum longer than wide, LR/ WR 1.28; dorsum moderately finely punctured, with obcordate concavity on basal half, weakly bulging on apical half; apical bulge flattish dorsally, but shallowly depressed on middle of basal part; dorsal contour of forehead and rostrum subcontinuous; dorsal contour of rostrum flattish in basal half, then weakly gradually raised from middle to apical quarter, and finally gradually declined to apex; sides weakly widened apically; ventral surface simple, not convex along midline. Prothorax subspherical, nearly as long as wide, WP/LP 1.04; dorsum sparsely finely punctured, slightly depressed on squamose parts, slightly flattish on disc; dorsal contour weakly gradually raised toward apex from subbasal constriction, highest at apical third; lateral contour gently dilated from moderately constricted base, widest at middle, then moderately convergent apicad, and finally narrowly faintly constricted just behind apex; basal and apical margins subtruncate; subbasal groove entirely distinct; subapical groove weak, become obscure dorsally. Elytra broadly subobovate, LE/WE 1.39, moderately convex dorsally, wider than prothorax, WE/WP 1.43, nearly twice as long as prothorax, LE/LP 2.05, moderately striate-punctured, with intervals evenly flat; dorsal contour highest before middle; lateral contour gradually dilated from base, widest before middle, then rather strongly convergent to faint subapical constrictions, and finally acutely rounded at apices. Legs stout; femora rather strongly clavate; apices of anterior margins of fore femora and posterior margins of mid and hind femora deeply arched, respectively; tibiae bluntly serrate along internal margins, strongly incurved apically, mucronate at apices; tibial mucrones well-developed on all legs. Metasternum and ventrite I widely conjointly depressed on disc; discal depression large, circular, deep on ventrite I, and hardly reaching apical margin of ventrite I at apex. Ventrite V shallowly rounded at apex. Genitalia as illustrated (Figs. 20–23).

Female. Unknown.

*Type material.* Holotype: male (NIAES), "[PHILIPPINES: Mindanao] / Mt. Apo, V. 2005 / native collector leg." (typed on a white card), "HIRAKU YOSHITAKE / COLLECTION" (typed on a white card), "[HOLOTYPE] Male / *Pachyrhynchus* / *notocruciatus* / Yoshitake, 2017 / det. Hiraku Yoshitake, 2017" (typed on a red card).

Distribution. Philippines (Mindanao: Mt. Apo).

Etymology. The new species is named after its characteristic marking on the prothorax.

*Notes.* In 2010, the type series of *Pachyrhynchus postpubescens* was examined by myself at SMTD for this study. In addition, I examined a long series of *P. postpubescens* specimens preserved at NIAES, which were collected from the Kitanglad Mountain Range, Bukidnon, Northern Mindanao, the Philippines.

# Pachyrhynchus sakaii sp. nov.

(Fig. 5)

Diagnosis. Pachyrhynchus sakaii is similar in general appearance to P. latifasciatus WATER-HOUSE, 1841, which was described from "the Philippine Islands". In addition to the unique scaly markings (Fig. 5), however, P. sakaii is readily distinguishable from P. latifasciatus by the following features: eyes weakly convex; rostrum stout, squarish in dorsal view, with lateroventral parts deeply sulcate along lower margins of antennal scrobes and squamose in sulci; and female elytra elongate, acutely rounded at apices. In contrast, P. latifasciatus possesses the more strongly convex eyes, slenderer rostrum rounded on apicolateral margins and with much shallower, glabrous sulci on lateroventral parts, and female elytra which are gently rounded at apices

*Description.* F e m a l e. Dimensions: LB: 14.45. LR: 2.30. WR: 2.38. LP: 4.80. WP: 4.20. LE: 10.1. WE: 7.10. N = 1 for all measurements. Dorsal habitus as shown in Fig. 5.

Integument mostly dark green; elytra darker, with blue tinge; antennae except scapes and mandibles black. Body surface moderately shiny; elytra and underside with slightly weaker luster.

Body with dull pale yellow markings of round recumbent scales. Head mostly glabrous, lacking scaly markings. Rostrum subglabrous, except with large, subobtriangular patch of dense general scales on basal half; patch bisected along midline; lateroventral parts just behind antennal scrobes with shallowly subobtriangular scaly patch on each side; patch fringed with short hairs and hair-like scales along margins; lateroventral parts before antennal scrobes with small, obliquely narrow elliptic scaly patch on sulcate part of each side, not setiferous apically. Prothorax dorsally glabrous, except with the following four scaly markings: 1) fine transverse band along basal margin, 2) a pair of small circular lateral patches on middle of disc, 3) broad transverse band along apical margin, and 4) very broad lateroventral stripe on each side; basal band becoming obscure laterally, with posterior margin which is very shallowly arched anteriorly; apical band with posterior margin undulate and anterior margin shallowly arched posteriorly; lateroventral stripe extending from subbasal to subapical grooves, slightly arched ventrally, connected with apical band, but hardly with basal band; squamose parts not pubescent. Each elytron glabrous, except with the following seven scaly markings: 1) small narrow elliptic patch behind middle of interval I, 2) larger, very narrow elliptic patch on apical part of

interval I, 3) subbasal transverse band extending from intervals II to IX and with posterior margin deeply arched anteriorly, 4) median broad transverse band extending from intervals II to VIII and with posterior margin shallowly arched anteriorly, 5) large U-shaped marking arranged on apical half between intervals III and X, 6) small circular patch on apical two thirds of interval V, and 7) larger, obliquely elliptic patch on subapical part of interval VII; median band and U-shaped marking laterally subcontiguous between intervals VIII and IX. Coxae mostly sparsely minutely pubescent, mingled with scattered dark fine hairs; fore coxae densely covered with general scales on anterior parts, with scattered scales also on other parts. Femora mostly subglabrous. Fore femora each with large scaly patch on subapical part except posterior margin, in addition to small transverse patch on postmedian part along posterior margin, rather densely covered with short dark hairs and pale hair-like scales on basal part along anterior margin. Mid and hind femora each with large scaly patch on subapical part except anterior margin, rather densely covered with short dark hairs and pale hair-like scales on basal half along posterior margin; subapical patches sometimes partially interrupted. Tibiae mostly subglabrous, partially furnished with light-colored hairs which become longer apically, fringed with suberect hairs along internal margins, sparsely mingled with slightly darker setae. Fore tibiae dorsally sparsely pubescent on apical parts, furnished with long hairs on interomarginal parts of apices; ventral surface with hairs on interomarginal parts. Mid and hind tibiae dorsally furnished with hairs on interomarginal parts; ventral surface with long hairs on interomarginal parts of apices. Sterna mostly covered with dense general scales; intercoxal part of prosternum clothed with hairs in addition to scales. Venter mostly glabrous; ventrite I with a pair of large parallelogrammic scaly patches on sides along apical margin; ventrite II with smaller, transversely elliptic scaly patches; ventrite V minutely pubescent, with a pair of large circular scaly patch, fringed with very long suberect hairs along lateral and apical margins.

Head moderately minutely punctured; forehead slightly depressed medially, 2.50 times as wide as eye width; eyes moderately large, weakly prominent from lateral contour of head; each eye highest at middle. Antennae with scape stout, nearly as long as funicle, moderately clavate; funicle with segment I nearly twice as long as wide, 1.50 times as long as II; segment II slightly longer than wide, 1.43 times as long as III; segments III-VI equal in length, nearly as long as wide, nearly as long as but slightly narrower than VII; segment VII 1.38 times as wide as long; club subellipsoidal, nearly twice as long as wide. Rostrum stout, nearly as long as wide, LR/WR 0.97; dorsum moderately minutely punctured, with shallow, very broadly obtriangular concavity on basal half, moderately bulging on apical half; apical bulge dorsally flattish, with very shallow indistinct sulcus along midline from middle to apical quarter of rostrum; dorsal contour of forehead and rostrum continuous; dorsal contour of rostrum nearly flat in basal half, then somewhat abruptly raised at middle, and finally gradually declined to apex; sides moderately widened apically, obtusely angulate on apicolateral parts; lateroventral parts deeply sulcate along lower margins of antennal scrobes; ventral surface simple, not convex along midline. Prothorax subspherical, barely longer than wide, WP/LP 0.88; dorsum smooth, faintly minutely punctured, weakly convex; dorsal contour highest at middle; lateral contour somewhat strongly dilated from moderately constricted base, widest just before middle, then gently convergent apicad, and finally weakly constricted behind apex; subbasal constriction dorsally narrow; subapical constriction dorsally relatively broad; basal and apical margins subtruncate; subbasal groove entirely distinct; subapical groove become obscure dorsally. Elytra broadly subobovoid, LE/WE 1.42, much wider than prothorax, WE/WP 1.69, nearly twice as long as prothorax, LE/LP 2.10, moderately striate-punctured, with intervals evenly flat; dorsum rather strongly convex; dorsal contour highest slightly before middle; lateral contour rather strongly dilated apically from base, widest just before middle, then strongly convergent to moderate subapical constrictions, and finally acutely rounded at apices. Legs slender; femora rather strongly clavate; tibiae moderately incurved apically, bluntly finely serrate along internal margins, mucronate at apices; tibial mucrones small, but evident on hind legs. Metasternum flat on disc. Ventrite I flattish on disc except basal half slightly depressed. Ventrite V shallowly rounded at apex.

Male. Unknown.

*Type material*. Holotype: female (NIAES), "Samar Is. / Philippines / Nov., 1990" (typed on a white card); "KAORU SAKAI / COLLECTION" (typed on a white card); "*Pachyrhynchus* / *sp. n.* / Det. Hiraku Yoshitake, 2010" (hand-written on yellow card, partially typed); "[ H O L O T Y P E ] Female / *Pachyrhynchus* / *sakaii* / Yoshitake, 2017 / det. Hiraku Yoshitake, 2017" (typed on a red card).

Distribution. Philippines (Visayas: Eastern Visayas region: Samar Is.).

*Etymology*. This species is named after Kaoru SAKAI, who kindly donated the type material to NIAES from his private collection.

*Notes*. In 2012, the holotype of *Pachyrhynchus latifasciatus* was examined by myself at NHML for this study. In addition, I examined a pair of *P. latifasciatus* specimens preserved at KUM, both of which were collected from Lope de Vega, Northern Samar, Eastern Visayas, the Philippines.

# Pachyrhynchus sumptuosoides sp. nov.

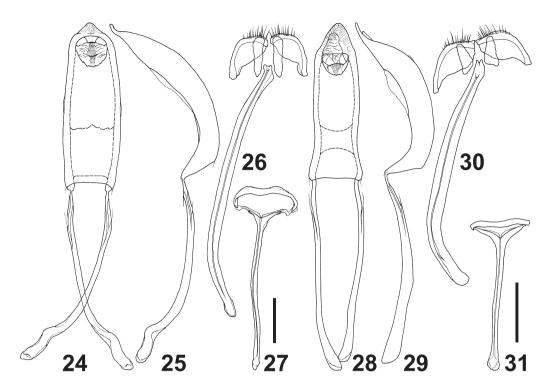
(Figs. 6, 7, 24-27)

Diagnosis. Pachyrhynchus sumptuosoides is very similar in general appearance to P. callainimaculatus Yoshitake, 2017, which was described based on a single male specimen collected from the Sierra Madre Mountain Range, Cagayan, Cagayan Valley region, Northeast Luzon, the Philippines. However, P. sumptuosoides is easily distinguishable from P. callainimaculatus by the following features in the males: body mostly immaculate, with subdued markings of pale bluish purple to grayish blue scales; antennae with funicular segment II shorter and stouter, 1.50 times as long as wide; antennal club longer, subellipsoidal; sides of rostrum gently rounded on apicolateral parts; and sides of prothorax more weakly dilated. On the contrary, P. callainimaculatus possesses the following features: body much maculate, with glittering markings of glossy blue to green scales; antennal funicle with segment II slenderer, slightly less than twice as long as wide; antennal club shorter, subovoid; sides of rostrum obtusely angulate on apicolateral parts; prothorax strongly dilated on sides. It should be noted that this new species shows a superficial similarity in color and body pattern characteristics to P. sumptuosus Schultze, 1917, which was described from "Luzon, Bontoc".

Description. M a l e. Dimensions: LB: 13.15-14.50 (holotype 13.40; mean 13.70). LR: 2.30-2.55 (holotype 2.30; mean 2.44). WR: 2.45-2.50 (holotype 2.48; mean 2.48). LP: 4.60-5.10 (holotype 4.60; mean 4.85). WP: 4.25-4.40 (holotype 4.25; mean 4.33). WE: 5.60-6.40 (holotype 5.85; mean 5.99). LE: 8.55-9.10 (holotype 8.85; mean 8.83). N = 4 for all measurements. Dorsal habitus as shown in Fig. 6.

Integument wholly black. Body surface mostly weakly shiny; elytra and underside except venter subopaque.

Body mostly subglabrous, with markings of pale bluish purple to grayish blue recumbent round scales. Rostrum dorsally minutely pubescent, with widely arrowhead-shaped scaly patch on middle of basal half; patch sometimes reduced, vestigical, or even vanished without trace; lateroventral parts just behind antennal scrobes with small indefinite scaly patch on each side; lateroventral parts behind antennal scrobes with transverse scaly patch, mingled with fine light-colored hairs, and fringed with long golden setae at apex on each side. Prothorax dorsally glabrous, except with the following three



Figs. 24–31. Male genitalia of *Pachyrhynchus* spp. —— 24–27, *Pachyrhynchus sumptuosoides* sp. nov., holotype male; 28–31, *P. orbifer striatomaculatus* subsp. nov., holotype male. —— 24, 28, Aedeagus in dorsal view; 25, 29, ditto in lateral view; 26, 30, sternite IX in dorsal view; 27, 31, tegmen in dorsal view. Scale bars: 1.00 mm.

scaly markings: 1) a pair of indefinite spots on the middle of dorsolateral parts, 2) a pair of indefinite spots on dorsolateral parts along subapical groove, and 3) broad lateroventral stripe extending from subbasal groove to apical margin on each side; 1) and 2) sometimes vestigial or vanished. Each elytron with small circular patch on subbasal part along outermost stria and with larger patch just behind subapical constriction. Fore coxae densely covered with general scales on anterior parts, each with small circular scaly patch on middle of internal part. Mid coxae each with faint scaly spot on internal part. Femora each with scaly band on subapical part. Tibiae fringed with dense light-colored hairs and sparse dark setae along internal margins, apically rather densely setiferous. Intercoxal part of prosternum with small elliptic scaly patch on basal part. Mesepimera each with small circular scaly patch. Metasternum with a pair of large scaly patches on sides. Ventrites I and II each with a pair of small circular scaly patches on sides of disc; patches on ventrite II smaller and more narrowly separated from each other than those on ventrite I.

Head moderately faintly minutely punctured; forehead flattish, nearly three times as wide as eye width; eyes relatively small, weakly convex from lateral contour of head. Antennae with scape flattened, moderate in length, nearly as long as funicle, gradually widened apicad; funicular segment I twice as long as wide, slightly longer than II; segment II relatively short and stout, 1.50 times as long as wide, 1.50 times as long as III; segments III–VI subequal in length, nearly as long as wide except VI slightly wider than long; segment VII 1.25 times as long as VI, slightly wider than long; club sub-

ellipsoidal, relatively short, 1.75 times as long as wide, barely longer than funicular segments V–VII combined. Rostrum nearly as long as wide, LR/WR 0.93-1.02 (holotype 0.93); dorsum moderately finely punctured, sometimes weakly foveate on middle of base, with shallow obtriangular concavity on middle of basal half, very weakly bulging on apical half; apical bulge dorsally flattish, slightly depressed on middle of basal part; dorsal contour of forehead and rostrum continuous; dorsal contour of rostrum gradually declined from base to middle, then weakly raised from middle to apical third, and finally gradually declined to apex; sides strongly dilated apically, gently rounded on apicolateral parts; ventral surface simple, not convex along midline. Prothorax subspherical, barely longer than wide, WP/LP 0.85-0.92 (holotype 0.92); dorsum faintly minutely punctured, moderately convex, with short costa on each side of basal part; dorsal contour highest before middle; lateral contour gently dilated from strongly constricted base, widest before middle, gradually linearly convergent apicad, and then faintly constricted near apex; basal margin subtruncate; apical margin shallowly arched anteriorly; subbasal groove entirely distinct, but interrupted dorsolaterally by basal costae; subapical groove becoming obscure dorsally. Elytra subellipsoidal, LE/WE 1.42–1.53 (holotype 1.51), moderately wider than prothorax, WE/WP 1.30–1.47 (holotype 1.38), less than twice as long as prothorax, LE/LP 1.76– 1.92 (holotype 1.92), vestigially striate-punctured except outer two striae partially well-marked, with intervals evenly flat, weakly rugose; dorsum strongly convex; dorsal contour highest before middle; lateral contour gradually dilated from base, widest before middle, and then more strongly convergent to very strong subapical constriction. Legs slender; femora strongly clavate; anterior margins of fore femora and posterior margins of mid and hind femora moderately emarginate in subapical parts, respectively; tibiae moderately incurved, sparsely bluntly serrate along internal margins, mucronate at apices; tibial mucrones vestigial on hind leg. Metasternum and ventrite I conjointly depressed on disc; discal depression deep on ventrite I, reaching its apical margin at apex. Ventrite I rather densely punctured on middle. Ventrite II moderately finely punctured, mostly flattish except sides. Ventrite V laterally slightly compressed on basal half, shallowly rounded at apex. Genitalia as illustrated (Figs. 24-27).

F e m a l e. Dimensions: LB: 13.75-14.65. LR: 2.40-2.50. WR: 2.35-2.50. LP: 4.68-5.20. WP: 4.15-4.50. WE: 6.10-6.50. LE: 8.95-9.40. N = 2 for all measurements. Dorsal habitus as shown in Fig. 7.

Rostrum LR/WR 1.00–1.02. Prothorax WP/LP 0.87–0.89. Elytra LE/WE 1.45–1.47, WE/WP 1.44–1.47, LE/LP 1.81–1.91. Ventrite V widely shallowly depressed on lateromarginal parts except apical third, more narrowly rounded at apex. Otherwise, essentially as in males.

*Type material.* Holotype: male (KUM), "Philippines: N Luzon / Apayao, Conner, / IX. 2014 / Local collector" (typed on white card); "[HOLOTYPE] Male / *Pachyrhynchus* / *sumptuosoides* / YOSHITAKE, 2017 / det. Hiraku YOSHITAKE, 2017" (typed on red card). Paratypes: 2 males from Apayao (KUM), and 1 male and 2 females from Kalinga (NIAES & KUM).

Distribution. Philippines (Luzon: Cordillera Administrative Region).

Etymology. This species is named after its superficial similarity to Pachyrhynchus sumptuosus.

*Notes*. This new species was described in comparison with the male holotype of *Pachyrhynchus callainimaculatus* preserved in NIAES.

# Pachyrhynchus orbifer striatomaculatus subsp. nov.

(Figs. 8, 9, 28-31)

Diagnosis. This new subspecies is similar to Pachyrhynchus orbifer gemmans Chevrolat, 1841 from "Manille" in having the elytral bands composed of glittering round scales and interrupted longi-

tudinally by glabrous parts along striae (Figs. 8 & 9). However, *P. o. striatomaculatus* is clearly distinguishable from *P. o. gemmans* by the elytra mostly covered with the scales, except with two narrowly transverse glabrous parts between each band, whereas *P. o. gemmans* possesses the elytra with much smaller scaly markings and therefore naked in the greater part.

Description. M a 1 e. Dimensions: LB: 10.65-11.00 (holotype 11.00; mean 10.8). LR: 1.80 (holotype 1.80; mean 1.80). WR: 1.65-1.75 (holotype 1.75; mean 1.70). LP: 3.60-3.65 (holotype 3.60; mean 3.62). WP: 3.90-4.05 (holotype 4.05; mean 4.00). LE: 6.95-7.55 (holotype 7.55; mean 7.23). WE: 5.30-5.60 (holotype 5.60; mean 5.47). N = 3 for all measurements. Dorsal habitus as shown in Fig. 8.

Integument shining black. Body surface with glittering markings of golden, coppery red, and metallic green recumbent round scales; each marking composed mainly of coppery red scales in median part, but of golden to metallic green ones on periphery. Head with subrectangular scaly patch which extends from vertex to apex of forehead; each side with obtriangular scaly patch which extends from lateroventral part of head below eye to that of rostrum just behind antennal scrobe. Rostrum often with small obscure scaly patch in median concavity. Prothorax with the following scaly markings: 1) broad crossband whose longitudinal part is subtriangular and transverse part is greatly expanded toward both sides, 2) fine transverse band along apical margin, and 3) very broad lateroventral stripe on each side; apical band often interrupted on middle in varying degrees; 1) and 2) confluent with 3) on sides; scaly markings sometimes enlarged to cover the greater part of prothorax. Elytra with transverse scaly bands on basal, median, and apical parts, respectively; each band broad, narrowly separated by transverse glabrous parts, longitudinally interrupted by fine glabrous parts along striae, confluent laterally with each other on intervals IX and X; basal and median bands and/or median and apical bands sometimes connected with each other on intervals III, dividing glabrous part between each band into three; basal band sometimes narrowly interrupted on suture, with posterior margin deeply sharply emarginate between intervals I and II; anterior and posterior margins of median bands more or less emarginate between intervals I and II, respectively; anterior margin of apical band more or less emarginate on intervals I. Rostrum barely longer than wide, LR/WR 1.03–1.09 (holotype 1.03). Prothorax barely wider than long, WP/LP 1.08-1.13 (holotype 1.13). Elytra moderately longer than wide, LE/ WE 1.26–1.36 (holotype 1.35), moderately wider than prothorax, WE/WP 1.31–1.41 (holotype 1.38), nearly twice as long as prothorax, LE/LP 1.93-2.10 (holotype 2.10). Venter relatively wide; ventrite I widely depressed on disc in conjunction with metasternum; apex of discal depression not reaching apical margin of ventrite I; ventrite V widely subtruncate at apex. Genitalia as illustrated (Figs. 28-31).

F e m a l e. Dimensions: LB: 9.90–11.80 (mean 10.76). LR: 1.55–1.95 (mean 1.73). WR: 1.40–1.90 (mean 1.61). LP: 2.90–3.90 (mean 3.36). WP: 3.40–4.00 (mean 3.74). LE: 6.95–7.95 (mean 7.38). WE: 5.30–6.10 (mean 5.76). N = 5 for all measurements. Dorsal habitus as shown in Fig. 9.

Rostrum LR/WR 1.03–1.11. Prothorax WP/LP 1.03–1.17. Elytra wider and longer, LE/WE 1.22–1.32, WE/WP 1.45–1.59, LE/LP 2.04–2.40. Venter narrower; ventrite I slightly inflated; ventrite V narrowly truncate at apex. Otherwise, essentially as in males.

*Type material.* Holotype: male (NIAES), "[ PHILIPPINES: Luzon ] / Cagayan Valley region, Luzon / Is., Nueva Vizcaya, Aritao, / X. 2011, native collector leg." (typed on white card); "HIRAKU YOSHITAKE / COLLECTION" (typed on white card); "[ H O L O T Y P E ] Male / *Pachyrhynchus / orbifer / striatomaculatus /* YOSHITAKE, 2017 / det. Hiraku YOSHITAKE, 2017" (typed on red card). Paratypes: 10 exs. from the same locality as the holotype (KUM & NIAES).

Distribution. Philippines (Luzon: Cagayan Valley region).

Etymology. This new subspecies is named after the characteristic markings on the elytra.

*Notes.* Presently, eight subspecies including this new subspecies are recognized under *Pachy-rhynchus orbifer*. However, the intraspecific classification of *P. orbifer* is apparently in need of revision due to the lack of a detailed study. I have already examined all the concerned type material.

It should be noted that *P. o. striatomaculatus* shows a superficial resemblance in color and body pattern characteristics to *Doliops taylori* VIVES, 2013 (Cerambycidae), its putative mimic known from Nueva Vizcaya, Luzon, the Philippines.

## Pachyrhynchus rukmaneae BARŠEVSKIS, 2016

Pachyrhynchus rukmaneae Barševskis, 2016, 2 (type locality: "Marinduque Isl., Boac"; type depository: DUBC). Pachyrhynchus takakuwai Yoshitake, 2016 a, 34 (type locality: "Marinduque Is., Buenavista"; type depository: NIAES). — Syn. nov.

Diagnosis. See Yoshitake (2016 a: 36).

Distribution. Philippines (Luzon: Mimaropa region: Marinduque Is.).

Notes. Judging from the original description of Pachyrhynchus rukmaneae with images of habitus and male aedeagus in dorsal and lateral views (BARŠEVSKIS, 2016: p. 3, Fig. 1A–C), it is quite apparent that P. takakuwai described by myself is conspecific with P. rukmaneae, which has about one month precedence over P. takakuwai. BARŠEVSKIS (2016) titled and summarized the paper containing the original description of P. rukmaneae as follows: "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" and "New species of the genus Pachyrhynchus GERMAR, 1824 and Macrocyrtus Heller, 1912 (Coleoptera: Curculionidae) from the Marinduque Island (Philippines) are described and illustrated: P. rukmaneae sp. n. and M. rukmaneae sp. n. Both species occur together forming the mimetic species pair. Mimicry between genera Pachyrhynchus and Macrocyrtus described for the first time". In fact, however, Pachyrhynchus taylori SCHULTZE, 1922 and Macrocyrtus kalinganus SCHULTZE, 1922 have already been reported as an example of "mimetic relations" by SCHULTZE (1923: 617, Table.1). The author should be severely criticized for the mistake of fact that was apparently caused by the lack of fundamental knowledge of the Pachyrhynchini.

# Acknowledgments

I thank Max BARCLAY (NHML), Johannes BERGSTEN (NHRS), Olaf JÄGER (SMTD), Klaus-Dieter Klass (SMTD), Christopher H. C. Lyal (NHML), Matthias Nuss (SMTD), and Christian Schmidt (SMTD) for support in examination of concerned type material, and Enzo Colonnelli (Rome) for suggestions on specific and subspecific epithets of the new taxa described in this paper. I appreciate Maurizio Bollino (Lecce), Munetoshi Maruyama (KUM), and Franco Sandel (Miane) for cooperation so far in my study of the Pachyrhynchini. My thanks are also due to Steve R. Davis (American Natural History Museum, New York) for English correction of the draft, and to Naoko Nakahara (Tsukuba) and Eri Tanaka (NIAES) for assistance in preparing the manuscript.

## 要 約

吉武 啓:フィリピン産カタゾウムシ属 (鞘翅目ゾウムシ科クチブトゾウムシ亜科) の6新タクサの記載と1新参異名. — カタゾウムシ属 *Pachyrhynchus* GERMAR にはこれまで127 種が知られているが、本属の分類学的研究は遅れており、いまだ相当数の未記載タクサが存在する。本論文では、フィリピン産カタ

ゾウムシ属に下記の6新種および1新亜種を認め、命名・記載した:P. conformis sp. nov. (サマール島)、P. gilvomaculatus sp. nov. (ミンダナオ島)、P. sakaii sp. nov. (サマール島)、P. sumptuosoides sp. nov. (ルソン島)、P. orbifer striatomaculatus subsp. nov. (ルソン島). なお、各新種・新亜種について、近縁種・亜種との区別点を明記したうえでその形態的特徴を詳細に記載し、全形写真とる交尾器図(ただし、1口に基づいて記載されたP. sakaii sp. nov. を除く)を付した。その他、P. rukmaneae Barševskis、2016(フィリピン・マリンドゥケ島)より約1ヵ月遅れで同島から記載されたP. takakuwai Yoshi-Take、2016を前者の新参異名として扱った。

# 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*, *Ilgas*, **16**: 1–6.
- BOLLINO, M., & F. SANDEL, 2015. Three new species of the genus *Pachyrhynchus* GERMAR, 1824 from Lubang Island (Philippines) (Curculionidae: Entiminae: Pachyrhynchini). *Munis Entomology & Zoology, Ankara*, **10**: 392–401.
- CABRAS, A. A., & A. RUKMANE, 2016. A new species of *Pachyrhynchus* GERMAR, 1824 (Coleoptera: Curculionidae: Entiminae). *Acta Biologica Universitatis Daugavpiliensis*, *Ilgas*, 16: 123–127.
- Rukmane, A., 2016. Six new species of the genus *Pachyrhynchus* German, 1824 (Coleoptera: Curculionidae) from the Philippines. *Acta Biologica Universitatis Daugavpiliensis*, *Ilgas*, **16**: 77–89.
- RUKMANE, A., & A. BARŠEVSKIS, 2016. Nine new species of the genus *Pachyrhynchus* GERMAR, 1824 (Coleoptera: Curculionidae) from the Philippines. *Baltic Journal of Coleopterology*, *Ilgas*, **16**: 77–96.
- SCHULTZE, W., 1923. A monograph of the pachyrrhynchid group of the Brachyderinae, Curculionidae: Part I. The genus *Pachyrrhynchus* GERMAR. *Philippine Journal of Science*, *Manila*, **23**: 609–673 + 6 pls.
- YOSHITAKE, H., 2011. A new species of the subgenus *Artapocyrtus* of the genus *Metapocyrtus* (Coleoptera: Curculionidae: Entiminae) from Mindanao, the Philippines. *Esakia*, Fukuoka, (50): 115–119.
- YOSHITAKE, H., 2012. Nine new species of the genus *Pachyrhynchus* GERMAR (Coleoptera: Curculionidae) from the Philippines. *Esakia*, Fukuoka, (52): 17–34.
- YOSHITAKE, H., 2016 a. A new species of the genus *Pachyrhynchus* GERMAR (Coleoptera, Curculionidae, Entiminae) from Marinduque Island, the Philippines. *Gekkan-Mushi*, *Tokyo*, (549): 34–37.
- YOSHITAKE, H., 2016 b. A new synonymy of *Pachyrhynchus apoensis* YOSHITAKE (Coleoptera, Curculionidae, Entiminae). *Elytra, Tokyo*, (n. ser.), 6: 197–198.
- YOSHITAKE, H., 2017. Notes on Pachyrhynchini jewel weevils (Coleoptera: Cuculionidae: Entiminae) and other insects showing remarkable resemblance in color and body pattern characteristics. *Gekkan-Mushi*, *Tokyo*, (553): 22–40. (In Japanese, with English title, original descriptions and summary.)
- Yunakov, N. N., 2013. Pachyrhynchini. P. 347. *In Löbl.*, I., & A. Smetana, (eds.), *Catalogue of Palaearctic Coleoptera*, **8**. 700 pp. Brill, Leiden, Netherlands.

Manuscript received 28 February 2017; revised and accepted 8 May 2017.