

## One new species of the genus *Trichomacrocyrtus* Yoshitake, 2018 (Coleoptera: Curculionidae: Entiminae) from Luzon Island, Philippines

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Rukmane A. 2019. One new species of the genus *Trichomacrocyrtus* Yoshitake, 2018 (Coleoptera: Curculionidae: Entiminae) from Luzon Island, Philippines. *Baltic J. Coleopterol.*, 19(2): 159 – 162.

One new species of the genus *Trichomacrocyrtus* Yoshitake, 2018 from the Philippines, Luzon Island is described and illustrated: *T. caerulans* sp. nov.

Key words. Coleoptera, Curculionidaem Pachyrhynchini, *Trichomacrocyrtus*, taxonomy, Philippines, Luzon Island

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### INTRODUCTION

The genus *Trichomacrocyrtus* Yoshitake, 2018 (Curculionidae, Entiminae, Pachyrhynchini) is a recently described genus, that consist of five species: *T. calostigma* Yoshitake, 2018, *T. chlorostigma* Yoshitake, 2018, *T. hieroglyphicus* Schultzze, 1917, *T. kalinganus* Schultzze, 1922, *T. trivittatus* Schultzze, 1922 and is characterized by the following features: hind tibiae covered with golden hairs along internal margin, rostrum with distinct basal border, without basal transverse groove, broad tarsal segments I and II, well separated pro coxae (Schultzze, 1917; Schultzze, 1922; Yoshitake, 2018).

During my research on the tribe Pachyrhynchini I discovered one species, that differs from all the rest species in the genus *Trichomacrocyrtus*. In

current paper I establish this species as new for science.

### MATERIAL AND METHODS

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

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

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

/ = different lines

// = different labels

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

LE – elytral length

LP = pronotal length

LR = length of the rostrum

WE = maximum width of the elytra

WP = maximum width of the pronotum

WR = maximum width of the rostrum

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

(Holotype 4.2; mean 4.15); LR: 2.0 – 2.2 (Holotype 2.1; mean 2.1); WR: 2.1 – 2.2 (Holotype 2.2; mean 2.88). N=5 for all measurements. Dorsal habitus as shown in Fig. 1A.

Integument black, shiny, elytra with weaker lustre; markings of dark blue round to recumbent scales on elytra, pronotum, rostrum, femur and underside; underside with weaker lustre, metasternum densely covered with dark blue round scales, mingled with long, light hairs, strongly pubescent; roundish patch of scales on each side of ventrite I; rest of the ventrites without scales, mingled with long light hairs.

Head sub ovate, weakly punctured and slightly pubescent; genae without scales, mingled with short light hairs up to ventral part; forehead slightly wrinkled between eyes, nearly 2 times as wide as eye width, without scales; rostrum strongly pubescent, with short light hairs dorsally; moderate long light hairs from antennal scape to labrum; in dorsal contour nearly straight, with slightly narrowed apex and more strongly narrowed base; dorsally with shallow longitudinal groove from middle of rostrum to sub basal part of forehead, deep sub ovate depression on basal part, apical part slightly bulging; eyes very strongly convex, relatively big, strongly prominent from the outline of the head. Antennae slender; segment I nearly 2 times as long as segment II, 3 times as long as wide, segment II slightly longer than segment III, 1.5 times longer than wide, segments III-VII sub-equal in size, gradually increasing to club, wider than long, club lanceolate, nearly 2.5 times longer than wide; Rostrum nearly as wide as long, WR/LR 1.05.

Prothorax sub cylindrical, wider than long, WP/LP 1.11, with the following scaly markings: 1) two elongated, arrow-like patches medially on each side on disc, patches can be connected in some cases; 2) a pair of triangular patches sub basal part of the disc on each side 3) ovate patch on each latero-ventral part; finely punctured, pubescent; widest just before the middle, in dorsal contour narrowest along apical margin, increased to widest just before midline, then rounded and

## RESULTS

### *Trichomacrocirtus caerulans* sp. nov.

Fig. 1, 2.

**Type material.** Holotype, male: “PHILIPPINES / Luzon, Ifugao, Banaue / VII. 2015 / local collector leg.” (white rectangular label, printed); “HOLOTYPE / *Trichomacrocirtus caerulans* / Rukmane 2019 / det. Rukmane 2019” (red rectangular label, printed) (DUBC).

Paratypes (18 males, 10 females): All from the Ifugao Province, Banaue, with the following dates: 1 male VI.2014; 1 male VIII.2014; 1 male XI.2014; 1 male II.2015; 1 female V.2015; 1 male VI.2015; 1 female VII.2015; 1 male VIII.2015; 2 males, 1 female IX.2015; 1 male X.2015; 1 male, 1 female XI.2015; 2 males, 1 female XII.2015; 1 male I.2016; 2 males IV.2016; 1 female VI.2016; 1 male, 1 female VII.2016; 1 male, 1 female VIII.2016; 1 female X.2016. 1 male, 1 female with the following white printed label: “PHILIPPINES / Luzon, Ifugao, Banaue / local collector leg.”. All with the following red rectangular printed label: “PARATYPE / *Trichomacrocirtus caerulans* / Rukmane 2019 / det. Rukmane 2019. All in DUBC.

**Description.** Male. Measurements: LB: 13.8 – 14.4 (Holotype 14.1; mean 13.92); LP: 3.6 – 3.9 (Holotype 3.8; mean 3.66); LE: 10.6 – 11.1 (Holotype 10.7; mean 10.88); WE: 6.5 – 6.8 (Holotype 6.6; mean 6.66); WP: 4.0 – 4.3

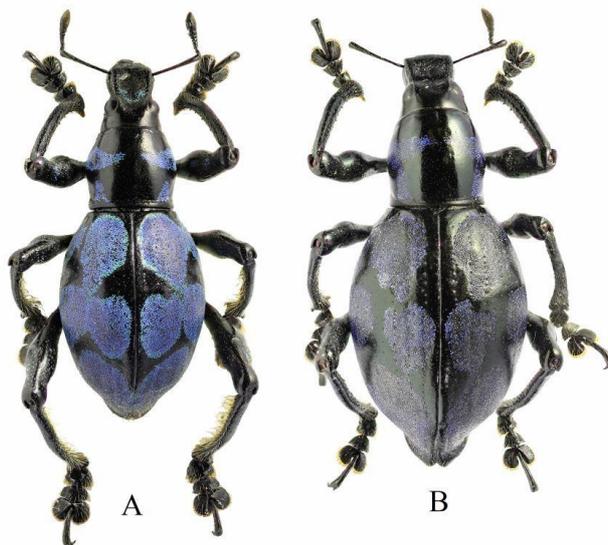


Fig. 1. Dorsal habitus of *Trichomacrocyrtus caerulans* sp. nov.; A – male, B – female



Fig. 2. Male genitalia of *Trichomacrocyrtus caerulans* sp. nov.; A – sternite IX in ventral view; B – tegmen in ventral view; C – aedeagal body in lateral view; D – aedeagal body in ventral view.

decreased to basal 1/5 where slightly incurved, then slightly increased along basal margin; apical margin weakly incurved on disc medially.

Elytra sub-lanceolate, widest just before the middle; in dorsal increased from basal margin to widest just before middle, rounded and decreased to apical 1/2 and more strongly decreased to extended apex; each elytron with the following scaly markings: 1) two roundish patches on basal part from interval I to lateral margin, patches might be connected or nearly separate; 2) two big roundish medial patches from interval I to sub-lateral part, lateral margin with one more small, elongated patch; 3) sub triangular patch on apical part, patches slightly connected along suture; LE/WE: 1.62; wider and longer than prothorax, WE/WP: 1.57, LE/LP: 2.82; without finely expressed intervals, pubescent at apical part; with moderate length golden hairs near apex.

Front coxa with few round scales, slightly pubescent; femora with few round scales on apical part along internal margin, sparsely covered with longer or shorter light hairs, pubescent; front tibia with short golden hairs in all length and longer hairs along internal margin and apical part; mid and hind tibia with long, dense golden hairs along internal margin.

Aedeagal body as shown in Fig. 2A-D.

Female. Measurements: LB: 14.1 – 14.4 (mean 14.2); LP: 3.8 – 4.0 (mean 3.88); LE: 10.1 – 10.4 (mean 10.25); WE: 6.9 – 7.2 (mean 7.66); WP: 3.9 – 4.1 (mean 4.0); LR: 1.9 – 2.0 (mean 1.95); WR: 2.0 – 2.1 (mean 2.88). N=5

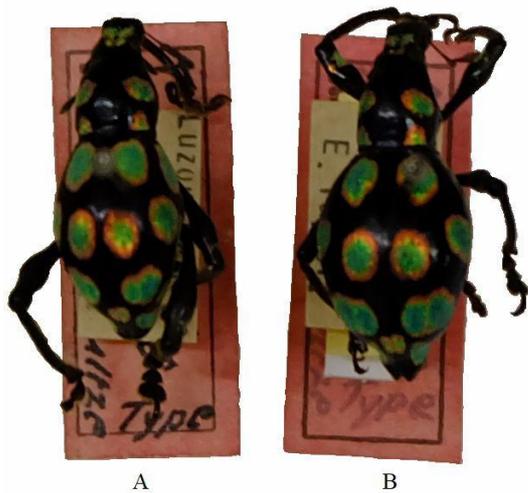


Fig. 3. Type specimens of *Trichomacrocirtus kalinganus* Schultzze, 1922; A – male; B – female

for all measurements. Smaller of same size as male. LE/WE 1.34, wider than in males, at apical 1/3 more strongly rounded, apex narrower, more strongly expressed; eyes slightly smaller than in males; hind tibia with few golden hairs along internal margin.

**Differential analyses.** *T. caeruleans* sp. nov. in general appearance is similar to *T. kalinganus* Schultzze, 1922 from Kalinga province located on north from Ifugao Province. Species are easily distinguishable by the following features: 1) different pronotal markings (Fig. 3), in *T. kalinganus* pronotum on disc is marked with four roundish spots, in *T. caeruleans* two medial spots on disc are elongated, arrow-like, or connected in one uninterrupted medial line; 2) eyes of *T. caeruleans* sp. nov. bigger, much more strongly expressed from the dorsal contour of the head; 3) different elytral markings; 4) differences in shape of male aedeagal body (Fig.2).

**Distribution.** Luzon Island, Ifugao Province.

**Etymology.** This species is named after its indigo-blue markings on the body. Blue on Latin – caeruleum. This species also is similar to newly described *Macrocyrtus (Exmacrocyrtus) caeruleans* Rukmane, 2019. Both species are expected to be in mimetic relationship.

## REFERENCES

Schultze, W. 1917. Fourth contribution to the Coleoptera fauna of the Philippines. *Philippine Journal of Science, Manilla*, 12(4), 249 – 259.

Schultze, W. 1922. Neunter Beitrag zur Coleoptera-Fauna der Philippinen. *Deutsche entomologische Zeitschrift*, 36 – 45.

Yoshitake, H. 2018. A new genus and two new species of the tribe Pachyrhynchini (Coleoptera, Curculionidae, Entiminae) from the Philippines. *Elytra, Tokyo*, 8(1), 5 – 14.