

A New Genus and New Species of the Tribe Pachyrhynchini (Coleoptera, Curculionidae, Entiminae) from the Philippines

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Abstract A new genus, *Enoplocyrtus* gen. nov., is established in the tribe Pachyrhynchini (Curculionidae, Entiminae) for *E. marusan* sp. nov. from Mountain Province, northern Luzon, the Philippines.

Introduction

Presently, the tribe Pachyrhynchini (Curculionidae, Entiminae) comprises 15 genera mainly from the Philippines, but the classification of the tribe is rather confused with several ill-defined genera and subgenera, as well as with not a few undescribed species which do not fit into the current classification system (YOSHITAKE, 2013).

During my ongoing revision of the higher classification of the Pachyrhynchini, I found a short series of specimens which belong to a peculiar species occurring in northern Luzon, the Philippines. It was quite apparent that the species is a member of the Pachyrhynchini in having the diagnostic characteristics mentioned by MORIMOTO *et al.* (2006), but it did not fit into any currently recognized genera within the tribe.

After careful examination, I concluded that the species in question is new to science and should be placed in a new genus. The purpose of this paper is to describe the new species and establish a new genus for it.

Material and Methods

This study was based on specimens preserved in the Munetoshi MARUYAMA Collection at the Kyushu University Museum, Fukuoka (MCKUM), Institute for Agro-Environmental Sciences, NARO, Tsukuba (NIAES), and Senckenberg Naturhistorische Sammlungen, Museum für Tierkunde, Dresden (SMTD). In addition, concerned specimens in the private collections of Enrico RUZZIER, Mirano, Italy (ERPC) and Franco SANDEL, Miane, Italy (CFS) were examined by Enrico RUZZIER on behalf of myself. The methods used in this study were the same as those explained in YOSHITAKE (2017 a, b). The holotype of the new species is preserved in NIAES.

Taxonomy

Enoplocyrtus gen. nov.

Type species: *Enoplocyrtus marusan* sp. nov.

Diagnosis. *Enoplocyrtus* is similar to the genus *Macrocyrtus* HELLER, 1912 in having the simple rostrum lacking basal transverse groove, dorsal depression and apical bulge (Figs. 3 & 4), as well as the non-carinate antennal scrobes on upper margins (Fig. 3) (HELLER, 1912; SCHULTZE, 1923). Howev-

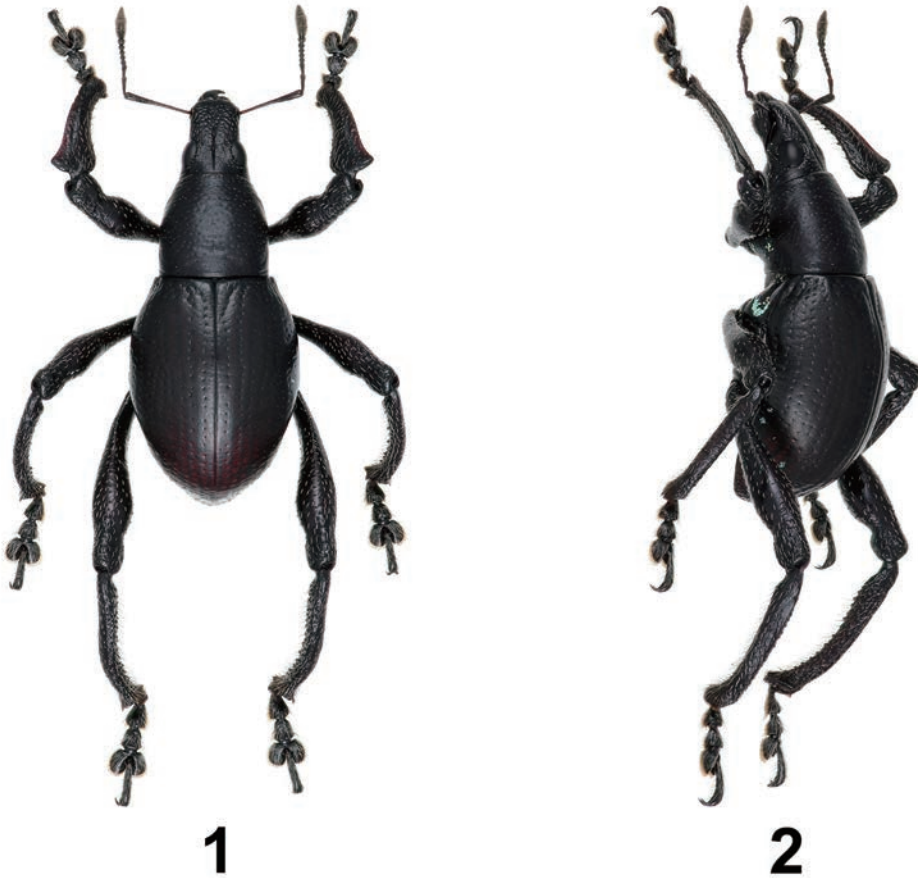
er, *Enoplocyrtus* can be easily distinguished from *Macrocyrtus* mainly by the fore tibiae, which are wide, flattened, and keeled along external margins (Fig. 8). Also, in *Enoplocyrtus* the upper margin of antennal scrobe on each side of the rostrum is interrupted by subtriangular depression (Fig. 3) and the hind tibiae are at most granulate along internal margins (Fig. 8), whereas in *Macrocyrtus* the antennal scrobe is complete and the hind tibiae are sparsely denticulate along internal margins. Moreover, *Enoplocyrtus* is characterized also by the chaetotaxy of mandibles and prementum (Figs. 5 & 6).

Description. Body relatively small. Forehead wider than eye width, mostly flat but slightly convex along inner margin of each eye, with fine groove along midline. Eyes moderately prominent from outline of head. Rostrum as long as or nearly as long as wide, weakly curved ventrally; dorsal surface without transverse groove at base, with fine longitudinal groove on middle, which becomes obscure apically, flattish, not bulging apically (Fig. 3), with sides subparallel, not constricted in basal part; dorsolateral edges rounded, obscure; dorsal contour of forehead and rostrum more or less continuous (Fig. 3); sides subparallel or barely widened apically; lateral surface lacking longitudinal depression between eye and upper margin of antennal scrobe; upper margins of antennal scrobes smooth, not carinate, each of which is interrupted by subtriangular depression (Fig. 3); ventral surface with a pair of oblique grooves on median part, simple on sides, not sulcate; grooves approximated basally; interstice between grooves flattened; lower margins of antennal scrobes gradually approximated basally, but well-separated in entire length on ventral surface. Each mandible (Fig. 5) with five to six lateral setae, in addition to some short fine hairs. Postmentum weakly declined apically toward prementum. Prementum (Fig. 6) shallowly subsided into oral cavity, widely concave in middle, bearing a pair of setae on each side of apical half, with apical declivity; one of the paired setae long and another short. Antennae (Fig. 7) with scape slender, reaching hind margin of eye, longer than funicle; club relatively long. Prothorax with basal margin wider than apical margin; subbasal constriction weak, becoming thinner dorsally, but entirely distinct (Fig. 3); subapical constriction weak, dorsally becoming weaker (Fig. 3); pronotum even, weakly punctured; dorsal contour flattish (Fig. 3). Elytra more or less obovoidal, dorsally moderately convex (Fig. 3), more or less striate-punctured, simple laterally, not depressed above hind coxae; basal margin subtruncate, more than half as wide as elytra, simple, not prominent dorsally; intervals flat and smooth or irregularly convex and uneven; striae sometimes distorted; apical declivity gradual, uniform, lacking projection; internal margins of apices simple, not fringed with dense golden hairs. Legs as illustrated (Figs. 8 & 9). Procoxae narrowly separated. Mesocoxae widely separated. Hind femora simple, not concave basally on internal surfaces. Tibiae mucronate apically at least on fore and mid legs; fore tibiae wide and flattened, keeled along external margins; hind tibiae at most granulate on internal margins, not denticulate (Fig. 8). Tarsal segment II simple, not sharply projected at apical corners (Fig. 9). Metepisternal suture indistinct (Fig. 3). Under-side of thorax and abdomen as illustrated (Fig. 10). Intercostal portion of prosternum strongly convex in basal half and gradually declined apically in apical half. Apical margin of prosternum gently emarginate, not angulate. Mesosternal process flat, as high as intercostal portion of metasternum. Metasternum moderate in length on disc, clearly longer than mesosternal process; intercostal portion weakly convex along basal margin. Ventrites I and II simple, not bulging laterally, divided by suture which becomes indistinct on disc. Ventrites III and IV normal, well-separated, and unarmed in both sexes. Ventrite V round to subtruncate at apex.

Distribution. Philippines (Luzon).

Etymology. The generic name, which is masculine in gender, is a combination of the Greek words *enoplos* meaning 'armed' and *cyrtos* meaning 'curved', for the unique tibiae and its similarity to *Macrocyrtus*.

Notes. In addition to the type species described below, a distinct undescribed species of this new



Figs. 1–2. *Enoplocyrtus marusan* gen. et sp. nov., holotype male (NIAES). — 1, Dorsal habitus; 2, dorsolateral habitus.

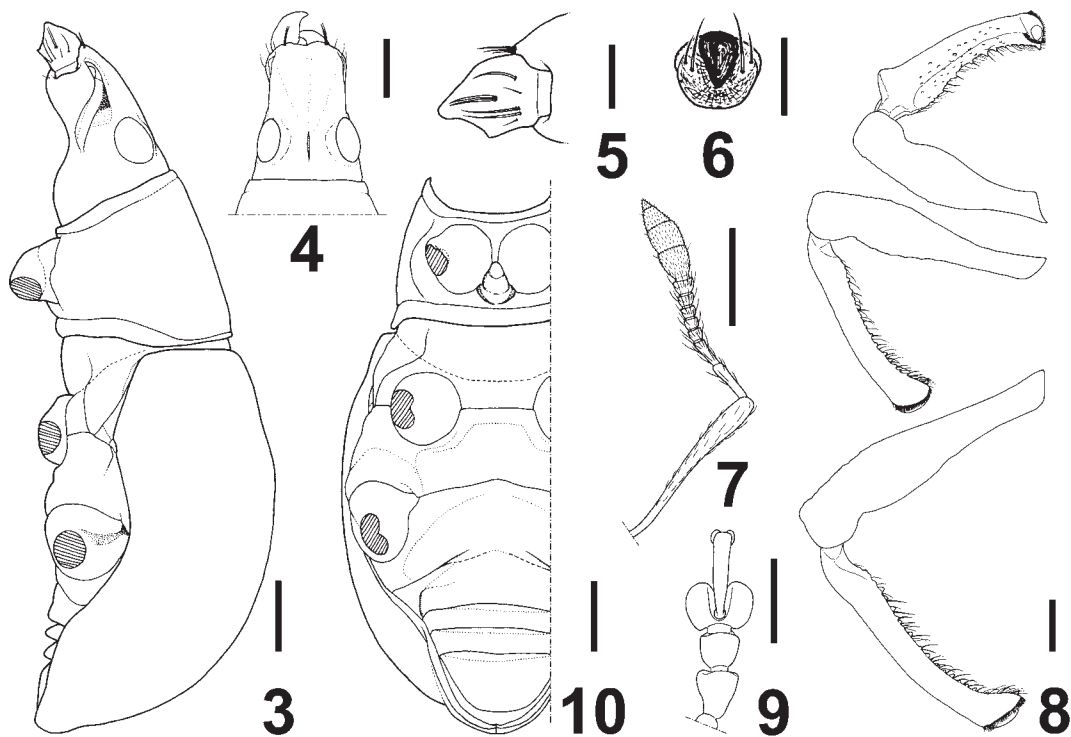
genus is present in Mt. Data, Mountain Province, northern Luzon. It is unique in having the brownish body and uneven elytra with irregularly convex intervals. The generic description was completed by taking morphological features of the species into consideration, but I chose to leave it undescribed this time since only a few female specimens are available for me.

Enoplocyrtus marusan sp. nov.

(Figs. 1–14)

Diagnosis. This new species is characterized mainly by the entirely black body, flat and smooth elytral intervals, uniform and distinct elytral striae, and male fore tibiae basally with external angulation.

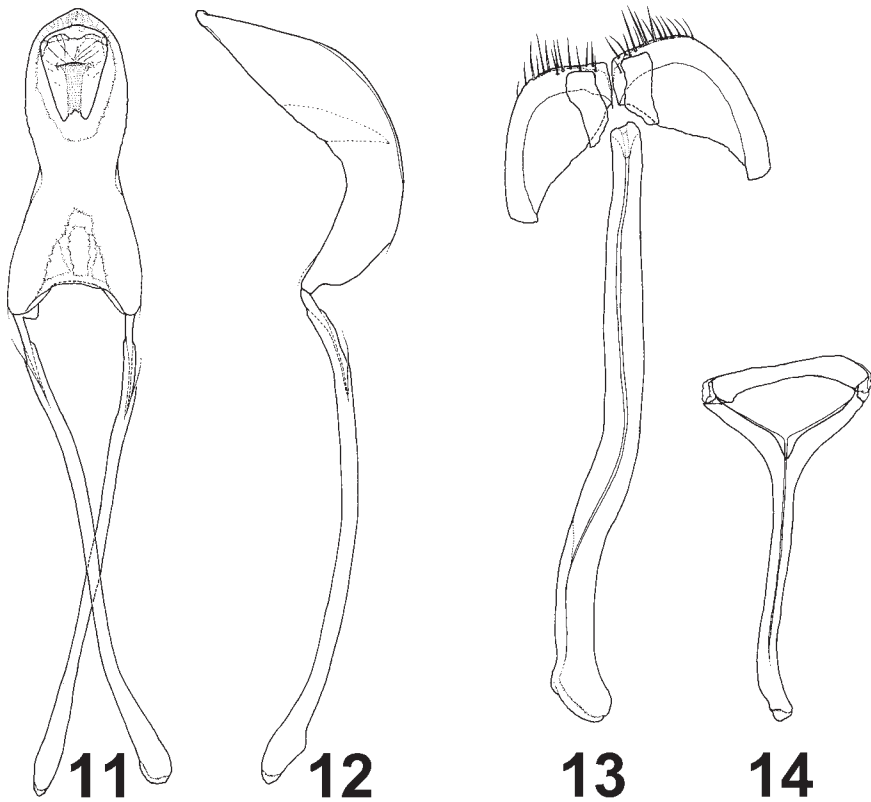
Description. Male. Dimensions (in mm): LB: 8.80–9.10 (holotype 9.10; mean 8.92). LR: 1.25–1.35 (holotype 1.35; mean 1.30). WR: 1.25–1.32 (holotype 1.30; mean 1.29). LP: 2.70–2.90 (holotype 2.85; mean 2.82). WP: 2.90–2.95 (holotype 2.90; mean 2.92). LE: 6.50–6.70 (holotype 6.70; mean 6.60). WE: 6.50–6.70 (holotype 6.70; mean 6.60). N = 3 for all measurements. Dorsal and dorsolateral habitus as shown in Figs. 1 & 2. Integument black, except antennae slightly paler. Body sur-



Figs. 3–10. Diagnostic characteristics of *Enoplocyrtus* gen. nov. (*E. marusan* gen. et sp. nov., paratype, male). — 3, Body excluding appendages except coxae, in lateral view; 4, head in dorsal view; 5, left mandible and apex of rostrum, in lateral view; 6, prementum in ventral view; 7, right antenna in dorsal view; 8, right legs excluding tarsi, in ventral view; 9, right fore tarsus in dorsal view; 10, underside excluding head, in ventral view. Scale bars: 1.00 mm for 3–4 & 7–10; 0.50 mm for 5 & 6.

face mostly weakly shiny except femora and venter with stronger luster.

Body mostly sparsely clothed with light-colored hairs, with markings of glossy pale blue to pale green, ovate to lanceolate scales. Forehead clothed with fine short hairs. Rostrum dorsally clothed with fine short hairs; each side rather densely clothed with fine short hairs and glossy pale blue hair-like scales on lateroventral part behind antennal scrobe, furnished with long hairs near apex. Prothorax mostly minutely pubescent, with obscure longitudinal scaly stripe on lateroventral part of each side; stripe composed mainly of general scales but in part of sparse hairs and hair-like scales. Each elytron mostly very minutely pubescent; pubescence becoming larger near apex; lateral part with scattered very small irregular spots of general scales. Legs mostly covered with fine short hairs. Coxae thinly covered with hairs, sparsely mingled with pale blue to pale green hair-like and/or round scales. Femora moderately covered with hairs. Tibiae moderately clothed with hairs, which become denser and darker apically; each tibia fringed with denser and longer hairs along internal margin, mingled with dark setae. Mesepisterna each with two scaly markings of general scales: small obscure patch on basal part and larger, lunate patch on apical part. Underside mostly thinly covered with fine short hairs. Prosternum with small spot of general scales on each side of subapical part; subapical spots composed in part of hairs and hair-like scales. Intercostal part of mesosternum mingled with pale blue to pale green hair-like scales; hairs becoming finer and shorter medially. Metasternum subglabrous on



Figs. 11–14. Male genitalia of *Enoplocyrtus marusan* gen. et sp. nov., holotype male. — 11, Aedeagus in dorsal view; 12, ditto in lateral view; 13, sternites VIII and IX in dorsal view; 14, tegmen in dorsal view. Scale bar: 1.00 mm.

disc; sides mingled with pale blue to pale green, ovate to lanceolate scales. Hind coxal cavity each with anterior margin which is fringed with row of glossy pale blue to pale green scales; scales in row varying in shape, aciculate to subtrapezoidal. Ventrite I with vestiture as that on metasternum. Ventrite II subglabrous except sides of disc thinly covered with hairs. Ventrites III and IV each furnished with hairs arranged in row. Ventrite V more densely covered with hairs.

Head subopaque, sparsely finely punctured; forehead nearly twice as wide as eye width; eyes moderate in size, moderately prominent from lateral contour of head. Antennae slender, with scape sinuate, fine, 8.60 times as long as wide, slightly longer than funicle, moderately clavate; funicular segment I 3.90 times as long as wide, 1.67 times as long as II; segment II 2.50 times as long as wide, 2.14 times as long as III; segments III–V subequal in length and width, nearly as long as wide, barely shorter and narrower than VI; segment VI nearly as long as wide, slightly shorter and narrower than VII; segment VII nearly as long as wide; club lanceolate, nearly 3.00 times as long as wide, slightly longer than funicular segments V to VII combined. Rostrum nearly as long as wide, LR/WR 0.98–1.04 (holotype 1.04); dorsum subopaque, weakly rugose, moderately somewhat coarsely punctured; median groove well-marked on basal half, but vestigial on apical half; dorsal contour of forehead and rostrum subcontinuous; dorsal contour of rostrum flattened in basal 2/3, and then gently declined to

apex; sides barely widened apically. Prothorax subhexagonal, subopaque, nearly as long as wide, WP/LP 1.02–1.07 (holotype 1.02); dorsum moderately shallowly punctured, flattened dorsally; dorsal contour highest before base; sides gradually narrowed from widest point at base to subbasal constriction, subparallel to apical 1/3, and then gradually convergent apicad; basal and apical margins subtruncate; subbasal groove becoming finer but distinct dorsally; subapical groove becoming indistinct dorsally. Elytra subobovoidal, LE/WE 1.47–1.50 (holotype 1.47), wider than prothorax, WE/WP 1.49–1.57 (holotype 1.57), more than twice as long as prothorax, LE/LP 2.24–2.44 (holotype 2.35); striae well-marked, composed of small but distinct punctures; intervals flat and smooth; dorsal contour highest at basal 1/4; sides gradually dilated from base, widest before middle, then more strongly narrowed to strong subapical constrictions, and finally arcuately convergent to round apices; apical part behind subapical constrictions relatively long. Legs slender except fore pair stout. Femora moderately clavate; mid and hind femora finely sparsely granulate along posterior margins. Tibiae mucronate apically on all legs. Fore tibiae coarsely serrate along internal margins, finely granulate on ventral surface; internal margin of each tibia widely roundly produced in basal part, and then rather strongly incurved toward apices; external margins strongly angulate basally. Mid and hind tibiae densely granulate ventrally; internal margin of each tibia slightly produced basally and then rather strongly incurved toward apex. Metasternum and ventrite I rather deeply conjointly depressed on disc; depression very wide. Venter with sparse small punctures; ventrite II widely flattened on disc except apical marginal part; ventrite V more densely punctured, flat, devoid of depression, widely rounded at apex. Genitalia as illustrated (Figs. 11–14).

F e m a l e. Unknown.

Type material. Holotype male (NIAES), “Philippines: N. Luzon, / Barlig, Mt. Province. / JANUARY, 2015. / Local Collector” (typed on a white card), “[HOLOTYPE] Male / *Enoplocyrtus marusan* / YOSHITAKE, 2017 / Det. Hiraku YOSHITAKE, 2017” (typed on a red card). Paratypes (4 exs.). Same locality as the holotype: 1 male, XII.2012, local collector (ERPC); 1 male, VII.2014, local collector (ERPC); 1 male, X.2014, local collector (CFS); 1 male, I.2015, local collector (MCKUM). 1 male, Mt. Polis, Mountain Province, IV.2014, local collector (MCKUM).

Distribution. Philippines (Luzon).

Etymology. Named after Dr. Munetoshi MARUYAMA, a keen Japanese entomologist who loves Pachyrhynchini jewel weevils deeply, for our long-lasting friendship. I call him as ‘Maru-san’.

Acknowledgments

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要 約

吉武 啓：フィリピン産カタゾウムシ族(鞘翅目ゾウムシ科クチブトゾウムシ亜科)の1新属新種。———カタゾウムシ族 Pachyrhynchini には、カタゾウムシ属 *Pachyrhynchus* GERMAR をはじめ現在 15

属が認められているが、本族の高次分類体系は未だ確立されていないため、既存の体系に適合しない未記載種が少なからず存在する。本論文では、新属カマアシカタゾウムシ属 *Enoplocyrtus* gen. nov. をルソン島北部マウンテン州産の1新種 *E. marusan* sp. nov. を模式種とする単型属として設立した。実際には、ルソン島北部に本新属の顕著な1未記載種が存在するが、少数の♀標本のみしか検することができなかったため、今回はその命名・記載を保留した。

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