# Two new species of the genus *Acronia* Westwood, 1863 (Coleoptera: Cerambycidae) from the Philippines

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Two new endemic species of the genus *Acronia* Westwood, 1863 (Coleoptera: Cerambycidae) from the Philippines are described and illustrated: *A. streicsi sp.* nov. and *A. teterovi* sp. nov. An updated check-list of the genus *Acronia* is proposed. The genus *Acronia* in the world fauna is now represented by 14 species.

Key words: Coleoptera, Cerambycidae, Lamiinae, Pteropliini, *Acronia*, new species, fauna, Philippines

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# INTRODUCTION

The genus *Acronia* Westwood, 1863 (Coleoptera: Cerambycidae) belongs to the tribe Pteropliini Thomson, 1861 of the subfamily Lamiinae Latreille, 1825. Species of this genus are endemics for the Philippine Archipelago.

Vives (2009) erected the new genus *Mimacronia* Vives, 2009 for six species of the closely related genus *Acronia*: *M. alboplagiata* (Schultze, 1922), *M. arnaudi* (Hudepohl, 1983), *M. decimmaculata* (Schultze, 1919), *M. dinagatensis* (Hudepohl, 1995), *M. novemmaculata* (Hudepohl, 1995), *M. viridimaculatoides* (Breuning, 1980), and transferred to *Acronia* five species previously

described within the genus *Callimetopus* Blanchard: *A. gloriosa* (Schultze, 1922), *A. pulchella* (Schultze, 1922), *A. principalis* (Heller, 1924), *A. superb* (Breuning, 1947), and *A. multialbosignata* (Breuning, 1960). Barševskis (2015a) described a new species of the genus *Mimacronia*, *M. regale* Barševskis, 2015. Few months later Vives (2015) published the description of *M. rutilans* Vives, 2015, which proved conspecific with *M. regale* and was synonymised with it (Barševskis 2015b).

The genus *Acronia* in recent decades has been mentioned in several publications: Hudepohl (1989) described *A. ysmaeli* Huedepohl, 1989 from Luzon Island (Mountain Province); Vives (2009) described *A. vyzcayana* Vives, 2009 from the same island (environs of Nueva

Vizcaya); the same author changed the taxonomic status of *A. strasseni* var. *roseolata* Breuning, 1947 to the species level (Vives 2013); later Vives (2015) published faunistic data for the rare species *A. luzonica* Schultze 1934 which was collected in North Luzon, Kalinga.

In the present paper two new species of the genus *Acronia* are described and illustrated from the Philippine Archipelago and updated check-list of this genus is proposed. The genus *Acronia* is now represented by 14 species.

### MATERIALAND METHODS

The studied material is deposited in the following institutional collections: DUBC - Coleopterological Research Center, Institute of Life Sciences and Technology, Daugavpils University (Ilgas, Daugavpils Distr., Latvia); SMTD- Senkenberg Natural History Collections Dresden, Museum of Zoology (Dresden, Germany). The type specimens of the new species are deposited in DUBC. All specimens have been collected in the Philippines by local collectors.

The laboratory research and measurements have been performed using *Nikon* AZ100, *Nikon* SMZ745T and *Zeiss* Stereo Lumar V12 digital stereomicroscopes, NIS-Elements 6D software, and *Canon* 60D and *Canon* 1 Ds Mark II cameras. The map of the Philippine archipelago with localities of the new species (Fig. 5) was drawn using the software *ArcGis* 10.

# **RESULTS**

Acronia streicsi sp. n. (Fig. 1)

**Type material. Holotype:** Male: Philippines, Samar Isl., Lope De Vega, 04.2016, local collector leg. (DUBC). **Paratypes:** 2 males and female: Philippines, Samar Isl., Lope De Vega,

05.2016, local collector leg.; male and female: Philippines, 06.2016, local collector; (DUBC).

**General distribution:** Philippines: Samar Island (Fig. 2).

**Description.**Body elongate, black, lustrous, surface with black pubescence and spots of ocher brown and white pubescence (Fig. 1A). Body length: 18.0 - 20.0 mm, maximal width of elytra: 6.0 - 6.2 mm.

Head flat, wide, with almost parallel sides, with slightly convex eyes and slightly extended cheeks covered with pale sparse pubescence. Surface of head shiny, with sparse and coarse puncturation, interspaces between punctures with very thin punctures and flat crincles. Middle portion of head with longitudinal thin line stretching from front near the clypeus and will continuing up to the base of the head. Head with three ocher brown spots: two smaller oval spots between antennal insertion and largest spot in frontal part of head which with a longitudinal middle line is divided into two triangular adjoining spots. One large spot located also under eyes. Labrum pubescent, with punctures with dark hairs. Clypeus black, narrow, transverse, shiny, with delicate pubescence. Mandible shiny, massive, relatively wide and sharp. Antennae black and relatively short, covered by dense black pubescence; first antennomere thickened, with sparse coarse brown punctures between pubescence, 3rd- 4th and small 5th antennomere in basal part with white pubescence.

Pronotum almost cylindrical, very convex, in frontal part with sparse and coarse punctures and acute, extended basal angles. Basal part of pronotum not convex, neck-shaped, with elongate ocher brown spot on each side laterally. Dorsal disc of pronotum without distinct middle line. Scutellum small, apically rounded.

Elytra black, glossy, finely punctated, on both sides with well developed and visible humps behind shoulders. Dorsal part of elytra behind



Fig. 1. Acronia streicsi sp.n., holotype

shoulders with wide impression. Elytra mostly covered with black pubescence, each elytron with eight ocher brown and white spots. Elytra at base and at apex smooth, shiny flat, without pubescence. Elytra with elongated ocher brown spot behind scutellum at suture, with triangular white spot behind it dorsally and with ocher brown spot, and in apical portion with oval ocher brown spot and narrow transverse white spot. Lateral portions of each elytron with three ocher brown spots: one between shoulder and hump, one in medio-lateral part of elytra and one larger transverse spot before apex. Apical part of elytra along suture with narrow flat keelshaped elevation. Apex of elytra without visible projections.

Bottom side of body black, with ocher brown and white spots. Legs relatively short, slightly shiny, covered with dark pubescence. Tarsomeres black, from bottom side covered by yellow brown pubescence.

**Differential diagnosis.** The new species differs from other species of the genus *Acronia* by characteristic coloration of the body: ocher brown and white spots on black background. This species is similar to *Mimacronia arnaudi*, described from Luzon, but it differs from *M. arnaudi* by the sharp, extended basal angles of pronotum and different number of spots on the head and elytra (elytra of *M. arnaudi* have 10 ocher brown spots and surface of head with two ocher brown spots (Huedepohl, 1983)).

Etymology. This species is named after the prominent Latvian film director and producer, honorary member of Latvian Academy of Sciences, active supporter and patron of Daugavpils University, Jānis Streičs, in great respect, gratitude and due to his 80-year birthday.

Acronia teterevi sp. n. (Fig. 2)

**Type material. Holotype:** Male: Philippines, Mindanao Isl., Kabanglasan, Bukidnon, 10.2015, local collector leg. (DUBC).

**Paratypes**: 20 specimens. Male, 2 females: Philippines, Mindanao Isl., Mt. Apo, 09. 2013, local collector leg.; male: Philippines, Mindanao Isl., Mt. Apo, 07.2014, local collector leg.; female: Philippines, Mindanao, Mt. Apo, Cotabato, 06.2014, local collector leg.; male: Philippines, Mindanao, Mt. Apo, Cotabato, 07.2014, local collector leg.; male and 3 females: Philippines, Mindanao Isl., Mt. Apo, Kidapawan, Cotabato, 09.2014, local collector leg.; male and female: Philippines, Mindanao Isl., Davao del Sur, Kapatagan, 12.2015, local collector leg.; male: Philippines, Mindabao Isl., Sarangani, Kiamba, 10.2015, local collector leg.; 2 males, 1 female: Philippines, Mindanao Isl., Sarangani, Kiamba, 12.2015, local collector leg.; female: Philippines, Mindanao Isl., Mt. Parker, S Cotabato, 07.2013, local collector leg; male and female: Philippines, Mindanao Isl., Mt.

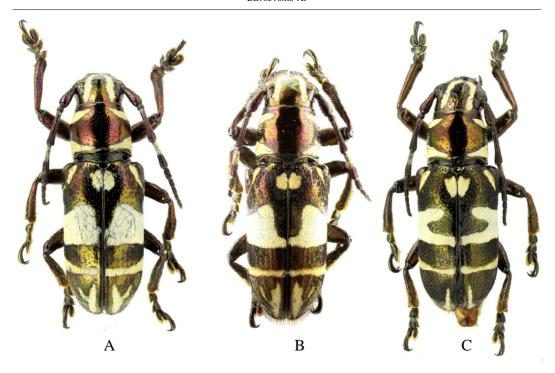


Fig. 2. Acronia teterevi sp.n.: A - holotype, B - C - paratypes (different colour forms)

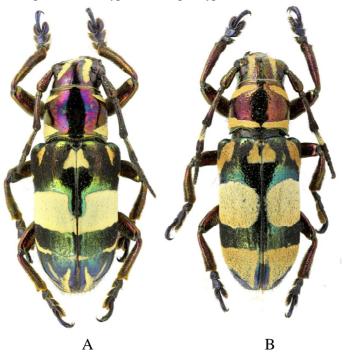


Fig. 3. Acronia superba Breuning: A-B - two different colour forms



Fig. 1. Distribution of *Acronia streicsi* sp.n. and *A. teterevi* sp.n.



Fig. 1. Aedeagus of A. teterevi sp.n.

Parker, S Cotabato, 12.2013, local collector leg; male: Philippines, MinOdanao Isl., Mt. Parker, S Cotabato, 05.2014, local collector leg (all in DUBC).; male: Philippines, Mindanao Isl., Mt. Parker, 07.2013, local collector leg. [in collection I. & B. Teterev].

**General distribution:** Philippines: Samar Island (Fig. 5).

**Description.**Body elongate, black, shiny, with bronze luster, surface with dark pubescence and white spots (Fig. 2A).Body length: 18.0 □ 20.0 mm, maximal width of elytra: 6.2 mm.

Head flat, wide, with almost parallel sides, with slightly convex eyes and slightly extended cheeks covered with pale, very sparse pubescence and punctures. Surface of head shiny, with bronze luster, with sparse and coarse puncturation, interspaces between punctures with very thin, small punctures. Middle portion of head with longitudinal well-developed convex keel and thin middle line, that starts at front near clypeus and will continue up to the base of the head. Head with two wide slightly divergent basally longitudinal bands. Labrum pubescent, with punctures, with dark brown hairs. Clypeus brown, narrow, transverse, shiny, with delicate pubescence. Mandible shiny, elongate, relatively narrow and sharp. Antennae relatively short, black, shiny, with bronze luster, covered by dense black and pale pubescence; first antennomere thickened, with sparse coarse brown punctures between pubescence; basal parts of 3rd - 4th antennomeres with white pubescence.

Pronotum wide, almost cylindrical, convex, in frontal and basal parts with sparse and coarse punctures and acute, extended basal angles. Basal part of pronotum neck-shaped. Frontal and basal margins of pronotum with white or yellow narrow bands, interrupted in the middle. Dorsal disc of pronotum without distinct middle line. Scutellum small, apically rounded.

Elytra shiny, with unicolor bronze luster, punctuated, on both sides with low developed and visible humps behind shoulders; apical part of each elytron rounded, without visible projections. Elytra mostly covered with dark pubescence and each with 7 or 8 white spots: elongated oval spot behind scutellum at suture, line-shaped spot behind shoulders dorsal, larger spot in lateral part, sometimes it can be connected by a thin line with dorsal spot; middle part of elytra with large, transverse white band, with straight or slightly wavy basal margin extending to suture and sloping front edge, which usually does not reach suture (this spot of most specimens trapezoidal, sometimes it can be transverse with V-shaped lines, basal lines on suture can be connected (Fig. 2 B)). Apical part of longitudinal V-shaped spot of two thin lines can be in middle with third rudimentary line. Apical part of elytra along suture with flat shiny keel-shaped elevation.

Lower side of body black, shiny, with white pubescence. Legs relatively short, shiny, covered with dark brown pubescence. Tarsomeres black, covered by yellow brown pubescence on lower side.

Apical part of aedeagus curved down with sharp, straight forward lamella (Fig. 4A)

**Differential diagnosis.** The new species is closely related with *A. superba* Breuning, 1947 (Fig. 3), but differs from it by the characteristic unicolor bronze coloration of the body surface and different shape of spots on elytra. Elytra of *A. teterevi* sp. n. are with following shape of spots: postscutellar spot elongated, oval, not triangular or reversely triangular (in some specimens), spots behind shoulder in dorsal and lateral parts small, thin, some times can be

connected by a thin line; middle large, transverse white band of most specimens is trapezoidal, in rare cases it can be with transverse V-shaped lines. The body surface of A. superba is bicolorous: head, pronotum and basal part of elytra are bronze, other part of elytra with metallic green background. Elytra of this species are with other shape of spots: postscutellar spot is triangular, spots behind shoulders in dorsal and lateral part are large, connected between with well-developed line (sometimes this line with short interruption). Middle large, transverse white band is not trapezoidal, mostly evenly wide over the entire length, very rarely slightly trapezoidal or they are merging on both elytra as one band. Apical V-shaped band sometimes with white triangular pubescence. The body surface of A. superb with more delicate punctures. Aedeagus of A. teterevi sp. nov. (Fig. 4A) more larger, in apical part more curved as that of A. superba (Fig.

**Etymology.** The species is named after the outstanding Latvian philanthropists Ināra and Boris Teterev who financially supported the Latvian science, culture, art and education, including my studies in beetles systematics.

#### Check-list of the genus Acronia

Acronia Westwood, 1863

- Acronia gloriosa (Schultze, 1922) -Mindanao Isl.
- 2. *Acronia luzonica* Schultze, 1934 Luzon Isl.
- 3. *Acronia nigra* Breuning, 1947 Philippines
- 4. Acronia perelegans Westwood, 1863- Luzon Isl.

- Acronia pretiosa Schultze, 1917 -Luzon Isl.
- 6. Acronia principalis (Heller, 1924) Samar Isl.
- 7. Acronia pulchella (Schultze, 1922) Mindanao Isl.
- Acronia rosealata Breuning, 1947 -Luzon Isl.
- Acronia strasseni Schwarzer, 1931 -Luzon Isl.
- Acronia streicsi Barševskis, 2016 sp. n. - Samar Isl.
- Acronia superba (Breuning, 1947) -Mindanao Isl.
- Acronia teterevi Barševskis, 2016 sp. n. - Mindanao Isl.
- Acronia vizcayana Vives, 2009 -Luzon Isl.
- 14. Acronia ysmaeli Hudepohl, 1989 Luzon Isl.

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#### REFERENCES

Barševskis A. 2015a. A new species of the genus Mimacronia Vives, 2009 (Coleoptera: Cerambycidae). Baltic J. Coleopterol., 15(1): 1-8.

Barševskis A. 2015b. To the knowledge of the genus MimacroniaVives, 2009 (Coleoptera: Cerambycidae). Acta Biol. Univ. Daugavp., 15 (2): 405 – 409.

Barševskis A. 2015. To the knowledge of the genus MimacroniaVives, 2009 (Coleoptera: Cerambycidae). Acta Biol. Univ. Daugavp., 15 (2): 405 – 409.

Barševskis A. 2015. To the knowledge of the genus *Mimacronia* Vives, 2009 (Coleoptera: Cerambycidae). Acta Biol. Univ. Daugavp., 15 (2): 405 - 409.

Barševskis A. 2015b. To the knowledge of the genus Mimacronia Vives, 2009 (Coleoptera: Cerambycidae). Acta Biol. Univ. Daugavp., 15 (2): 405 - 409.

Huedepohl K.-E. 1989. Über südostasiatische Cerambyciden, IV (Coleoptera, Cerambycidae, Cerambycinae: Cerambycini und Callichromini; Lamiinae: Pteropliini). Entomofauna. Zeutschriftfur Entomologie . 10 (5): 45 - 72.

Vives E. 2009. New orinteresting Cerambycidae from the Philippines (Coleoptera, Cerambycidae) (Part III). Les Cahiers Magellanes, 105: 1-20.

Vives E. 2013. New or interesting Cerambycidae from the Philippines (Part VII) (Coleoptera,

Cerambycidae).Les Cahiers Magellanes, NS, 11: 62 - 75.

Vives E. 2015. New or interesting Cerambycidae from the Philippines (Coleoptera, Cerambycidae, Lamiinae) (Part XII). Boletin de la S. E. A., 56 (30.06.2015): 49 - 60.

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