

Two new species of the genus *Metapocyrtus* Heller, 1912 (Coleoptera: Curculionidae: Entiminae), from Mindanao Island and an updated checklist of *Metapocyrtus* species in the Philippines

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Abstract. Despite discoveries of new species of *Metapocyrtus* Heller, 1912 (Coleoptera: Curculionidae), in Mindanao Island, Philippines, over the past few years, there are still many unknown species inhabiting unprotected and unexplored forest and mountain ecosystems. A recent survey of Mount Hamiguitan Range Wildlife Sanctuary revealed two new species of the genus. These two species, *Metapocyrtus villalobosae*, new species, and *M. gapudi*, new species, from Mount Kabunulan, Hamiguitan Range, Surop, Governor Generoso, Davao Oriental, Philippines, are described. An updated checklist, list of host plants, and brief descriptions of the natural habitat and ecology are also provided.

Key words. Entiminae, Pachyrhynchini, curculionids, broad-nosed weevil, scales

INTRODUCTION

As one of the megadiverse countries in the world that have very high species richness and endemism (Mittermeier et al., 1998), the Philippines is still considered one of the less-explored regions in Southeast Asia. Mindanao, one of the largest islands of the Philippine archipelago, has remote mountain and forest ecosystems that are still under-explored, especially for entomological research. One of the less-studied groups of insects on Mindanao Island are beautiful long-snout beetles from the tribe Pachyrhynchini, belonging to the genus *Metapocyrtus* Heller, 1912.

The genus *Metapocyrtus* is considered one of the most diverse and complex beetle genera, with more than 200 species in the Philippines (Yap, 2008). This genus, known mainly by attractive and bright body markings, inhabits only limited regions in the islands of the circum-Pacific, specifically in the less-explored mountainous regions between 500 to 2,000 m above sea level and 16–18° N latitude (Schultze, 1923; Star & Wang, 1992; Yap & Gapud, 2007). In addition, the

genus can also be characterised by having black, brown, or reddish-brown body colour, with few or many scale markings, round or irregular spots, or longitudinal or transverse stripes. The rostrum is as long as broad, and the pronotum of most species is subglobular, granulated, and/or punctured (Yap & Gapud, 2007).

The genus was established by Heller in 1912, who transferred *Apocyrtus impius* (Erichson, 1834) from the Philippines (Laguna [Mt. Banahao] and Bataan [Limay]) to be the type specimen. Yap & Gapud (2007) re-examined subgeneric characters of the genus and established seven subgenera: *Artapocyrtus*, *Dolichocephalocyrtus*, *Metapocyrtus* s. str., *Orthocyrtus*, *Sclerocyrtus*, *Sphenomorphaidea*, and *Trachycyrtus*. Several entomologists have conducted inventory and taxonomic studies of the genus *Metapocyrtus*, and discovered many new species and much new information with concentration on species in Luzon (Yap & Gapud, 2007; Yoshitake, 2017; Sandel & Bollino, 2018). Recent findings of new *Metapocyrtus* species in Mindanao islands added to more than a hundred known species from the genus, including the recently described new species *M. bronzi* Patano & Yap, 2020 (Ballentes et al., 2006; Cabras et al., 2016, 2017; Mohagan et al., 2018, 2020; Cabras et al., 2019; Cabras & Medina, 2019; Bollino et al., 2020; Patano et al., 2020, 2021).

One of the known habitats of the genus, specifically in the southernmost part of Mindanao, is the Mount Hamiguitan Range Wildlife Sanctuary in Davao Oriental. It is the only UNESCO World Heritage Site in Mindanao Island and is a known habitat of rare and endemic flora and fauna (UNESCO, 2014). Moreover, it probably also harbours unknown species just waiting to be studied and described.

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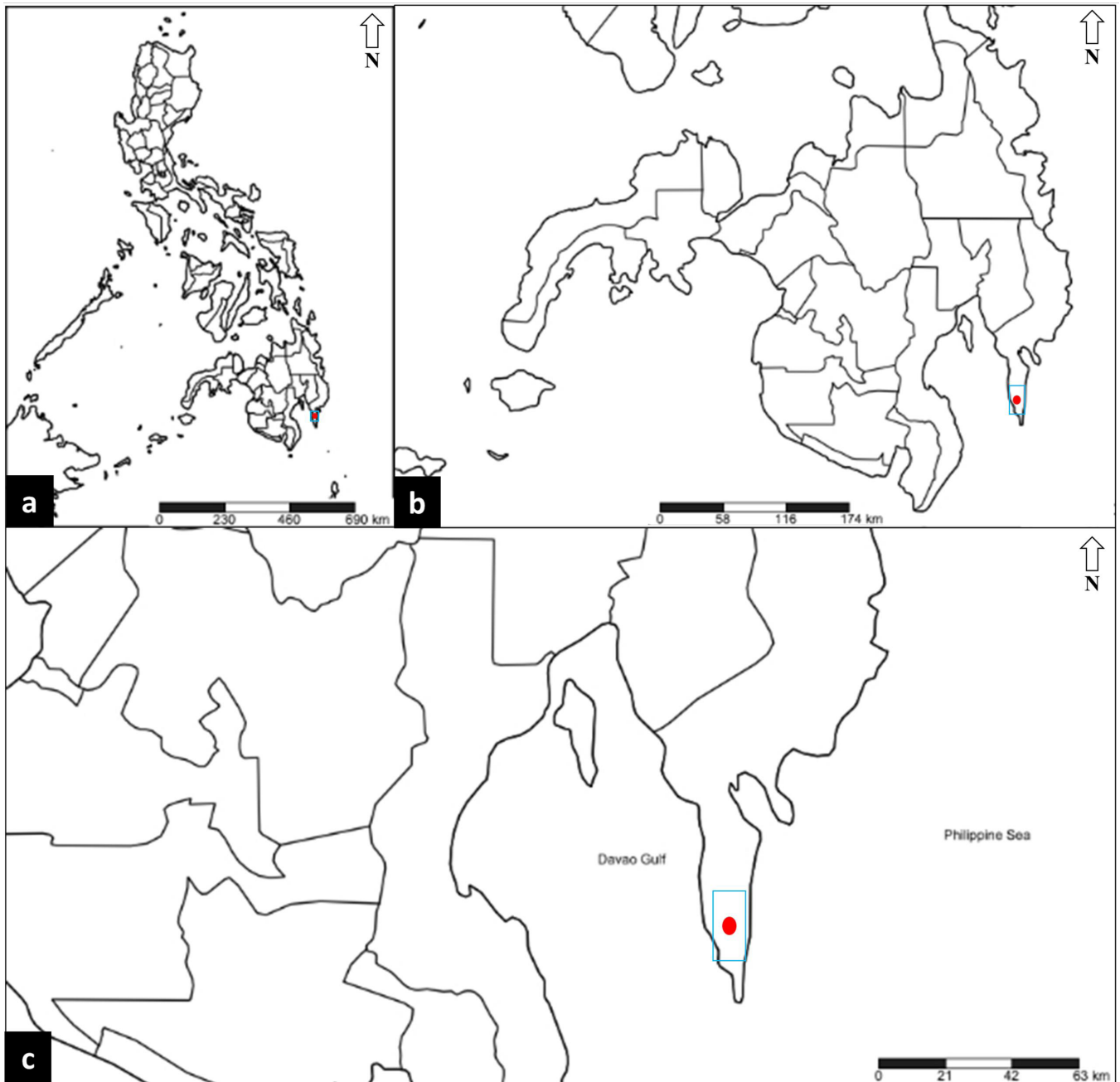


Fig. 1. Map of the (a) Philippines and (b) Mindanao, showing (c) Mount Kabunulan, Hamiguitan Range, Surop, Governor Generoso, Davao Oriental, Mindanao, Philippines ($6^{\circ}27'45.29''\text{N}$, $126^{\circ}10'19.07''\text{E}$; 350–400 m a.s.l.), where specimens of the two new species were collected (red dots).

In this paper, we describe two new species from our recent field survey in Mount Kabunulan, Hamiguitan Range, Surop, Governor Generoso, Davao Oriental, Mindanao, Philippines. A checklist of *Metapocyrtus* species in the Philippines with new records, a list of host plants, and brief descriptions of their natural habitat and ecology are also provided.

MATERIAL AND METHODS

Acquisition of permits. An approved Gratuitous Permit (GP) was obtained from the Department of Environment and Natural Resources (DENR) in compliance with Republic Act 9147, which states that a maximum of four specimens per species can be collected. An Institutional Animal Care

and Use Committee (IACUC) Permit was also acquired from the College of Veterinary Medicine, Central Mindanao University, Musuan, Maramag, Bukidnon, Philippines, for animal handling.

Field sampling, collection of specimens, photography, and measurements. The specimens of the two new species were collected near the riverine ecosystem in the lowland ultramafic secondary forest of Mount Kabunulan, Hamiguitan Range, Surop, Governor Generoso, Davao Oriental, Mindanao, Philippines (Figs. 1, 2). Both species were observed perching on shrub-like plants ($6^{\circ}27'45.29''\text{N}$, $126^{\circ}10'19.07''\text{E}$; 350–400 m a.s.l.; 23–31 January 2021). A two-kilometre transect covering 10×5 m was established. Standard sampling techniques, such as opportunistic and



Fig. 2. Habitat of *Metapocyrtus villalobosae*, new species, and *M. gapudi*, new species, a lowland ultramafic secondary rainforest near a riverine ecosystem about 350–400 m a.s.l. at Mount Kabunulan, Mount Hamiguitan Range Wildlife Sanctuary, Surup, Governor Generoso, Davao Oriental, Mindanao, Philippines.

random sampling with the use of sweep nets, were done in the established transect. Female and male specimens of the two new species were collected through handpicking and sweep netting whenever encountered during diurnal (0700–1500 hours) and nocturnal (1700–2200 hours) periods. Specimens of the two new species were put in separate vials, filled with 95% ethyl-alcohol, for preservation. The specimens were then air-dried and mounted for photo documentation.

Specimens were examined and photographed under a stereomicroscope. A TG6 Olympus camera was used to photograph the specimens. Adobe Photoshop CS6 software (licensed) was used to create final images of the two species. An ocular micrometer and digital calipers were used to measure the specimens. The male terminalia of the two new species were extracted by removing abdominal segments III to V of the specimens, which were then cleaned in boiling 10% potassium hydroxide solution for 10 to 30 minutes. The specimens of the two new species examined in this study were deposited in Central Mindanao University, University Museum, Zoological Section, Curculionidae collection (CMUZS).

The standard methodology of measurements and description by Yoshitake (2012) and Schultze (1923, 1925) were employed. All measurements are shown in millimetres (mm). The following body measurements were taken: BL, body length (from the apical margin of pronotum to the apex of the elytra); EL, elytral length (from the level of the basal margins to the apex of the elytra); WE, maximum width across elytra; PL, pronotal length (from the base to apex along the midline); WP, maximum width across pronotum; RL, rostrum length; and WR, maximum width of the rostrum.

TAXONOMY AND SYSTEMATICS

Family Curculionidae Latreille, 1802

Metapocyrtus Heller, 1912

Diagnosis of the genus. Rostrum longer than broad except in subgenus *Artapocyrtus*; with distinct transverse groove that separates it from frons; antennae inserted at or near apex of rostrum. Frons is distinct median impressed line with a cross groove between rostrum and frons. Eyes not swollen, semi-circular, and slightly convex. Antennal segments variable in size; scape reaching at least or beyond hind margin of eye. Pronotum subglobular, broader than long, granulated or punctured, except for some species of subgenus *Orthocyrtus* with smooth pronotum; anterior submarginal groove distinct and dilated towards sides. Elytra elliptical or subovate, broader than pronotum, more or less striate-punctate or granulate. Distance between mid and hind coxae wider than that between fore and mid coxae. Hind femora clavate, usually reaching or extending beyond apex of elytra. Tibiae generally straight; apex of tibia with tuft of hairs; mucro and flange present. Tarsi ventrally spongy-hairy (Yap & Gapud, 2007).

Metapocyrtus (Artapocyrtus) villalobosae, new species (Figs. 3–5)

Type material. Holotype, male: PHILIPPINES: Mindanao, Mount Kabunulan, Hamiguitan Range, Surup, Governor Generoso, Davao Oriental, 6°27'44.29"N, 126°10'18.15"E, 400 m a.s.l., 23–31 January 2021, coll. R. R. Patano Jr., A. B. Mohagan, and V. B. Amoroso (CMUZS 2365); three paratypes, females, same data as the holotype (CMUZS 2366, 2367, 2368).

Diagnosis. This new species differs from all known congeners by having a wider than long rostrum, the presence of blue to light yellow and gold scale markings, and having two distinct longitudinal stripes in the apical half of each elytron. The pronotal markings are similar to those of *Metapocyrtus (Sclerocyrtus) chamissoi* Schultze, 1925, but differ in the presence of light yellow to gold scales, the presence of an elongated stripe under the eye on each lateral side, and the presence of two distinct longitudinal stripes in the apical half of each elytron.

Description. Measurements (n = 4): BL: 13.2–14.5 (14.5 holotype). EL: 7.9–8.9 (8.9 holotype). WE: 6.0–6.3 (6.3 holotype). PL: 3.5–3.8 (3.8 holotype). WP: 4.0–4.3 (4.3 holotype). RL: 2.4–2.9 (2.9 holotype). WR: 1.9–2.0 (2.0 holotype).

Integument black. Body surface mostly shiny except underside with weaker lustre. Body coarsely and irregularly punctured, with markings of blue and golden yellow, round to oval scales, more or less mingled with minute hairs and scales.

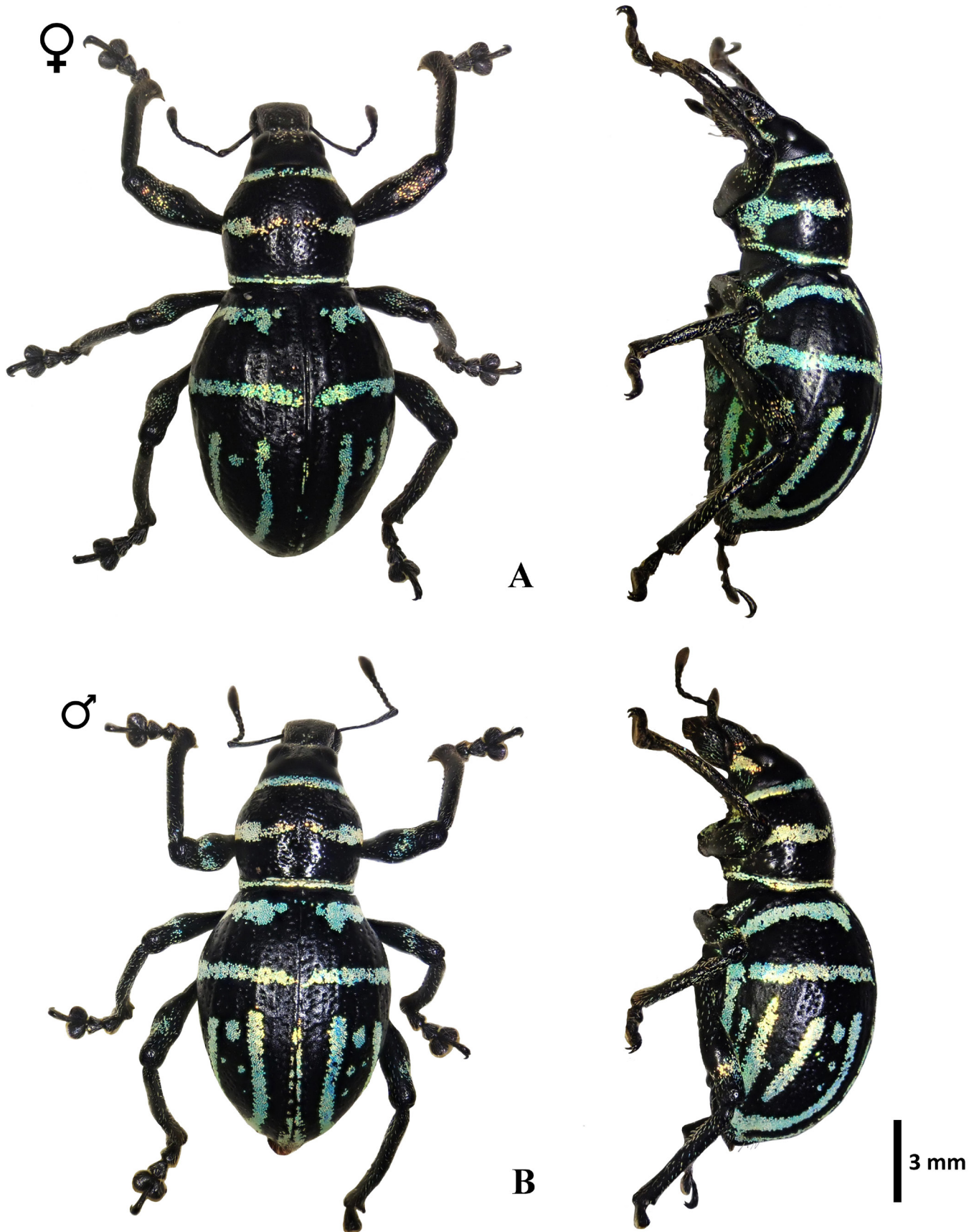


Fig. 3. Dorsal and lateral views of *Metapocyrus villalobosae* habitus, female (A) and male (B).

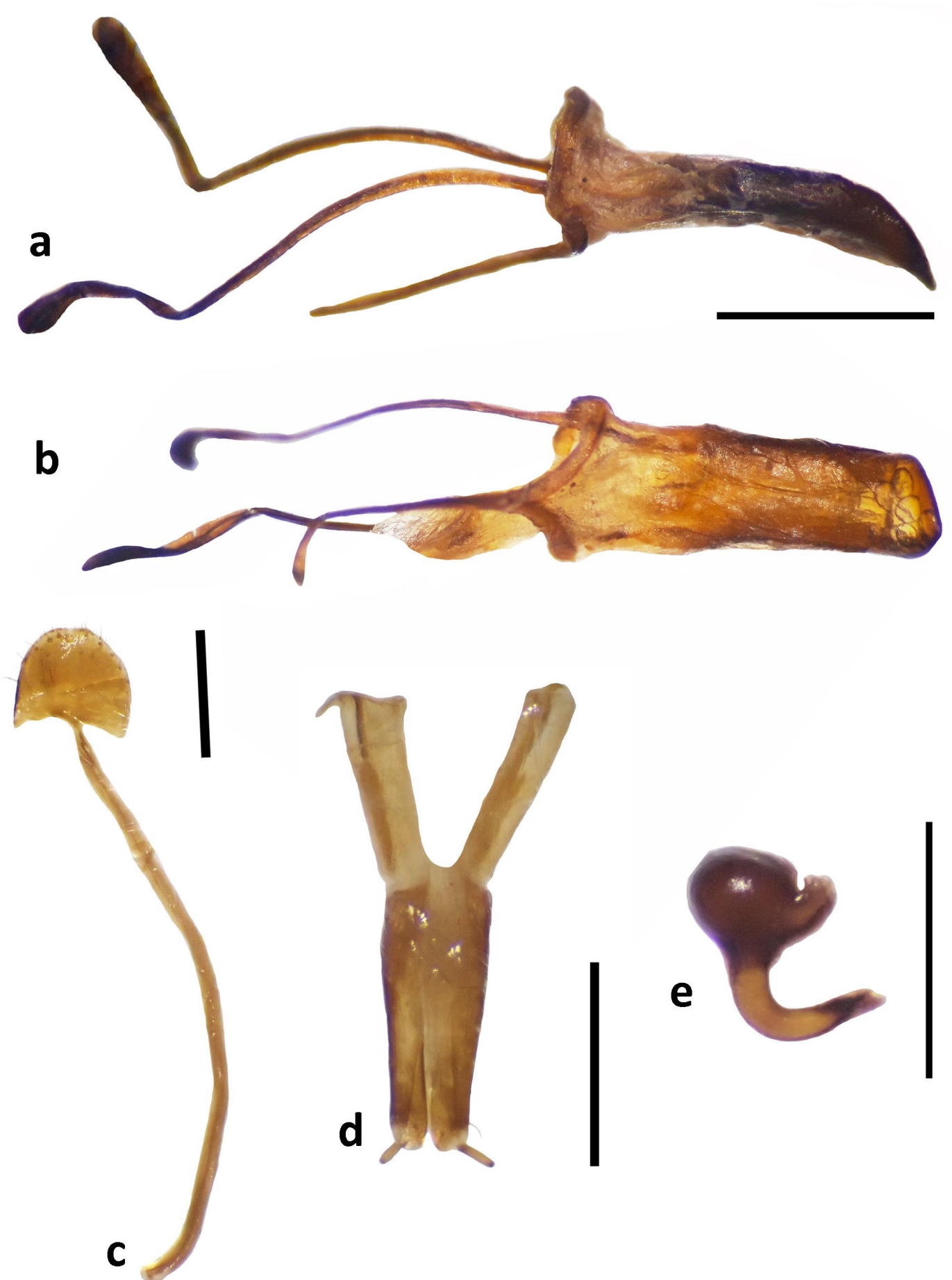


Fig. 4. Genitalia of *Metapocyrtus villalobosae*. Male aedeagus, lateral (a) and dorsal (b) views. Female sternite VIII in ventral view (c), ovipositor (d), and spermatheca (e). Scale bars = 1.0 mm.



Fig. 5. *Metapocyrtus villalobosae* in its natural habitat, perched on a shrub plant along the riverine ecosystem of Mount Kabunulan, Mount Hamiguitan Range Wildlife Sanctuary, Surup, Governor Generoso, Davao Oriental, Mindanao, Philippines.

Head sparsely minutely pubescent with elongated stripes of pale blue and yellow scales under eye on each lateral side diminishing towards apex of rostrum. Presence of sparse and evenly distributed yellow and blue scales between eyes or at the centre of the transverse groove. Eyes, antennae, and tarsomeres black. Eyes small and very weakly convex. Antennal scape smaller compared to funicle plus club (2:3). Funiculus composed of seven segments, segment I three times as long as wide and widest at the distal end, longer compared to the segments II and III (1:0.75:0.5). The segments IV, V, VI, and VII identical in size but three times shorter than segment I (0.18 mm). Antennal club almost 1 mm in length and 0.42 mm in width, subellipsoidal in shape and almost entirely covered with brown setae. Rostrum rugose, wider than long, flattened dorso-apically with white setae and long yellow hairs towards apex with prominent transverse basal and longitudinal median grooves forming a cross shape having sparse scales at the base. Ventral and lateral side with scattered short hairs.

Pronotum subglobular, widest at middle, convex, glabrous, with very minute and sparse punctures; with three thin latitudinal stripes of dense blue and sparse yellow scales of which the middle stripe is the thickest. These three latitudinal stripes confluent to the lateral base extending from the anterior to the posterior stripes of the pronotum.

Elytra slight to moderately convex with few minute hairs, regularly weakly striate-punctate. Each elytron with the following mostly blue to light yellow and gold markings: 1) a latitudinal stripe at the anterior base, gradually reducing from the middle to the lateral sides; 2) stripe on lateral margin extending from base towards the apex of the elytra; 3) thin latitudinal band in the middle part of elytra confluent with lateral margin extending from the base to the apex; 4) thin longitudinal stripe between intervals I and II extending from middle of the elytra to apex, may or may not be confluent with lateral margin; and 5) two longitudinal stripes that may or may not be extending from apex of each elytron. Ventral side black with white setae. Dense blue, light yellow, and gold scales present at both sides of the abdomen. Legs black with white short hairs, and light yellow and blue scales on the dorsal side of femora. Fore and mid femora 4.5–4.65 mm long and 1.2–1.3 mm wide. Tibiae armed with tooth-like projections on the inner margin covered with short setae. Tarsomeres covered with brown sparse setae. Female and male genitalia as shown in Fig. 4. For males, aedeagus long, arcuate, apical portion pointed, lateral margins sclerotised. For females, sternite VIII rounded; ovipositor slightly sclerotised, rounded apically with lateral projections; spermatheca rounded basally, distal part strongly curved.

Etymology. This new species is named after DOST Balik Scientist Dr. Annabelle P. Villalobos. Her outstanding support, help, and advice to the researchers of the Center for Biodiversity Research and Extension in Mindanao (CEBREM) have been valuable to the realisation of the research undertakings in the Center. The specific epithet is a genitive case noun.

***Metapocyrtus (Artapocyrtus) gapudi*, new species**
(Figs. 6–8)

Type material. Holotype, male: PHILIPPINES: Mindanao, Mount Kabunulan, Hamiguitan Range, Surup, Governor Generoso, Davao Oriental, 6°27'45.29"N, 126°10'19.07"E, 385 m a.s.l., 23–31 January 2021, coll. R. R. Patano Jr., A. B. Mohagan, and V. B. Amoroso (CMUZS 2369); three paratypes, females, same data as the holotype (CMUZS 2370, 2371, 2372).

Diagnosis. This new species differs from all known congeners by the presence of unique patterns of mostly light and dark blue, with some light yellow to white scale markings in elytra, pronotum, rostrum, and abdomen. Legs entirely black. Pronotal and elytral markings resemble those of *M. (M.) rugicollis* Chevrolat and *M. (M.) bukidnonensis* Schultze, but differ in colouration of scales and legs. Elytral markings also resemble those of *M. (M.) polilloensis* Schultze, but differ in scale colouration.

Description. Measurements (n = 4): BL: 9.2–9.4 (9.3 holotype). EL: 5.0–5.1 (5.1 holotype). WE: 3.8–4.0 (4.0 holotype). PL: 2.6–2.8 (2.8 holotype). WP: 2.65–2.9 (2.9 holotype). RL: 1.3–1.4 (1.4 holotype). WR: 1.1–1.2 (1.2 holotype).

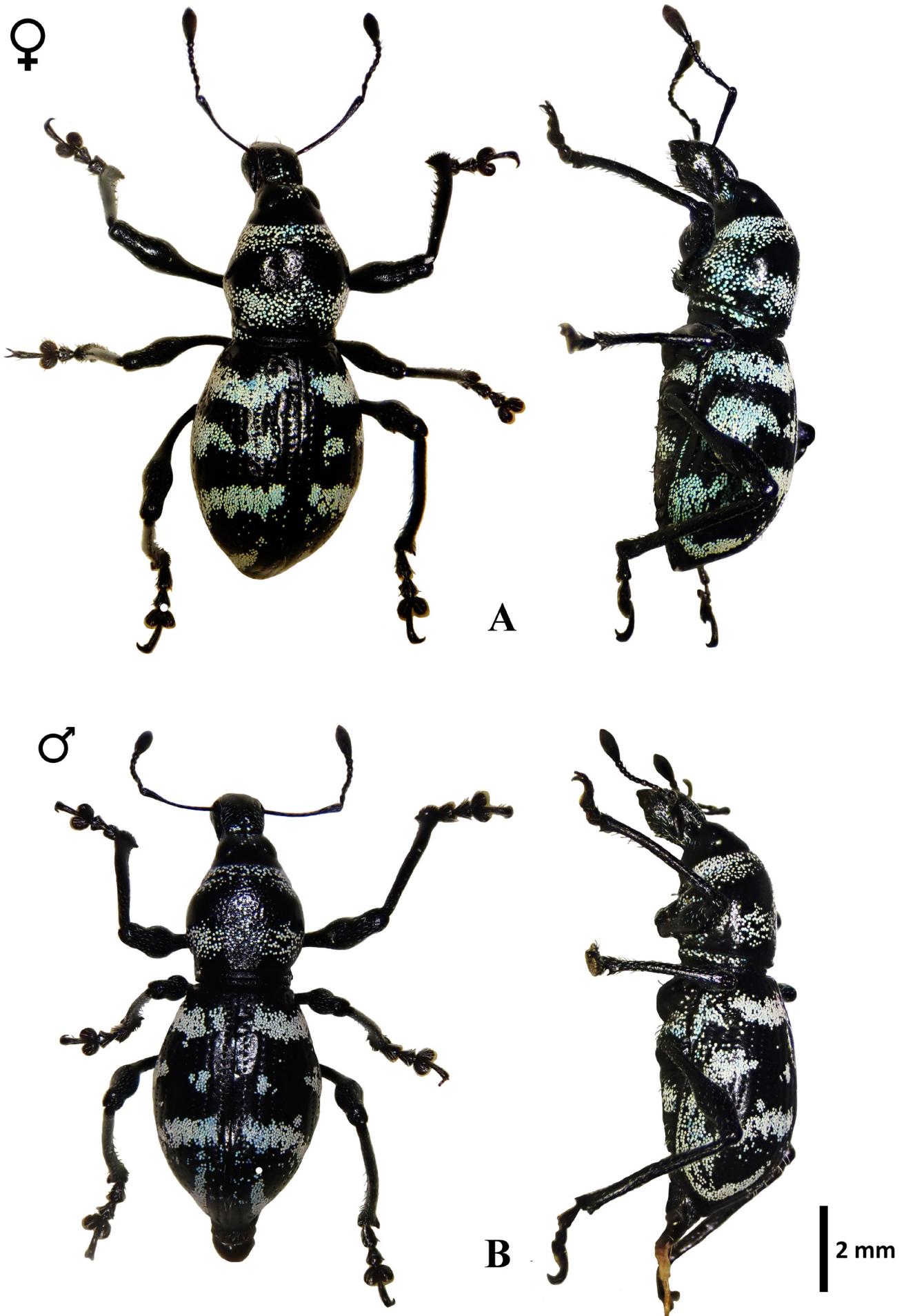


Fig. 6. Dorsal and lateral views of *Metapocyrtus gapudi* habitus, female (A) and male (B).

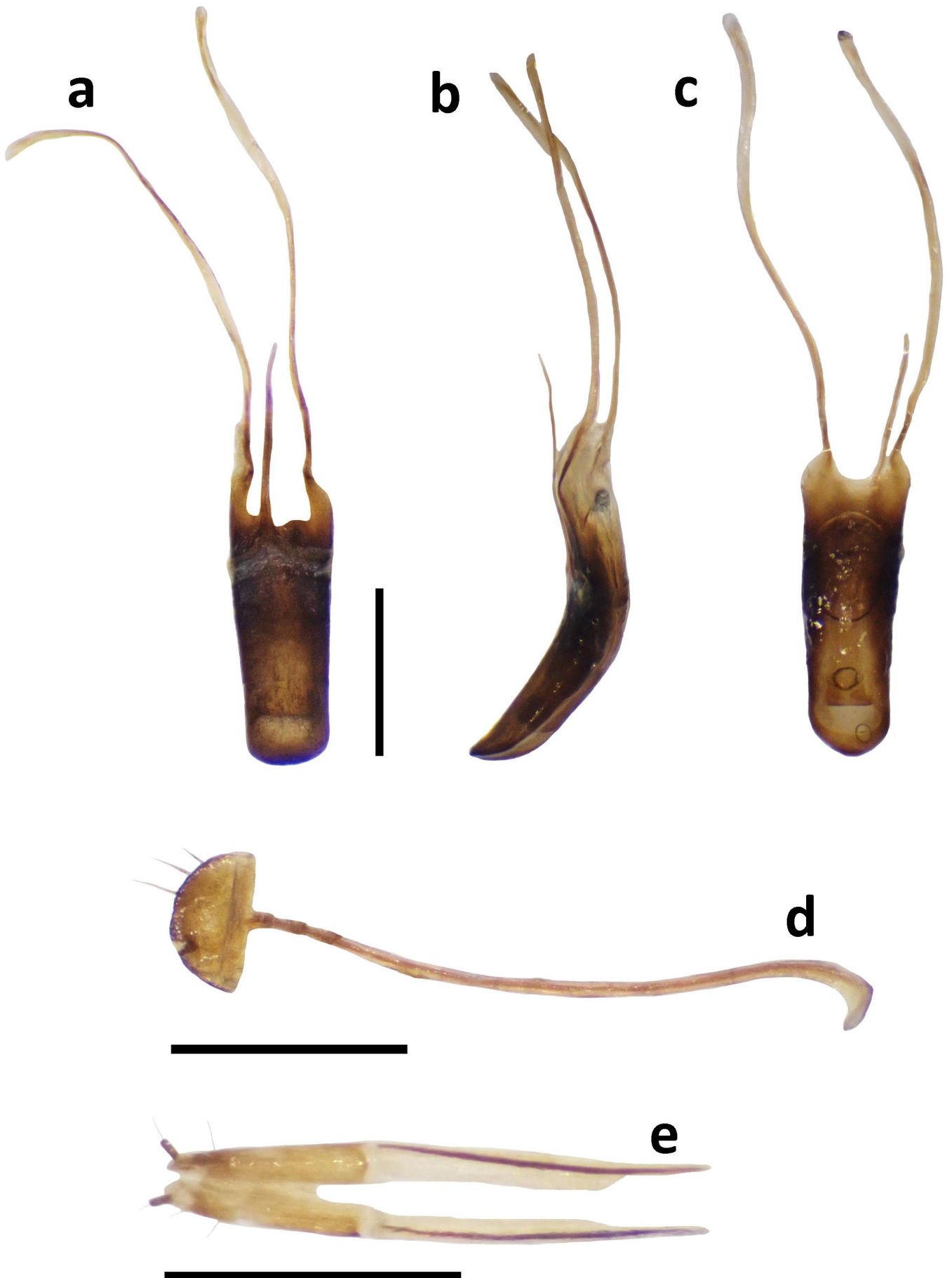


Fig. 7. Genitalia of *Metapocyrtus gapudi*. Male aedeagus, dorsal (a), lateral (b), and ventral (c) views. Female sternite VIII in ventral view (d) and ovipositor (e). Scale bars = 1.0 mm.

Integument black. Body surface mostly shiny except underside with weaker lustre. Body mostly clearly punctured, with markings of glossy, recumbent, round to oval light blue and light yellow scales, more or less mixed with small hairs.

Head sparsely minutely pubescent with markings of light blue and yellow scales below and between the eyes, respectively. Eyes and tarsomeres black, and antennae reddish black. Eyes small and weakly convex. Antennal scape smaller compared to funicle plus club (3.38:1.81). Antennal funiculus composed of seven segments, segment I slightly longer than segment II (0.54 mm:0.39 mm), almost four times as long as wide. Segment III slightly smaller compared to segment II and longer than wide (1.5:1). Segments IV, V, VI, and VII almost identical in size and almost three times shorter than segment I (0.21 mm). Antennal club almost 1.14 mm in length and 0.43 mm in width, subellipsoidal in shape and almost entirely covered with minute brown setae. Rostrum wrinkled, slightly longer than wide, flattened dorso-apically with white to brown setae and long yellow hairs towards apex. Ventral and lateral sides with scattered short hairs.

Pronotum globular to elliptical in shape, very weakly convex, dorsally and coarsely striate-punctate. A transverse band of blue scales surrounded by light yellow and white scales at the base and at the apex confluent with a lateral band at the base of the lateral margin.

Elytra oblong-ovate to elliptical and slightly convex, coarsely striate-punctate. Each elytron with three transverse bands of blue scales surrounded by white and yellow scales, and a longitudinal band extending from the apex to the third quarter of the elytra, which may or may not be confluent with the third transverse band. Ventral side black with white setae and blue to yellow scales present on both sides of the abdomen. Legs black with white short hairs. Fore and mid femora almost 3.0–3.15 mm long and 0.65–0.71 mm wide. Tibiae armed with tooth-like projections at the inner margin covered with short setae. Tarsomeres covered with brown sparse setae. Female and male genitalia as shown in Fig. 7. For males, aedeagus arcuate, long, apex truncate, aedegeal body and median apodemes sclerotised. For females, sternite VIII apically rounded; ovipositor lightly sclerotised, apically rounded with lateral projections; spermatheca rounded basally.

Etymology. This new species is named after the late Dr. Victor P. Gapud, a renowned entomologist in the Philippines. His excellent work in curculionids and other invertebrates is the foundation of and benchmark for different entomological studies in the Philippines. The specific epithet is a genitive case noun.

Checklist of *Metapocyrtus*

This is the most updated checklist of *Metapocyrtus* in the Philippines (Table 1) since Yap, 2008. A total of seven subgenera and 258 species are listed. *Metapocyrtus* (*Metapocyrtus*) *elegans* (Waterhouse, 1842) is newly recorded from Polillo Island. Based on the list, 50% of



Fig. 8. *Metapocyrtus gapudi* in its natural habitat, perched on a shrub plant along the riverine ecosystem of Mount Kabunulan, Mount Hamiguitan Range Wildlife Sanctuary, Surup, Governor Generoso, Davao Oriental, Mindanao, Philippines.

species are only found on Luzon island, 22.09% of species have only been recorded from Mindanao, and 19.77% are found on Visayas. Another 5.04% are Philippine endemics with no specific island or locality records. 0.78% are species found on both Mindanao-Luzon, and 1.55% are species found on Mindanao-Visayas, both one species found on Visayas-Luzon and Luzon-Visayas-Mindanao, respectively. The data implies that surveys and collections were more concentrated on Luzon compared to other islands. Our recent survey in Mount Hamiguitan reveals that there are more unknown species that await discovery.

List of host plants

We present here for the first time the list of host plants of *Metapocyrtus* (Table 2). Species of *Metapocyrtus* are found in trees, shrubs, and herbs near or inside forested areas, and also along rivers and ravines. Field observations revealed that these weevils are polyphagous but not considered natural pests of forest plants. However, the conversion of forest land to agriculture severely limits forest host plant sources, driving many species to become pests of agricultural crops. A total of 46 species of host plants belonging to 31 families was documented. Of the 46 species, eight are ferns, and the rest are flowering plants. Several species are introduced and invasive to the Philippines, such as *Chromolaena odorata* (L.) R.M.King & H.Rob., *Pteridium aquilinum* (L.) Kuhn, *Piper aduncum* L., and *Lantana camara* L. *Alocasia heterophylla* (C.Presl) Merr, *A. zebrina* Schott ex van Houtte, *Celtis luzonica* Warb., *Impatiens platypetala* Lindl., and *Medinilla* sp. are endemic in the country. A few species such as *Shorea contorta* S.Vidal, *A. zebrina*, and most species of *Cyathea* are vulnerable, while several species of *Begonia* and *Medinilla* are critically endangered (DAO, 2017–2011). *Citrus* spp., *Citrofortunella microcarpa* (Bunge) Wijnands, *Manihot esculenta* Crantz, and *Alocasia macrorrhizos* (L.) G. Don (giant taro) are considered agricultural crops; the latter originated in the Philippines (Nauheimer et al., 2012), is cultivated throughout the tropics, and found in exposed and open places.

Table 1. Updated checklist of *Metapocyrtus* in the Philippines.

Taxa/classification	Distribution	References
A. Subgenus <i>Artapocyrtus</i> Heller		
1. <i>M. bacoensis</i> Sandel & Bollino, 2018	Luzon: Mindoro Island	Sandel & Bollino, 2018
2. <i>M. bifasciatus</i> (Waterhouse, 1842) (= <i>Apocyrtus bifasciatus</i>)	Luzon (with no specific locality); Mindanao	Waterhouse, 1842; Yap, 2008
3. <i>M. bronsi</i> Patano & Yap, 2020	Mindanao: Mount Hamiguitan, Davao Oriental	Patano et al., 2020
4. <i>M. bucasanus</i> Schultze, 1919	Mindanao: Bucas Grande Island, Surigao del Norte	Schultze, 1919; Yap, 2008
5. <i>M. coeruleolineatus</i> Sandel & Bollino, 2018	Luzon: Mindoro Island	Sandel & Bollino, 2018
6. <i>M. colonnellii</i> Bollino, Yoshitake & Sandel, 2019	Luzon: Central and northern Catanduanes	Bollino et al., 2019
7. <i>M. derasocobaltinus</i> Heller, 1912	Visayas: Samar, Leyte	Heller, 1912; Yap, 2008
8. <i>M. diffusisquamosus</i> Schultze, 1925	Visayas: Leyte (Cabalian); Mindano: Surigao	Schultze, 1925; Yap, 2008
9. <i>M. falsoquadrulifer</i> Heller, 1929	Visayas: Samar	Heller, 1929; Yap, 2008
10. <i>M. gapudi</i> sp. nov.	Mindanao: Mount Kabunulan, Hamiguitan Range, Surop, Governor Generoso (Davao Oriental)	Present study
11. <i>M. geniculatus</i> Waterhouse, 1842 (= <i>Apocyrtus feniculatus</i>)	Philippines (with no specific locality); Mindanao: Marilog [Davao (Mt. Malambo, Baganihan, Marahan)], Mount Agad-Agad, Iligan City	Waterhouse, 1842; Yap, 2008; Mohagan et al., 2018, 2020; Patano et al., 2021
12. <i>M. humeralis</i> Heller, 1912	Visayas: Leyte	Heller, 1912; Yap, 2008
13. <i>M. humeralis aureofasciatus</i> Schultze, 1925	Visayas: Samar	Schultze, 1925; Yap, 2008
14. <i>M. inexpectatus</i> Bollino, Sandel & Yoshitake, 2019	Visayas: Central and southern part of Leyte Island	Bollino et al., 2019
15. <i>M. latifasciatus</i> Bollino, Medina & Cabras, 2020	Mindanao: North Cotabato, Magpet, Kidapawan, Sarangani, Davao del Sur	Bollino et al., 2020
16. <i>M. latinus</i> Heller, 1925	Mindanao: Surigao (Dapia), Bucas Grande Island (Socorro)	Heller, 1925; Yap, 2008
17. <i>M. longipenis</i> Schultze, 1925	Visayas: Bohol (Bilar), Leyte (Palompon), Biliran Island	Schultze, 1925; Yap, 2008
18. <i>M. lumawigi</i> Bollino & Sandel, 2017	Luzon: Bicol subregion	Bollino & Sandel, 2017
19. <i>M. mysticus</i> Bollino, Sandel & Yoshitake, 2019	Mindanao: Dinagat Island, Caraga Region	Bollino et al., 2019
20. <i>M. octomaculatus</i> Schultze, 1922	Luzon: Polillio Island	Schultze, 1922; Yap, 2008
21. <i>M. pardalis</i> Heller, 1912	Luzon (with no specific locality); Mindanao: Agusan (Butuan)	Heller, 1912; Yap, 2008
22. <i>M. polychromus</i> Bollino, Sandel & Yoshitake, 2019	Luzon: Mount Bulusan, Sorsogon, Bicol region	Bollino et al., 2019
23. <i>M. pulangi</i> Bollino, Medina & Cabras, 2020	Mindanao: Pulangi River in Bukidnon; Cabanglasan; Wao; Buda; Mt. Kitanglad; Tagoloan; Mt. Apo, Davao del Sur; Alamada, North Cotabato	Bollino et al., 2020

Taxa/classification	Distribution	References
24. <i>M. quadriplagiatus caeruleus</i> Bollino & Sandel, 2017	Luzon: Sierra Madre subregion	Bollino & Sandel, 2017
25. <i>M. quadriplagiatus</i> Roelofs, 1876	Luzon: Laguna (Paete), Rizal (Mt. Lumutan)	Roelofs, 1876; Yap, 2008
26. <i>M. rubricollis</i> Sandel & Bollino, 2018	Luzon: Mindoro Island	Sandel & Bollino, 2018
27. <i>M. ruficrus</i> Dalla Tore & Emden, 1931	Visayas: Samar; Mindanao: Agusan del Norte (Butuan)	Dalla Tore et al., 1931; Yap, 2008
28. <i>M. sakaii</i> Yoshitake, 2011	Mindanao: Surigao del Sur	Yoshitake, 2011
29. <i>M. samaranus</i> Heller, 1925	Visayas: Samar	Heller, 1925; Yap, 2008
30. <i>M. samarensis</i> Schultze, 1925	Visayas: Samar (Borongan)	Schultze, 1925; Yap, 2008
31. <i>M. sexmaculatus</i> Schultze, 1917 (= <i>Artapocyrtus sexmaculatus</i>)	Luzon (with no specific locality)	Schultze, 1917; Yap, 2008
32. <i>M. tagabawa</i> Cabras, Medina & Bollino, 2020	Visayas: Antique; Mindanao: Toril (Davao City), Wao (Lanao del Sur)	Bollino et al., 2020
33. <i>M. tandaya</i> Bollino, Sandel & Yoshitake, 2019	Visayas: Northern Samar	Bollino et al., 2019
34. <i>M. villalobosae</i> , new species	Mindanao: Mount Kabunulan, Hamiguitan Range, Surop, Governor Generoso (Davao Oriental)	Present study
35. <i>M. violaceus</i> Schultze, 1919	Mindanao: Siargao Island	Schultze, 1919; Yap, 2008
36. <i>M. willietorresi</i> Cabras & Medina, 2018	Mindanao: Mount Apo, Natural Park	Cabras & Medina, 2018
37. <i>M. yoshitakei</i> Bollino & Sandel, 2018	Luzon: Mindoro Island	Sandel & Bollino, 2018
B. Subgenus <i>Dolichocephalocyrtus</i> Schultze		
38. <i>M. bambalio</i> Heller, 1912	Luzon: Benguet (Irisan River)	Heller, 1912; Yap, 2008
39. <i>M. bituberosus</i> Heller, 1912	Mindanao: Davao (Dolicoan), Mount Kiamo, Malaybalay, Bukidnon	Heller, 1912; Yap, 2008; Cabras et al., 2017
40. <i>M. bituberosus davaoensis</i> Schultze, 1925	Mindanao: Davao	Schultze, 1925; Yap, 2008
41. <i>M. bituberosus samalensis</i> Schultze, 1925	Mindanao: Davao (Samal Island)	Schultze, 1925; Yap, 2008
42. <i>M. chloromaculatus</i> Schultze, 1925	Visayas: Panay Capiz, Jamindan	Schultze, 1925; Yap, 2008
43. <i>M. clemensi</i> Schultze, 1925	Mindanao: Davao (Mt. Apo)	Schultze, 1925; Yap, 2008
44. <i>M. dolosus</i> Heller, 1912	Mindanao: Surigao	Heller, 1912; Yap, 2008
45. <i>M. duyagi</i> Schultze, 1934	Luzon: Rizal (Mt. Irid)	Schultze, 1934; Yap, 2008
46. <i>M. elicanoi</i> Schultze, 1925	Luzon: Batan (Liguan); Visayas: (Albay), Leyte (Butasan)	Schultze, 1925; Yap, 2008
47. <i>M. emarginaticollis</i> Schultze, 1925	Visayas: Samar	Schultze, 1925; Yap, 2008
48. <i>M. figuratus</i> Heller, 1912	Luzon: Catanduanes (Virac)	Heller, 1912; Yap, 2008
49. <i>M. frosti</i> Schultze, 1925	Visayas: Samar (Catarman)	Schultze, 1925; Yap, 2008
50. <i>M. glaberrimus</i> (Chevrolat, 1881) (= <i>Apocyrtus glaberrimus</i>)	Mindanao (with no specific locality)	Chevrolat, 1881; Yap, 2008
51. <i>M. lineaticollis</i> Schultze, 1925	Mindanao: Lanao (Mumungan, Iligan)	Schultze, 1925; Yap, 2008
52. <i>M. mindanaoensis</i> Schultze, 1925	Mindanao: Cotabato (Saob), Zamboanga, Tatayan	Schultze, 1925; Yap, 2008
53. <i>M. negrosensis</i> Schultze, 1925	Visayas: Negros	Schultze, 1925; Yap, 2008

Taxa/classification	Distribution	References
54. <i>M. opulentus</i> (Chevrolat, 1881) (= <i>Apocyrtus opulentus</i>)	Philippines (with no specific locality)	Chevrolat, 1881; Yap, 2008
55. <i>M. pikitensis</i> Schultzze, 1925	Mindanao: Cotabato (Pikit)	Schultzze, 1925; Yap, 2008
56. <i>M. ruficollis</i> (Waterhouse, 1842) (= <i>Apocyrtus ruficollis</i>)	Luzon: Cagayan; Mindanao: Bukidnon (Tangkulan, Lindaban), Marilog (Baganihan), Mount Kiamo (Malaybalay, Bukidnon)	Waterhouse, 1842; Yap, 2008; Mohagan et al., 2020; Cabras et al., 2017
57. <i>M. subdolosus</i> Schultzze, 1925	Mindanao: Agusan del Norte (Butuan, Agusan River)	Schultzze, 1925; Yap, 2008
58. <i>M. ticaoensis</i> Schultzze, 1925	Visayas: Ticao Island	Schultzze, 1925; Yap, 2008
59. <i>M. trifasciatus</i> Schultzze, 1925	Mindanao: Siargao Island	Schultzze, 1925; Yap, 2008
60. <i>M. univerrucosus</i> Schultzze, 1925	Luzon: Polillo Island	Schultzze, 1925; Yap, 2008
61. <i>M. zamboanganus</i> Cabras & Medina, 2020	Mindanao: Zamboanga Peninsula	Cabras et al., 2020
C. Subgenus <i>Metapocyrtus</i> Heller		
62. <i>M. abbrevilineatus</i> Heller, 1912	Luzon: Sorsogon (Sorsogon)	Heller, 1912; Yap, 2008
63. <i>M. adaptatus</i> Schultzze, 1925	Mindanao: Surigao, Mount Kiamo (Malaybalay, Bukidnon)	Schultzze, 1925; Yap, 2008; Cabras et al., 2017
64. <i>M. albodecoratus</i> Heller, 1912	Philippines (with no specific locality)	Heller, 1912; Yap, 2008
65. <i>M. annulatus</i> Schultzze, 1923	Luzon: Benguet (Mt. Pulag)	Schultzze, 1923; Yap, 2008
66. <i>M. atocanus</i> Schultzze, 1922	Luzon: Benguet (Atoc)	Schultzze, 1922; Yap, 2008
67. <i>M. batanensis</i> Schultzze, 1925	Luzon: Batan (Batanes group of islands)	Schultzze, 1925; Yap, 2008
68. <i>M. brevicollis</i> (Chevrolat, 1881) (= <i>Apocyrtus brevicollis</i>)	Luzon: Nueva Ecija (Caraballo Mountains)	Chevrolat, 1881; Yap, 2008
69. <i>M. bucanus</i> Heller, 1912	Mindanao: Bucas Grande Island (Surigao del Norte)	Heller, 1912; Yap, 2008
70. <i>M. bukidnonensis</i> Schultzze, 1925	Mindanao: Bukidnon (Lindaban)	Schultzze, 1925; Yap, 2008
71. <i>M. caeruleomaculatus</i> Schultzze, 1925	Luzon: Nueva Vizcaya (mountains near Santa Fe)	Schultzze, 1925; Yap, 2008
72. <i>M. caeruleomaculatus imuganus</i> Schultzze, 1925	Luzon: Nueva Vizcaya (Imugan)	Schultzze, 1925; Yap, 2008
73. <i>M. camarinensis</i> Schultzze, 1925	Luzon: Camarines Norte (Paracale)	Schultzze, 1925; Yap, 2008
74. <i>M. chlamydatius</i> Schultzze, 1925	Mindanao: Zamboanga (Port Banga)	Schultzze, 1925; Yap, 2008
75. <i>M. chrysogrammus</i> Kuntzen, 1914	Luzon (with no specific locality)	Kuntzen, 1914; Yap, 2008
76. <i>M. congestus</i> Schultzze, 1918	Luzon: Benguet (Baguio), Mt. Santo Tomas	Schultzze, 1918; Yap, 2008
77. <i>M. currani</i> Heller, 1934	Luzon: Benguet (Haight's Place)	Heller, 1934; Yap, 2008
78. <i>M. cylas</i> Heller, 1912	Luzon: Benguet (Pauai, Haight's place)	Heller, 1912; Yap, 2008
79. <i>M. derasus</i> (Boheman, 1845) (= <i>Apocyrtus derasus</i>)	Luzon: Benguet (Baguio, Mt. Data)	Boheman, 1845b; Yap, 2008
80. <i>M. difficilis</i> Heller, 1912	Luzon: Tayabas (Atimonan), Camarines Norte (Paracale)	Heller, 1912; Yap, 2008
81. <i>M. diffusus</i> Schultzze, 1925	Visayas: Samar (Wright)	Schultzze, 1925; Yap, 2008
82. <i>M. elegans</i> (Waterhouse, 1842) (= <i>Apocyrtus elegans</i>)	Luzon: Laguna (Mt. Banahao, Paete, Sta. Maria, Lilio), Rizal (Montalban, Mt. Lumutan), Quezon (Polillo Island— new island record)	Waterhouse, 1842; Yap, 2008

Taxa/classification	Distribution	References
83. <i>M. elegans phenax</i> Heller, 1916	Luzon: Tayabas (Malinao), Polillo Island	Heller, 1916; Yap, 2008
84. <i>M. elongatus</i> Schultze, 1925	Visayas: Negros Occidental (Fabrica, Faraon)	Schultze, 1925; Yap, 2008
85. <i>M. erichsoni</i> (Chevrolat, 1841) (= <i>Apocyrtus erichsoni</i>)	Luzon (with no specific locality); Visayas: Bohol (Sevilla)	Chevrolat, 1841; Yap, 2008
86. <i>M. fraudator</i> Heller, 1929	Luzon: Nueva Vizcaya (Imugan)	Heller, 1929; Yap, 2008
87. <i>M. furcatus</i> Schultze, 1917	Luzon: Benguet (Baguio, Mount Mirador)	Schultze, 1917; Yap, 2008
88. <i>M. gibbirostris</i> (Waterhouse, 1842) (= <i>Apocyrtus gibbirostris</i>)	Visayas: Bohol (Bilar)	Waterhouse, 1842; Yap, 2008
89. <i>M. gregarius</i> Schultze, 1925	Luzon: Laguna (Paete), Bataan (Limay), Rizal (Mt. Lumutan)	Schultze, 1925; Yap, 2008
90. <i>M. imitatus</i> Schultze, 1925	Visayas: Bohol (Bilar)	Schultze, 1925; Yap, 2008
91. <i>M. impius</i> (Erichson, 1834) (= <i>Artapocyrtus impius</i>)	Luzon: Laguna (Mt. Banahao), Bataan (Limay)	Erichson, 1834; Yap, 2008
92. <i>M. interruptolineatus</i> Heller, 1912	Luzon: Benguet (Atoc, Mountain Trail at kilometre 88)	Heller, 1912; Yap, 2008
93. <i>M. interruptostriatus</i> Schultze, 1922	Luzon: Benguet (Mt. Santo Tomas)	Schultze, 1922; Yap, 2008
94. <i>M. interruptus</i> Heller, 1916	Luzon: Benguet (Baguio, Mt. Santo Tomas)	Heller, 1916; Yap, 2008
95. <i>M. irridanus</i> Schultze, 1934	Luzon: Rizal (Mt. Irid)	Schultze, 1934; Yap, 2008
96. <i>M. iridensis</i> Schultze, 1929	Luzon: Rizal (Mt. Irid)	Schultze, 1929; Yap, 2008
97. <i>M. italonus</i> Heller, 1929	Luzon: Nueva Vizcaya (Bayombong)	Heller, 1929; Yap, 2008
98. <i>M. kitangladensis</i> Cabras et al., 2019	Mindanao: Mount Kitanglad Range, Natural Park (Bukidnon), Mt Kiamo (Bukidnon), Marilog District	Cabras et al., 2019
99. <i>M. lepantoensis</i> Schultze, 1925	Luzon [Lepanto (Suyoc, Mankayan), Benguet]	Schultze, 1925; Yap, 2008
100. <i>M. limayensis</i> Schultze, 1925	Luzon: Bataan (mountains near Limay)	Schultze, 1925; Yap, 2008
101. <i>M. lindabonus</i> Schultze, 1922	Mindanao: Bukidnon (Lindaban)	Schultze, 1922; Yap, 2008
102. <i>M. lumutanus</i> Schultze, 1923	Luzon: Rizal (Mt. Lumutan), Manila	Schultze, 1923; Yap, 2008
103. <i>M. luzonensis</i> Schultze, 1925	Luzon: Laguna (Paete); Mindanao (with no specific locality)	Schultze, 1925; Yap, 2008
104. <i>M. macgregori</i> Heller, 1912	Luzon: Calayan (Babuyan Group)	Heller, 1912; Yap, 2008
105. <i>M. mandarinus</i> Heller, 1916	Luzon: Benguet (Baguio, Mt. Santo Tomas)	Heller, 1916; Yap, 2008
106. <i>M. mindorensis</i> Schultze, 1925	Luzon: Mindoro (Mt. Calavite, Mt. Halcon)	Schultze, 1925; Yap, 2008
107. <i>M. monticola</i> Schultze, 1925	Luzon: Rizal (mountains near Montalban)	Schultze, 1925; Yap, 2008
108. <i>M. multisquamosus</i> Schultze, 1919 (= <i>M. (Trachycyrtus) multisquamosus</i>)	Mindanao: Siargao Island (Davao)	Schultze, 1919; Yap, 2008
109. <i>M. niger</i> Schultze, 1925	Luzon: Polillo Island	Schultze, 1925; Yap, 2008
110. <i>M. panayensis</i> Schultze, 1918 (= <i>M. (Trachycyrtus) panayensis</i>)	Visayas: Panay [Capiz (Mt. Macosolon)]	Schultze, 1918; Yap, 2008
111. <i>M. perpulcheroides</i> Schultze, 1923	Luzon: Kalinga (Pinukpuk)	Schultze, 1923; Yap, 2008
112. <i>M. picipennis</i> (Waterhouse, 1842) (= <i>Artapocyrtus picipennis</i>)	Luzon: Cagayan (Pamplona)	Waterhouse, 1842; Yap, 2008
113. <i>M. picticollis</i> (Heller, 1912)	Luzon (with no specific locality)	Heller, 1912; Yap, 2008
114. <i>M. pilositibialis</i> Schultze, 1925	Visayas: Negros Occidental (Mt. Canlaon)	Schultze, 1925; Yap, 2008

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115. <i>M. pilosus</i> Schultze, 1925	Luzon: Nueva Vizcaya (Caraballo Mountains near Balete Pass)	Schultze, 1925; Yap, 2008
116. <i>M. polilloensis</i> Schultze, 1925	Luzon: Polillo Island	Schultze, 1925; Yap, 2008
117. <i>M. politissimus</i> Heller, 1912	Luzon: Benguet (Mt. Pulog)	Heller, 1912; Yap, 2008
118. <i>M. proteus</i> Heller, 1912	Luzon: Nueva Vizcaya (Imugan, Sta. Fe)	Heller, 1912; Yap, 2008
119. <i>M. pseudoelegans</i> Heller, 1921	Luzon: Nueva Vizcaya (Imugan)	Yap, 2008
120. <i>M. pseudomandarinus</i> Heller, 1921	Luzon: Nueva Vizcaya (Imugan)	Heller, 1921; Yap, 2008
121. <i>M. pseudomonilifer</i> Heller, 1912	Luzon (with no specific locality)	Yap, 2008
122. <i>M. puncticollis</i> Heller, 1912	Visayas: Sibuyan, Panay, Negros	Heller, 1912; Yap, 2008
123. <i>M. quadricinctus</i> (Chevrolat, 1881) (= <i>Artapocyrtus quadricinctus</i>)	Philippines (with no specific locality)	Chevrolat, 1881; Yap, 2008
124. <i>M. repandicauda</i> (Heller, 1912)	Luzon: Benguet (Mt. Pulog, Mt. Santo Tomas)	Heller, 1912; Yap, 2008
125. <i>M. reyesi</i> Schultze, 1925	Visayas: Negros Occidental (Fabrica)	Schultze, 1925; Yap, 2008
126. <i>M. rufotibialis</i> Heller, 1921	Luzon: Benguet (Baguio, Mt. Mirador)	Heller, 1921; Yap, 2008
127. <i>M. rugicollis</i> (Chevrolat, 1881) (= <i>Artapocyrtus rugicollis</i>)	Luzon: Tayabas (Atimonan), Laguna (Lilio, Mt. Banahao)	Chevrolat, 1881; Yap, 2008
128. <i>M. scabiosus</i> Heller, 1912	Luzon: Benguet (Pauai, Mt. Pulog, Mt. Pulog loko, Mt. Santo Tomas)	Heller, 1912; Yap, 2008
129. <i>M. schicki</i> Schultze, 1925	Luzon: Nueva Vizcaya (mountains near Sta. Fe)	Schultze, 1925; Yap, 2008
130. <i>M. sibuyanensis</i> Schultze, 1925	Visayas: Sibuyan Island	Schultze, 1925; Yap, 2008
131. <i>M. similis</i> Schultze, 1923	Luzon: Rizal (Mt. Lumutan)	Schultze, 1923; Yap, 2008
132. <i>M. solarii</i> Heller, 1924	Luzon: Ilocos Sur (Rupang, near Cabugao)	Heller, 1924; Yap, 2008
133. <i>M. sphaericollis</i> Schultze, 1925	Luzon: Benguet (Mt. Santo Tomas)	Schultze, 1925; Yap, 2008
134. <i>M. striatus</i> Heller, 1912	Luzon: Batanes, Romblon	Heller, 1912; Yap, 2008
135. <i>M. subdiffusus</i> Schultze, 1925	Visayas: Samar	Schultze, 1925; Yap, 2008
136. <i>M. subfasciatus</i> (Waterhouse, 1842) (= <i>M. (Artapocyrtus) subfasciatus</i>)	Visayas: Leyte (mountains near Cabalian), Samar (Catarman)	Waterhouse, 1842; Yap, 2008
137. <i>M. subfasciatus biliranensis</i> Schultze, 1925	Visayas: Biliran Island	Schultze, 1925; Yap, 2008
138. <i>M. subfasciatus variabilis</i> Schultze, 1925	Visayas: Samar (Wright)	Schultze, 1925; Yap, 2008
139. <i>M. subgregarius</i> Schultze, 1925	Luzon: Polillo Island	Schultze, 1925; Yap, 2008
140. <i>M. subvirgatus</i> Schultze, 1925	Visayas: Panay [Antique (mountains near Culasi)]	Schultze, 1925; Yap, 2008
141. <i>M. subpilosus</i> Schultze, 1934	Luzon: Rizal (Mt. Irid)	Schultze, 1934; Yap, 2008
142. <i>M. sumptuosus</i> Schultze, 1922	Luzon: Ilocos Norte (Mt. Palimlim)	Schultze, 1922; Yap, 2008
143. <i>M. tapulaonus</i> Schultze, 1925	Luzon: Zambales (Mt. Tapulao)	Schultze, 1925; Yap, 2008
144. <i>M. tenuipes</i> Heller, 1912	Luzon (with no specific locality)	Heller, 1912; Yap, 2008
145. <i>M. trispilotus</i> Heller, 1924	Visayas: Samar	Heller, 1924; Yap, 2008
146. <i>M. virgintimaculatus</i> Heller, 1929	Luzon: Nueva Vizcaya (Bayombong)	Heller, 1929; Yap, 2008
147. <i>M. virgatus</i> Heller, 1912	Visayas: Negros Occidental (Mt. Canlaon), Panay [Antique (mountains near Culasi)]	Heller, 1912; Yap, 2008

Taxa/classification	Distribution	References
148. <i>M. visayaensis</i> Schultze, 1925	Visayas: Panay [Capiz (Calivo), Antique (Culasi)]	Schultze, 1925; Yap, 2008
149. <i>M. waltoni</i> (Boheman, 1845) (= <i>Pachyrrhynchus waltoni</i>)	Philippines (with no specific locality)	Boheman, 1845a; Yap, 2008
150. <i>M. whiteheadi</i> Schultze, 1925	Luzon (with no specific locality)	Schultze, 1925; Yap, 2008
151. <i>M. worcesteri</i> Schultze, 1925	Mindanao: Zamboanga	Schultze, 1925; Yap, 2008
D. Subgenus <i>Orthocyrtus</i> Heller		
152. <i>M. aurantiguttatus</i> Yoshitake, 2017	Luzon: Nueva Vizcaya, Cagayan Valley Region	Yoshitake, 2017
153. <i>M. barsevskisi</i> Cabras, Villanueva & Medina, 2021	Mindanao: Bislig, Surigao del Sur	Cabras et al., 2021
154. <i>M. bifoveatus</i> Schultze, 1925	Visayas: Negros Occidental (Fabrica)	Schultze, 1925; Yap, 2008
155. <i>M. boholensis</i> Schultze, 1925	Visayas: Bohol (Bilar), Leyte (Cabalian, Palompon, Biliran)	Schultze, 1925; Yap, 2008
156. <i>M. bulusanus</i> Heller, 1929	Luzon: Sorsogon (Mt. Bulusan)	Heller, 1929; Yap, 2008
157. <i>M. caeruleonotatus</i> (Waterhouse, 1842) (= <i>Artapocyrtus caeruleonotatus</i>)	Mindanao: Surigao (Taganito)	Waterhouse, 1842; Yap, 2008
158. <i>M. caeruleovittatus</i> Yoshitake, 2017	Mindanao: South Cotabato, Mt. Parker, Soccsksargen Region	Yoshitake, 2017
159. <i>M. consobrinus</i> Schultze, 1919	Mindanao: Surigao (Taganito)	Schultze, 1919; Yap, 2008
160. <i>M. davaoensis</i> Cabras, Medina & Bollino, 2021	Mindanao: Calinan (Davao City)	Cabras et al., 2021
161. <i>M. dibagonus</i> Schultze, 1934	Luzon: Nueva Vizcaya (Mt. Dibago, Mt. Alzapan)	Schultze, 1934; Yap, 2008
162. <i>M. discomaculatus</i> Heller, 1929	Luzon (with no specific locality)	Heller, 1929; Yap, 2008
163. <i>M. ginalopezae</i> Cabras & Medina, 2019	Mindanao: Davao de Oro	Cabras & Medina, 2019
164. <i>M. helleri</i> Schultze, 1925	Luzon: Camarines Norte (Paracale)	Schultze, 1925; Yap, 2008
165. <i>M. hirakui</i> Cabras, Medina & Bollino, 2021	Mindanao: Lantapan (Bukidnon)	Cabras et al., 2021
166. <i>M. hopei</i> (Waterhouse, 1842) (= <i>Artapocyrtus hopei</i>)	Philippines (with no specific locality)	Waterhouse, 1842; Yap, 2008
167. <i>M. ilocanus</i> Schultze, 1925	Luzon: Ilocos Norte (Burgos)	Schultze, 1925; Yap, 2008
168. <i>M. infrequens</i> Yoshitake, 2017	Luzon: Nueva Vizcaya, Cagayan Valley Region	Yoshitake, 2017
169. <i>M. insulanus</i> Schultze, 1919	Mindanao: Siargao Island	Schultze, 1919; Yap, 2008
170. <i>M. lanusinus</i> Schultze, 1922	Mindanao: Bukidnon (Lindaban), Bukidnon (Mt. Kiamo, Impasug-ong), Davao City (Marilog)	Schultze, 1922; Yap, 2008; Cabras et al., 2019
171. <i>M. lenis</i> (Chevrolat, 1881) (= <i>Artapocyrtus lenis</i>)	Philippines (with no specific locality)	Chevrolat, 1881; Yap, 2008
172. <i>M. mansaka</i> Cabras, Bollino & Medina, 2018	Mindanao: Davao de Oro, South Cotabato and Agusan del Sur	Cabras et al., 2018
173. <i>M. melanostolus</i> Heller, 1929	Visayas: Samar	Heller, 1929; Yap, 2008
174. <i>M. monstrosus</i> Schultze, 1925	Luzon: Nueva Ecija (Sta. Fe)	Schultze, 1925; Yap, 2008

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175. <i>M. moorei</i> Schultze, 1923	Mindanao: Lanao (Dansalan)	Schultze, 1923; Yap, 2008
176. <i>M. orbiferoides</i> Schultze, 1918	Luzon: Ilocos Norte (Mt. Nagapatan)	Schultze, 1918; Yap, 2008
177. <i>M. ornatus</i> Schultze, 1919	Mindanao: Dinagat Island, Bucas Grande Island	Schultze, 1919; Yap, 2008
178. <i>M. ostentator</i> Heller, 1916	Luzon: Tayabas (Malinao), Laguna (Paete, Lilio)	Heller, 1916; Yap, 2008
179. <i>M. politus</i> Heller, 1912	Luzon: Benguet	Heller, 1912; Yap, 2008
180. <i>M. pretiosus</i> Schultze, 1918 (= <i>Homalocyrtus pretiosus</i>)	Luzon: Ilocos Norte (Mt. Palimlim)	Schultze, 1918; Yap, 2008
181. <i>M. propolitus</i> Schultze, 1923	Luzon: Kalinga (Lubuagan)	Schultze, 1923; Yap, 2008
182. <i>M. quadrulifer</i> (Waterhouse, 1842) (= <i>Artapocyrtus quadrulifer</i>)	Luzon: Laguna (Mt. Banahao, Lilio, Nagcarlan)	Waterhouse, 1842; Yap, 2008
183. <i>M. samarincola</i> Heller, 1929	Visayas: Samar	Heller, 1929; Yap, 2008
184. <i>M. schonherri</i> (Waterhouse, 1842) (= <i>Artapocyrtus schonherri</i>)	Mindanao (with no specific locality)	Waterhouse, 1842; Yap, 2008
185. <i>M. schonherri atratus</i> Schultze, 1923	Mindanao (Bucas Grande Island)	Schultze, 1923; Yap, 2008
186. <i>M. subquadrulifer</i> Waterhouse, 1842	Luzon: Laguna (Mt. Banahao, Mt. Makiling)	Waterhouse, 1842; Yap, 2008
187. <i>M. triangularis</i> Heller, 1912	Luzon: Dalupiri (Babuyan group)	Heller, 1912; Yap, 2008
188. <i>M. trilineatus</i> Heller, 1929	Luzon: Nueva Vizcaya (Bayombong)	Heller, 1929; Yap, 2008
189. <i>M. tumoridorsum</i> (Chevrolat, 1881) (= <i>Artapocyrtus tumoridorsum</i>)	Philippines (with no specific locality)	Chevrolat, 1881; Yap, 2008
190. <i>M. tumorosus</i> Schultze, 1934	Luzon: Rizal (Mt. Irid)	Schultze, 1934; Yap, 2008
191. <i>M. virens</i> Heller, 1912	Luzon (with no specific locality)	Heller, 1912; Yap, 2008
E. Subgenus <i>Sclerocyrtus</i> Heller		
192. <i>M. asper</i> Heller, 1912	Mindanao: Siargao (Surigao)	Heller, 1912; Yap, 2008
193. <i>M. celestinoi</i> Schultze, 1925	Visayas: Samar (Loquilocon, Wright)	Schultze, 1925; Yap, 2008
194. <i>M. chamissoi</i> Schultze, 1925	Visayas: Samar (Loquilocon, Wright); Mindanao: Mount Kiamo, Malaybalay, Bukidnon	Schultze, 1925; Yap, 2008; Cabras et al., 2017
195. <i>M. herrei</i> Schultze, 1934	Visayas: Samar (Burgos)	Schultze, 1934; Yap, 2008
F. Subgenus <i>Sphenomorhoidea</i> Heller		
196. <i>M. aureomaculatus</i> Schultze, 1925	Mindanao: Surigao	Schultze, 1925; Yap, 2008
197. <i>M. casiguranus</i> Schultze, 1934	Luzon: Tayabas (Casiguranus)	Schultze, 1934; Yap, 2008
198. <i>M. dibagonus</i> Schultze, 1934	Luzon: Nueva Vizcaya (Mt. Dibago, Mt. Alzapan)	Schultze, 1934; Yap, 2008
199. <i>M. laevicollis</i> (Waterhouse, 1842) (= <i>Artapocyrtus laevicollis</i>)	Visayas: Samar	Waterhouse, 1842; Yap, 2008
200. <i>M. metallicus</i> (Waterhouse, 1842) (= <i>Artapocyrtus metallicus</i>)	Luzon (with no specific locality); Visayas: Biliran Island, Leyte, Samar; Mindanao: Bukidnon (Tangcolan), Mt. Kiamo (Malaybalay, Bukidnon)	Waterhouse, 1842; Heller, 1912; Schultze, 1925; Yap, 2008
201. <i>M. mimicus</i> Heller, 1912	Philippines (with no specific locality)	Heller, 1912; Yap, 2008
202. <i>M. mumunganus</i> Schultze, 1934	Mindanao: Lanao	Schultze, 1934; Yap, 2008
203. <i>M. prolongatus</i> Schultze, 1934	Luzon: Laguna (Mt. Banahao)	Schultze, 1934; Yap, 2008

Taxa/classification	Distribution	References
204. <i>M. transversarius</i> Schultze, 1925	Mindanao: Bucas Grande, Siargao Island, Mount Kiamo (Malaybalay, Bukidnon)	Schultze, 1925; Yap, 2008; Cabras et al., 2017
205. <i>M. punctatus</i> Heller, 1912	Philippines (with no specific locality)	Heller, 1912; Yap, 2008
G. Subgenus <i>Trachycyrtus</i> Heller		
206. <i>M. acutipennis</i> (Waterhouse, 1843) (= <i>Artapocyrtus acutipennis</i>)	Luzon: Mindoro (Mt. Calavite, subranges of Mt. Halcon, Pinamalayan, Lake Naujan)	Waterhouse, 1843; Yap, 2008
207. <i>M. acutispinosus</i> Schultze, 1925	Visayas: Samar (Wright)	Schultze, 1925; Yap, 2008
208. <i>M. adpersus</i> (Waterhouse, 1843) (= <i>Artapocyrtus adpersus</i>)	Visayas: Bohol (Bilar), Biliran, Samar, Leyte (Palompon); Mindanao: Mount Kiamo, Malaybalay, Bukidnon	Waterhouse, 1843; Yap, 2008; Cabras et al., 2017
209. <i>M. alabatanus</i> Schultze, 1934	Luzon: Tayabas (Alabat Island)	Schultze, 1934; Yap, 2008
210. <i>M. apoensis</i> Schultze, 1925	Mindanao: Davao (Mt. Apo), Marilog [Davao (Mt. Malambo, Baganihan, Marahan)], Mount Agad-Agad (Iligan City), Mount Calayo (Musuan, Bukidnon)	Schultze, 1925; Yap, 2008; Cabras et al., 2016; Mohagan et al., 2018, 2020; Patano et al., 2021
211. <i>M. banahaoensis</i> Schultze, 1925	Luzon: Laguna (Mt. Banahao, Paete)	Schultze, 1925; Yap, 2008
212. <i>M. banahaoensis davanganus</i> Schultze, 1925	Luzon: Kalinga (Davangan)	Schultze, 1925; Yap, 2008
213. <i>M. banguiensis</i> Schultze, 1925	Luzon: Ilocos Norte (Bangui)	Schultze, 1925; Yap, 2008
214. <i>M. bispinosus</i> (Waterhouse, 1843) (= <i>Apocyrtus bispinosus</i>)	Philippines (with no specific locality)	Waterhouse, 1843; Schultze, 1934; Yap, 2008
215. <i>M. breviararmatus</i> Schultze, 1934	Luzon: Catanduanes (Virac)	Schultze, 1934; Yap, 2008
216. <i>M. calavitensis</i> Schultze, 1925	Luzon: Mindoro (Mt. Calavite)	Schultze, 1925; Yap, 2008
217. <i>M. chevrolati</i> (Waterhouse, 1843) (= <i>Artapocyrtus chevrolati</i>)	Luzon: Ilocos Norte (Mt. Palimlim)	Waterhouse, 1843; Yap, 2008
218. <i>M. concinnus</i> (Waterhouse, 1843) (= <i>Artapocyrtus concinnus</i>)	Visayas: Negros Occidental (Nakalang, Fabrica)	Waterhouse, 1843; Yap, 2008
219. <i>M. confusus</i> Schultze, 1925	Visayas: Bohol (Bilar)	Schultze, 1925; Yap, 2008
220. <i>M. corpulentus</i> Schultze, 1934	Visayas: Negros Occidental (Fabrica)	Schultze, 1934; Yap, 2008
221. <i>M. crassispinosus</i> Schultze, 1925	Mindanao: Surigao, Mount Kiamo (Malaybalay, Bukidnon)	Schultze, 1925; Yap, 2008; Cabras et al., 2017
222. <i>M. cuneiformis</i> (Waterhouse, 1842) (= <i>Artapocyrtus cuneiformis</i>)	Philippines (with no specific locality)	Waterhouse, 1842; Yap, 2008
223. <i>M. germari</i> (Waterhouse, 1843) (= <i>Artapocyrtus germari</i>)	Luzon: Ilocos Norte (Bangui, Piddig)	Waterhouse, 1843; Yap, 2008
224. <i>M. hедераepphilus</i> Yoshitake, 2012	Philippines (with no specific locality)	Yoshitake, 2012
225. <i>M. gibbicollis</i> Faust, 1895	Luzon: Benguet (Baguio, Mt. Santo Tomas), Nueva Vizcaya (near Balete rest house)	Faust, 1895; Yap, 2008
226. <i>M. immeritus</i> (Boheman, 1845) (= <i>Artapocyrtus immeritus</i>)	Luzon: Dalupiri (Babuyan Group)	Boheman, 1845b; Yap, 2008
227. <i>M. joloensis</i> Schultze, 1925	Mindanao: Jolo (Mt. Dajo)	Schultze, 1925; Yap, 2008
228. <i>M. lagunaensis</i> Schultze, 1925	Luzon: Laguna (Paete)	Schultze, 1925; Yap, 2008
229. <i>M. macrospinosus</i> Schultze, 1925	Luzon: Camarines Norte (Paracale)	Schultze, 1925; Yap, 2008
230. <i>M. magnigibbicollis</i> Schultze, 1925	Visayas: Negros Oriental (Cuernos Mountains)	Schultze, 1925; Yap, 2008
231. <i>M. microspinosus</i> Schultze, 1925	Mindanao: Bucas Grande Island	Schultze, 1925; Yap, 2008

Taxa/classification	Distribution	References
232. <i>M. miser</i> (Faust, 1895) (= <i>Artapocyrtus miser</i>)	Luzon: Benguet (Baguio, Trinidad), Palali	Faust, 1895; Yap, 2008
233. <i>M. multimaculatus</i> Schultze, 1934	Luzon: Isabela (Mt. Moises)	Schultze, 1934; Yap, 2008
234. <i>M. nanus</i> (Boheman, 1845) (= <i>Artapocyrtus nanus</i>)	Visayas: Negros Occidental (Maa, Fabrica, Cuernos Mountains)	Boheman, 1845a; Yap, 2008
235. <i>Metapocyrtus nautilus</i> Genka & Yoshitake, 2014	Mindanao: Davao, Polomolok South Cotabato	Genka & Yoshitake, 2014, 2018
236. <i>M. palawanensis</i> Schultze, 1925	Luzon: Palawan (Iwahig, Bacuit, Taytay)	Schultze, 1925; Yap, 2008
237. <i>M. palawanensis acutituberculatus</i> Schultze, 1925	Luzon: Busuanga Island (Concepcion)	Schultze, 1925; Yap, 2008
238. <i>M. palawanensis mangyanus</i> Schultze, 1925	Luzon: Mindoro (Mt. Calavite)	Schultze, 1925; Yap, 2008
239. <i>M. perarmatus</i> Schultze, 1934	Visayas: Leyte (Panaon Island)	Schultze, 1934; Yap, 2008
240. <i>Metapocyrtus pinya</i> Genka & Yoshitake, 2018	Mindanao: Davao	Genka & Yoshitake, 2018
241. <i>M. profanus</i> Erichson, 1839 (= <i>Artapocyrtus profanus</i>)	Luzon: Laguna (Los Baños, Paete), Pampanga (Mt. Arayat)	Erichson, 1839; Yap, 2008
242. <i>M. pseudoviridans</i> Schultze, 1925	Luzon: Rizal (Mt. Lumutan)	Schultze, 1925; Yap, 2008
243. <i>M. pulverulentus</i> (Waterhouse, 1843) (= <i>Artapocyrtus pulverulentus</i>)	Luzon: Tayabas (Laguimanoc)	Waterhouse, 1843; Yap, 2008
244. <i>M. rostrigibbosus</i> Schultze, 1925	Luzon: Tayabas (Gumaca)	Schultze, 1925; Yap, 2008
245. <i>M. saptangaensis</i> Schultze, 1925	Luzon: Saptang & Batan Island (Batanes group of islands)	Schultze, 1925; Yap, 2008
246. <i>M. sibayensis</i> Schultze, 1925	Visayas: Sibay Island, in the Semirara group, between Mindoro and Panay (Mt. Sibay)	Schultze, 1925; Yap, 2008
247. <i>M. smaragdinus</i> Schultze, 1925	Luzon: Nueva Vizcaya (near Balete Pass)	Schultze, 1925; Yap, 2008
248. <i>M. socius</i> Schultze, 1925	Visayas: Negros Occidental (Fabrica)	Schultze, 1925; Yap, 2008
249. <i>M. socius calivoensis</i> Schultze, 1925	Visayas: Panay [Capiz (Calivo)]	Schultze, 1925; Yap, 2008
250. <i>M. sparsus</i> (Faust) 1895 (= <i>Artapocyrtus sparsus</i>)	Luzon: Benguet (Baguio, Mt. Santo Tomas)	Faust, 1895; Yap, 2008
251. <i>M. spinipennis</i> Schultze, 1925	Visayas: Biliran Island	Schultze, 1925; Yap, 2008
252. <i>M. spinipes</i> (Chevrolat, 1881) (= <i>Artapocyrtus spinipes</i>)	Luzon: Rizal (Montalban Gorge)	Chevrolat, 1881; Yap, 2008
253. <i>M. tawiensis</i> Schultze, 1925	Mindanao: Tawitawi, Jolo (Mt. Dajo), Sulu Island (Banaran, Bilatan)	Schultze, 1925; Yap, 2008
254. <i>M. turgidofemoralis</i> Schultze, 1925	Luzon: Laguna (Mt. Banahao)	Schultze, 1925; Yap, 2008
255. <i>M. vestitus</i> Schultze, 1925	Visayas: Sibuyan Island (Romblon)	Schultze, 1925; Yap, 2008
256. <i>M. viridans</i> Schultze, 1925	Luzon: Rizal (Mt. Lumutan)	Schultze, 1925; Yap, 2008
257. <i>M. viridulus</i> (Chevrolat, 1881) (= <i>Artapocyrtus viridulus</i>)	Philippines (with no specific locality)	Chevrolat, 1881; Yap, 2008
258. <i>M. zambalensis</i> Schultze, 1925	Luzon: Zambales (Mt. Tapulao)	Schultze, 1925; Yap, 2008

Table 2. Known host plants of *Metapocyrtus* species in the Philippines.

Family	Species	Ecological notes
Actinidiaceae	<i>Saurauia</i> spp.	Present in secondary forest
Anacardiaceae	<i>Mangifera</i> sp.	Present in secondary forest
Araceae	<i>Alocasia heterophylla</i> (C.Presl) Merr	Present in secondary forest
	<i>A. macrorrhizos</i> (L.) G.Don	Present in agricultural area
	<i>A. zebrina</i> Schott ex van Houtte	Present in secondary forest
	<i>Rhaphidophora</i> sp.	Present in secondary forest
Araliaceae	<i>Schefflera</i> sp.	Present in secondary forest
Arecaceae	<i>Pinanga insignis</i> Becc.	Present in secondary forest
Asteraceae	<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob.	Present in agricultural area, shrubland, and secondary forest
Athyriaceae	<i>Diplazium</i> spp.	Present in secondary forest
Balsaminaceae	<i>Impatiens balsamina</i> Elm.	Present in secondary forest
	<i>I. platypetala</i> Lindl.	Present in secondary forest
Begoniaceae	<i>Begonia</i> sp.	Present in secondary forest
Cannabaceae	<i>Celtis luzonica</i> Warb.	Present in secondary forest
Chloranthaceae	<i>Ascarina philippinensis</i> C.B.Rob.	Present in secondary forest
Costaceae	<i>Helenia speciosa</i> (J.Koenig) Govaerts	Present in secondary forest
Cyatheaceae	<i>Cyathea</i> spp.	Present in secondary forest
Dennstaedtiaceae	<i>Pteridium aquilinum</i> (L.) Kuhn	Present in secondary forest
Dipterocarpaceae	<i>Shorea contorta</i> S.Vidal	Present in secondary forest
	<i>Parashorea malaanonan</i> (Blanco) Merr.	Present in secondary forest
Escalloniaceae	<i>Polyosma philippinensis</i> Merr.	Present in secondary forest
Euphorbiaceae	<i>Macaranga bicolor</i> Muell.-Arg.	Present in secondary forest
	<i>Homalanthus rotundifolius</i> Merr.	Present in secondary forest
	<i>Manihot esculenta</i> Crantz	Present in agricultural area
	<i>Trigonostemon acuminatus</i> Merr.	Present in secondary forest
Gentianaceae	<i>Fagraea auriculata</i> Jack	Present in secondary forest
Gleicheniaceae	<i>Dicranopteris linearis</i> (Burm.f.) Underw.	Present in secondary forest
Marattiaceae	<i>Angiopteris evecta</i> (G.Forst.) Hoffm.	Present in secondary forest
	<i>Angiopteris</i> spp.	Present in secondary forest
Melastomataceae	<i>Astrocalyx calycina</i> (S.Vidal) Merr.	Present in secondary forest
	<i>Medinilla</i> sp.	Present in secondary forest
	<i>Melastoma malabathricum</i> L.	Present in secondary forest
Moraceae	<i>Ficus ruficaulis</i> Merr.	Present in secondary forest
Nephrolepidaceae	<i>Nephrolepis biserrata</i> (Sw.) Schott	Present in secondary forest
Olacaceae	<i>Strombosia philippinensis</i> (Baill.) Rolfe	Present in secondary forest
Piperaceae	<i>Piper aduncum</i> L.	Present in secondary forest
Rosaceae	<i>Rubus fraxinifolius</i> Poir.	Present in secondary forest
	<i>Rubus</i> sp.	Present in secondary forest

Family	Species	Ecological notes
Rutaceae	<i>Citrofortunella microcarpa</i> (Bunge) Wijnands	Present in agricultural area
	<i>Citrus</i> spp.	Present in agricultural area
	<i>Melicope monophylla</i> Merr.	Present in secondary forest
Solanaceae	<i>Solanum</i> sp.	Present in secondary forest
Thelypteridaceae	<i>Christella</i> spp.	Present in secondary forest
Urticaceae	<i>Pipturus arborescens</i> (Link.) C.B. Rob.	Present in secondary forest
Verbenaceae	<i>Lantana camara</i> L.	Present in agricultural area, shrubland, secondary forest
Zingiberaceae	<i>Etlingeria</i> spp.	Present in secondary forest

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