

To the knowledge of the genus *Apocyrtus* Erichson, 1834 (Coleoptera: Curculionidae: Pachyrhynchini) with description of new species from Luzon Island, Philippines

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One new species of the genus *Apocyrtus* Erichson, 1834 of the tribe Pachyrhynchini is described from Luzon Island, Philippines: *Apocyrtus auroraensis* sp. nov. Description, photos of habitus, as well as male genitalia are included. Additionally members of the genus *Apocyrtus* are listed, new distribution records are reported, illustrative material for all known species of the genus is provided.

Key words: Pachyrhynchini, *Apocyrtus*, taxonomy, new species, fauna, Luzon, Philippines.

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INTRODUCTION

The genus *Apocyrtus* Erichson, 1834 (Type species *Apocyrtus inflatus* Erichson, 1834) is one of the 17 genus within the tribe Pachyrhynchini. Genus currently contains three species, two from Luzon Island: *A. inflatus* Erichson, 1834 (Laguna, Rizal), *A. mcgregori* Schultze, 1924 (Bataan) and one from Negros Island: *A. chapmani* Schultze, 1934.

During revision of the tribe Pachyrhynchini, I revised members of the current genus and concluded, that DUBC material contains one species, that strongly differs from the others. This new species is described herein.

MATERIAL AND METHODS

The study was based on specimens deposited at the Daugavpils University Beetle Collection (Daugavpils, Latvia) - DUBC, and Dresden Museum of Zoology Coleoptera Collection (Dresden, Germany) - MTD.

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

Label data are cited *verbatim*, where / = different lines.

Measurement system follows the one used in Rukmane & Barševskis, 2016.

Number of specimens examined is written in brackets after citation of the label.

RESULTS

Genus *Apocyrthus* Erichson, 1834

Type species: *Apocyrthus inflatus* Erichson.

“Rostrum dorsally slightly convex, separated at base from front by a deep and straight transverse groove. Eyes rather strongly bulging. Antenna reaching beyond hind margin of eye. Prothorax subglobular, anterior margin ventrally emarginate, at posterior margin strongly constricted. Scutellum absent. Elytra subglobularly inflated. First and second abdominal sternites in both sexes connate, the last three well segmented in the male; in the female, the third and fourth sternites suberect, more or less lamelliorm, the fifth rather strongly depressed. Hind femora in the male reaching well beyond apex of elytra, in the female only in line with the latter.” (Schultze, 1924).

Apocyrthus inflatus Erichson, 1934

(Fig. 1A - B; Fig. 5A)

Distribution: Previously known from Laguna province, Rizal province and Pollilo Island (Schultze, 1924). For the first time cited here from Isabela and Quirino provinces in Northern part to Aurora, Nueva Vizcaya in Central part to Bataan, Tanay, Laguna in Southern part of the Luzon Island, and from Marinduque Island.

Material examined: Philippines / Luzon, Aurora, Dingalan / VIII. 2013 / local collector leg. (1 male) // X. 2015 (2 females) // XI. 2015 (4 males, 3 females) // II. 2016 (2 males, 1 female) // IV. 2016 (2

males, 2 females) // V. 2016 (1 female) // VII. 2016 (1 male) // Philippines / Luzon, Labuyo / VIII. 2013 / local collector leg. (1 female) // II. 2014 (1 male) // III. 2014 (1 male) // V. 2015 (1 male) // Philippines / Luzon, Rizal, Rodriguez / I. 2018 / local collector leg. (1 male) // Philippines / Luzon, Laguna / VI. 2014 / local collector leg. (1 male) // Philippines / Marinduque, Buenavista / X. 2015 / local collector leg. (1 male) // Philippines / Luzon, Disimungal, Maddela / IX. 2015 / local collector leg. (1 male) // V. 2016 (2 males) // Philippines / Pollilo, Bordeus / X. 2018 / local collector leg. (1 female) // Philippines / Luzon, Nueva Vizcaya, Malico / VII. 2014 / local collector leg. (1 female) // Philippines / Luzon, Tanay, Rizal / IV. 2016 / local collector leg. (1 female) // Philippines / Luzon, Isabela, Sierra Madre / V. 2014 / local collector leg. (3 males, 6 females). Total: 41 ex. (21 male, 20 females).

Remarks: Comparison of material originating from three different islands, showed no significant differences in external morphology and in male and female genitalia structure (Fig. 5A). between material .

Apocyrthus mcgregori Schultze, 1924

Type locality: Luzon Island, Bataan Province, Lamao. Type in MTD, examined.

Distribution: Southern part of Luzon Island. Species so far is reported only from Bataan Province, with no new distribution records.

Apocyrthus chapmani Schultze, 1934

(Fig. 2A - B; Fig. 3A - B; Fig. 5B)

Type locality: Negros, Oriental Negros, Cuernos Mountains. Type in MTD, examined.

Distribution: New data on species distribution revealed, that species is present both on Southern (Cuernos Mountains, Dumaguete) and Northern (Canlaon Mountain, Don Salvador) part of Negros Island.

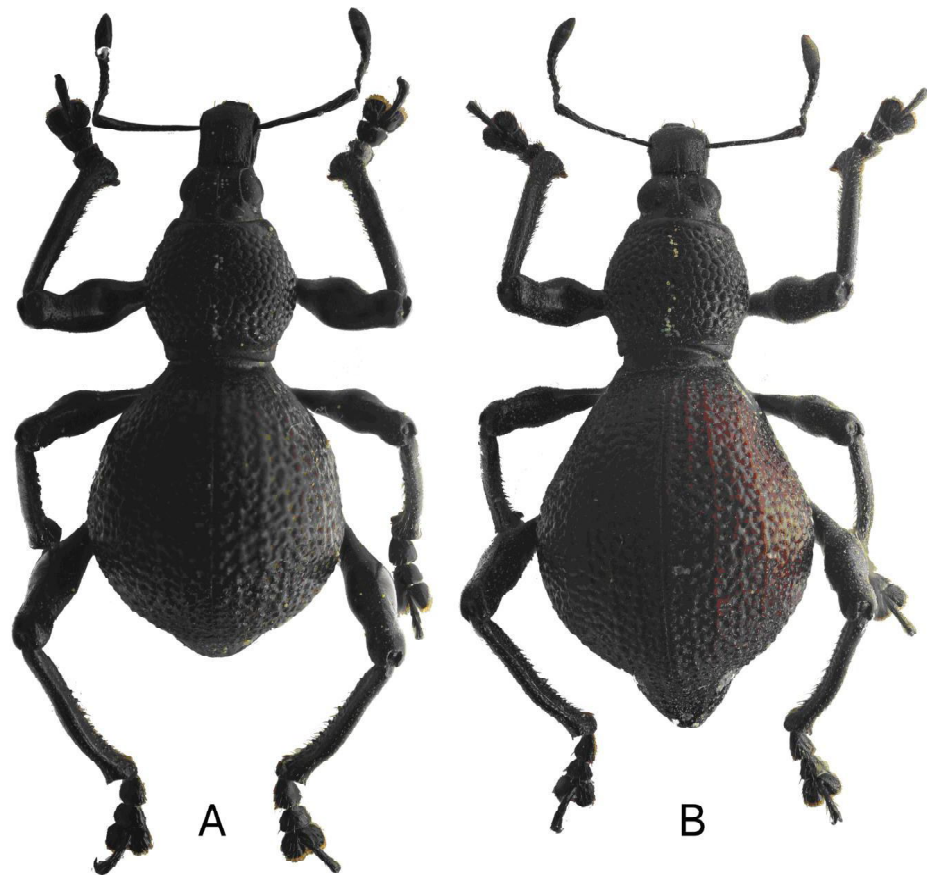


Fig. 1. Habitus of *Apocyrtus inflatus* Erichson, 1934. A - Male, B - Female

Material examined: Philippines / Negros Island, Mt. Canlaon, 600-900m / I. 2014 / local collector leg. (1 male) // IV. 2014 (2 males, 1 female) // V. 2014 (2 males, 1 female) // VIII. 2014 (1 male, 2 females) // XI. 2014 (2 males) // Philippines / Negros Island, Dumaguete / X. 2015 / local collector leg. (2 males, 2 females) // Philippines / Negros Island, Don Salvador / X. 2015 / local collector leg. (3 males, 1 females). Total: 20 ex. (13 males, 7 females).

Remarks: Species show two color variations that are not geographically isolated: green (Fig. 2A - B) and orange (Fig. 3A - B). No significant morphological differences or differences in shape of male genitalia (Fig. 5B) are recorded.

***Apocyrtus auroraensis* sp. nov.**

(Fig. 4; Fig. 5C)

Type material. Holotype, Male: "PHILIPPINES / Luzon, Aurora, Labuyo / VII. 2013 / local collector leg." (typed on a white rectangular label); "HOLOTYPE / Male / *Apocyrtus auroraensis* Rukmane-Bârbale, 2021 / det. Rukmane-Bârbale, 2021" (typed on a red rectangular label).

Distribution. Philippines, Luzon Island, Aurora province.

Description. Male. Measurements: LB: 10.0; LR: 1.4; WR: 1.0; LP: 2.7; WP: 2.9; LE: 5.9; WE: 5.4. N=1 for all measurements. Dorsal habitus as shown in Fig. 4.

Body, except abdomen black, shiny. Elytra and underside reddish. Markings of shiny, metallic green, round to recumbent scales on elytra, underside, prothorax and head.

Head minutely punctured, without hairs dorsally, with single scaly markings dorsally, laterally with patch of golden scales under each eye. Eyes small, slightly prominent from the outline of the head, peak just in the middle. Forehead slightly bulging dorsally, 1.5 times as wide as eye. Rostrum equally punctured, mingled with short, light hairs, longer than wide (LR/WR 1.4) dorsally with

deep transverse groove from the base of each eye, and one deep longitudinal medial groove from apical 1/3 of rostrum to middle of forehead. Rostrum slightly bulging at basal part. In dorsal and lateral view straight. Antennae mingled with long, light hairs; scape widened apically, slightly curved ventrally; basal antennomere two times as long as wide, apical part widened, slightly longer than antennomere II; antennomere II 1.5 times as long as wide, 2.5 times longer than III; antennomeres III - V subequal in size, slightly wider than long, shorter than VI - VII; VI - VII subequal in size, wider than long; club elongated,

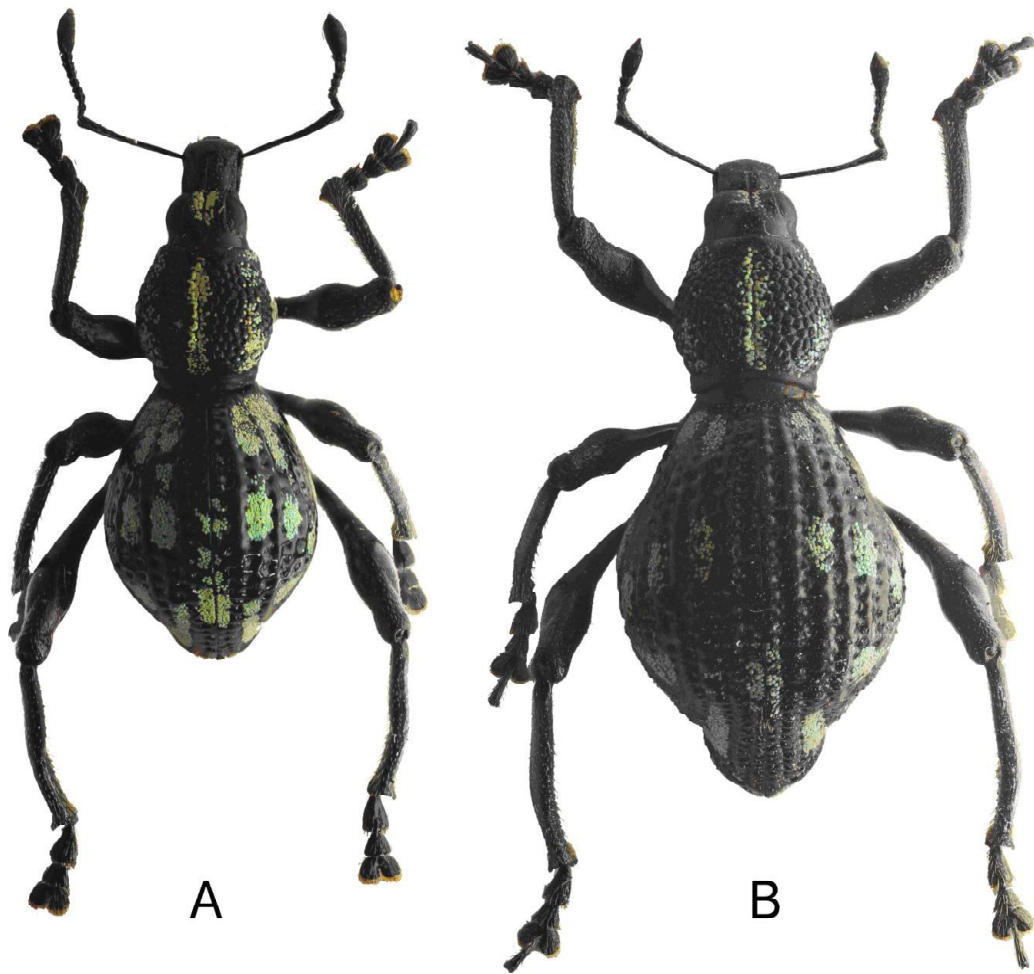


Fig. 2. Habitus of *Apocyrus chapmani* Schultze, 1934. Green form. A - Male, B - Female

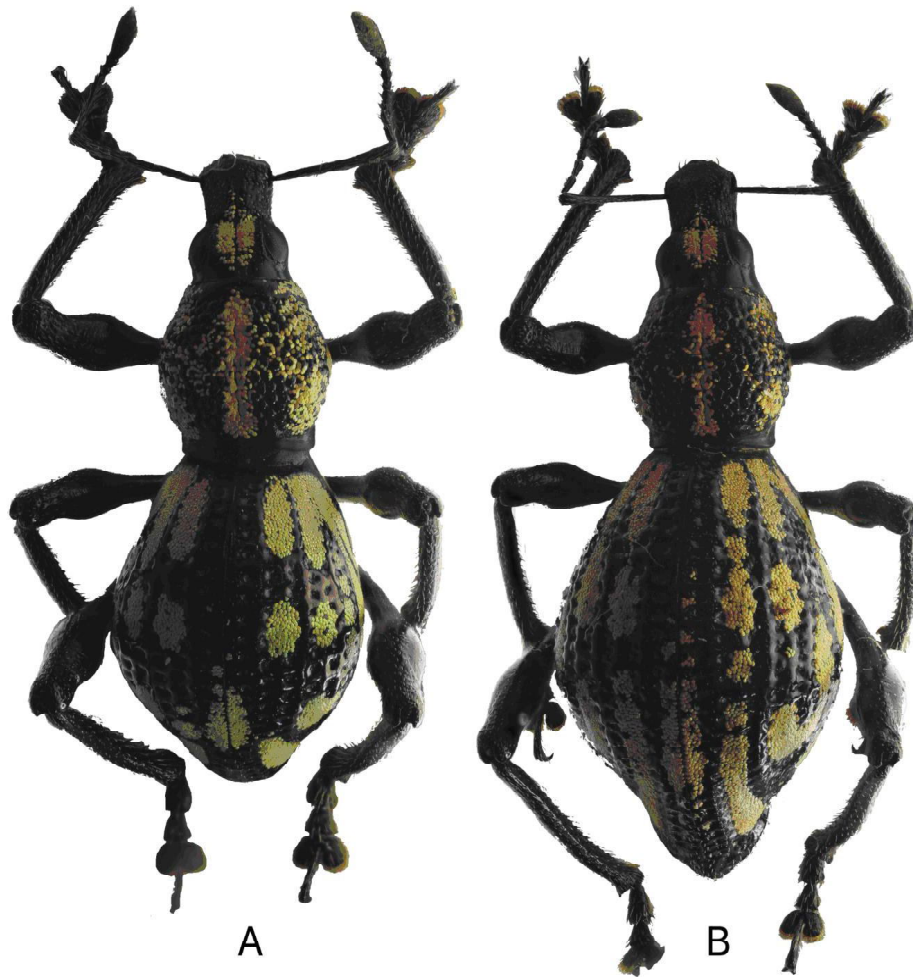


Fig. 3. Habitus of *Apocyrus chapmani* Schultze, 1934. Orange form. A - Male, B - Female

1.5 times as long as antennomeres I - VII, widest just at the middle, 2.5 times as long as wide. Prothorax with wrinkled structure, wider than long (WP/LP 1.08), disc with shallow medial longitudinal groove mingled with single metallic green scales; in dorsal view slightly impressed at subapical part, widest just at the middle, narrowed to subbasal part and straight to base; anterior edge dorsally slight curved apically, posterior edge curved apically. Elytra strongly rounded, slightly longer than wide (LE/WE 1.09), strongly rugose, with moderate longitudinal hollows on all length; markings of shiny, metallic green, round to recumbent single scales dis-

persed evenly on all length; in dorsal view strongly widened from base to widest middle, decreased to subapical part, apex raised; in lateral view strongly raised at subbasal part, then evenly rounded to apex, LE/LP 2.19, WE/WP 1.86. Coxa, femur, tibia and tarsus smooth, shiny; femur with short light hairs on apical half; tarsus with shorter light hairs at basal half and longer hairs at apical part, inner corner with spines; tarsus with long light hairs on all length; tarsite I same width as II, but longer, same length and width; tarsite II wider than long.

Aedegus as shown in Fig. 5C.



Fig. 4. Habitus of *Apocyrtus auroraensis* sp. nov. (holotypus)

Female unknown.

Differential analyses. The new species might be confused with *A. inflatus* Erichson, 1834 by coloration of body and elytra, but can be easily distinguished by the following characters: 1) Strongly rounded elytra of *A. auroraensis* sp. nov. compared to less rounded elytra in *A.*

inflatus Erichson, 1834; 2) elytra dorsally with markings of green metallic single scales in *A. auroraensis* sp. nov. and bare in *A. inflatus* Erichson, 1834; 3) apical edge of tarsite II curved apically in *A. auroraensis* sp. nov. and straight in *A. inflatus* Erichson, 1834; 4) stronger dorsal bulge at rostrum and forehead of *A. auroraensis* sp. nov.; 5) club of *A. auroraensis* sp. nov. big-

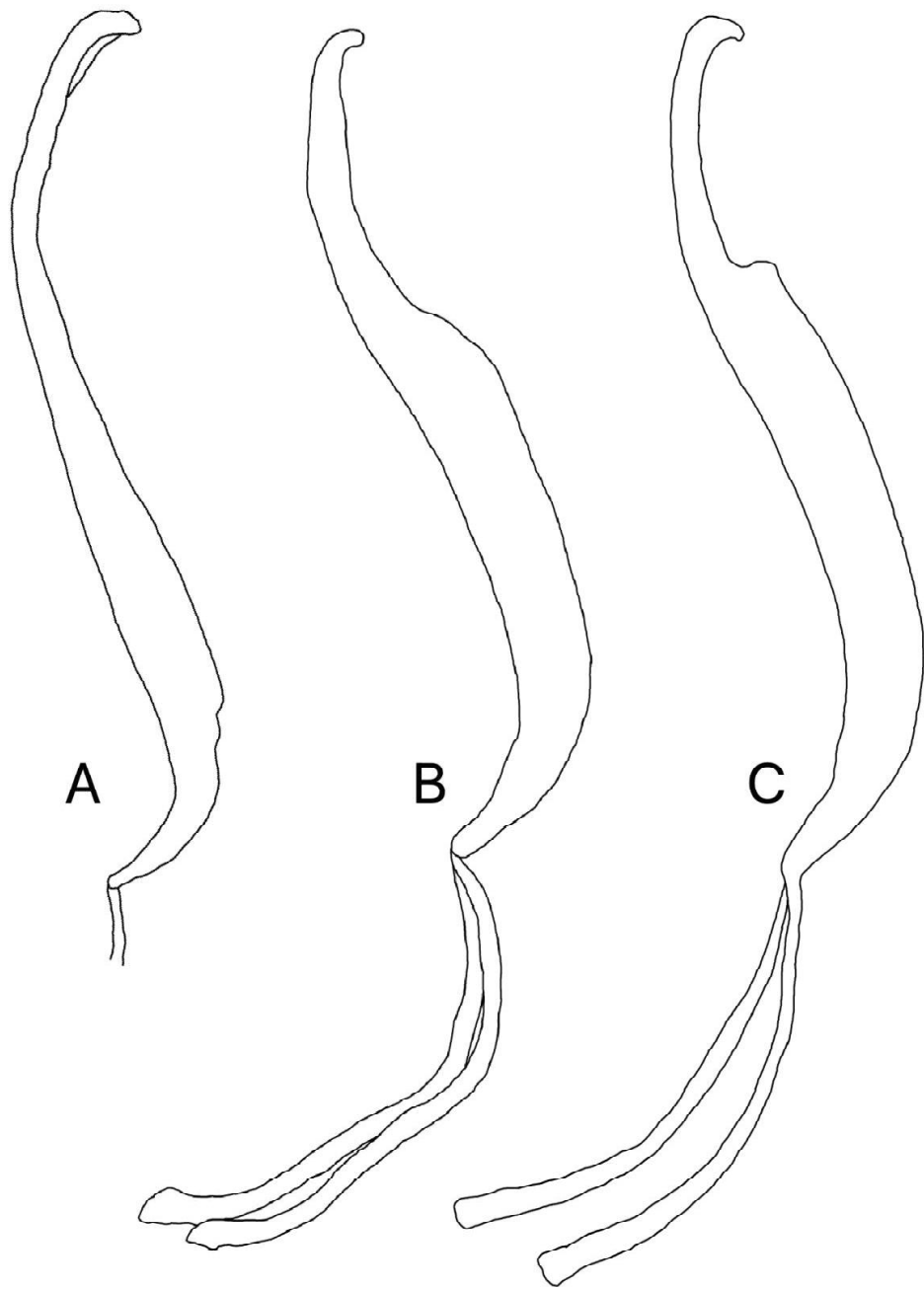


Fig. 5. Aedeagus of A - *Apocyrtus inflatus*, B - *Apocyrtus chapmani*, C - *Apocyrtus auroraensis* sp. nov

ger, more strongly elongated compared to *A. inflatus* Erichson, 1834.

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Etymology. The species name is dedicated to geographic locality where species is originally reported.

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