

Two new and poorly known species of the genus *Callimetopus* Blanchard, 1853 (Coleoptera: Cerambycidae) from the Philippines

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Abstract: Two new species of the genus *Callimetopus* Blanchard, 1853 (Coleoptera: Cerambycidae) are described and illustrated: *C. antonkozlovi* sp. n. (Philippines: Leyte, Luzon, Mindanao and Samar islands) and *C. juliae* sp. n. (Philippines, Luzon). New records for *C. variolosus* (Schultze, 1920) and *C. albatrus* (Newman, 1842) are given. The genus now includes 39 described species, which are distributed in the Philippine archipelago, Moluccan archipelago, Indonesia and Malaysia.

INTRODUCTION

In recent years, the long-horned beetle (Coleoptera: Cerambycidae) fauna of the Philippine archipelago has been intensively investigated. Over the last four years a lot of taxonomic papers with descriptions of new species or new records from the Philippines are published (Barševskis 2013, 2014a, 2014b, 2014c, 2014d, 2015a, 2015b, 2015c, 2015d, 2015e; Barševskis, Jaeger 2014; dela Cruz, Adorada 2012; Miroschnikov 2015; Vives 2012a, 2012b, 2013, 2014a, 2014b, 2015a, 2015b). Recently, nine new species of *Callimetopus* were described (Barševskis et al. 2016).

In last year author published three articles (Barševskis 2015c, 2015d, 2015e) on the genus *Callimetopus* and described five new endemic species from the Philippine archipelago, of which four species are found on the Luzon Island and one on the Mindanao Island.

In the present study two new species of *Callimetopus* are described and illustrated, one of which is closely related to *C. variolosus* (Schultze, 1920), and other is very similar with

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C. albatrus (Newman, 1842) from Luzon island. Besides that, new faunistic data for *C. variolosus* and *C. albatrus* are presented and type material for both species are studied. The genus *Callimetopus* now includes 39 described species.

MATERIAL AND METHODS

The material from the following collections has been examined:

AKC - Anton Kozlov private beetles collection (Moscow, Russia);

DUBC - Daugavpils University, Institute of Life Sciences and Technology, Coleopterological Research Centre (Ilgas, Daugavpils Distr., Latvia);

BMNH - The Natural History Museum (London, UK);

SMTD - Senckenberg Natural History Collections Dresden, Museum of Zoology (Dresden, Germany).

The type specimens of new described 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 maps of the Philippine archipelago have been drawn using the software *ArcGis 10* and *Bing Map Aerial* (Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, svvisstopo, and the GIS User Community; Image courtesy of NASA Earthstar Geographics SIO © 2016 Microsoft Corporation).

RESULTS

Callimetopus antonkozlovi sp. n.

Fig. 1A, E, G

Type material. Holotype, male: Philippines: Leyte Isl., Ormoc env., 04.2011, local collector leg. (DUBC).

Paratypes: 12 males, 4 females: Philippines: Leyte Isl., Libagon, 02.2014 (1, local collector leg.), Sogod, 02.2015 (3, local collector leg.); Luzon Isl., Nueva Vizcaya, Belance, 08.2014 (2, local collector leg.); Mindanao Isl., Surigao del Sur, Tandag, 06.2012 (1); Samar

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Isl., Hinabangan, 03.2010 (6, local collector leg.), 01.2015 (2, local collector leg.). Fifteen paratypes deposited in DUBC, one in AKC.

General distribution: Philippines: Leyte, Luzon, Mindanao and Samar islands (Fig. 2A).

Description. Body black, with light luster and small sparse spots of dense brown pubescence. Body length: 23.0-30.0 mm, maximal width: 7.2-10.0 mm.

Head flattened, rectangular, with slightly convex eyes and slightly extended cheeks. Head between eyes and antennal bases with longitudinal keel, surface along keel with sparse punctation and brown pubescence, interrupted by smooth black spots without pubescence. Cheeks with dense brown pubescence, between which with sparse black punctures. Clypeus transverse, brown, shiny, with very fine longitudinal crinckles. Labrum heart-shaped, black or dark - brown, shiny, with long pale pubescence. Labrum significantly longer than clypeus. Mandibles massive, sharp, long, with dense, crinkle-shaped punctures and sparse pubescence on basal part. First antennomere black, thickened, with dense pale tomentum and with several small dark spots and coarse punctures; second antennomere short, dark, covered with fine pale pubescence; 3rd antennomere black, longer than 4th antennomere, with light pubescence; 4th - 6th and inner side of basal part of 7th antennomeres with dense white pubescence and several dark long setae; remaining antennomeres black, without white pubescence.

Pronotum almost cylindrical, wider than long, expanded laterally before middle, black, with acute basal angles, sparse punctation, fine microsculpture and with spots of brown pubescence. Frontal part of dorsal disc of pronotum without pubescence, smooth, with brown pubescence and sparse, small dark spots in lateral part. Anterior ventrolateral pair of spine robust, blunt, visible. *Pars stridens* bilobate, with wide rounded apex and very fine transverse, reticulate microsculpture and with several sparse punctures. Scutellum small, rounded apically, with dense brown pubescence.

Elytra black and glossy, covered with a lot spots of brown pubescence and two transverse, irregular bands of white or grey pubescence. Basis of elytra concaved at shoulders, with very sparse pubescence. Apical part of elytra rounded, without sharp projections, with several long dark hairs.

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Bottom side of body covered with dense brown tomentum and small dark spots. Legs black, with dense brown and dark tomentum and sparse dark small spots. Tarsomeres black, covered by pale and dark tomentum.

Male. Aedeagus evenly curved, somewhat thick. Lamella with sharp, upwards oriented apex (Fig 1G).

Differential diagnosis. In general appearance of the body, the new species is similar to *C.*

variolosus (Schultze, 1920) (Fig. 1B, F, H), but differs from this species by some differences in coloration and shape of the aedeagus.. The body surface of *C. antonkozlovi* sp. n. covered with a lot spots of brown pubescence, while the surface of *C. variolosus* covered by white pubescence and with irregular spots of yellow - brown pubescence between it. Antennomeres 4th-6th and basal part of 7th antennomeres of *C. antonkozlovi* sp.n. with dense white pubescence, while *C. variolosus* are with very sparse white pubescence of these antennomeres (Fig. 1E, 1F). The aedeagus of *C. antonkozlovi* sp.n. more evenly curved and more robust than that of *C. variolosus*. The lamella of *C. antonkozlovi* sp.n. more widely rounded and more tilt up as in *C. variolosus*.

Etymology. This species is named after my colleague, entomologist Anton Kozlov (Moscow, Russia) in appreciation of cooperation.

Callimetopus variolosus (Schultze, 1920)

Fig. 1B, F, H

Euclea variolosa Schultze, 1920: The Philipp. Journ. Sc., 16, 2: 198

Callimetopus variolosa; De la Cruz & Adorata, 2012: Philippine Ent., 26, 2:

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Type material. Holotype & 2 Paratypes [SMTD - ex coll. Schultze].

Additional material: Philippines: Luzon Isl., Nueva Vizcaya, Belance, 08.2013 (1); 08.2014 (1); Sierra Madre, Aurora, Dingalan, 06.2015 (1); Mindanao Isl., Mt. Apo, 08.2013 (1); Negros Isl., Negros Oriental, 07.2013 (1), 09.2013 (4), 11.2013 (1), 02.2014 (1); Negros Oriental, Don Salvador Benedicto, 07.2015 (2); Negros Oriental, Dumaguete, 06.2014 (3), 09.2014 (7); Mt. Canla-on, 500 - 900 m, 06.2014 (2), 08.2014 (6), 09.2014 (1) [DUBC].

General distribution: Philippines: Luzon, Mindanao and Negros

islands (Fig. 2B).

Callimetopus juliae sp. n.

Fig. 1C, I

Type material. Holotype, male, Philippines: Luzon Isl., Sierra Madre, Isabela, 05.2014, local collector leg. (DUBC). Paratype: Philippines: Luzon Isl., Nueva Vizcaya, Belance, 05.2014, local collector leg. (DUBC).

General distribution: Philippines: Luzon Isl. (Fig. 2C).

Description. Body black, with light luster and dense golden-brown and white pubescence. Body length: 19.0-24.0 mm, maximal width: 7.0-7.2 mm.

Head flat, rectangular, with slightly convex eyes and slightly extended cheeks. Head between eyes and antennal bases with longitudinal keel, surface along keel with coarse punctation and white pubescence. Cheeks with sparse white and brown pubescence. Clypeus transverse, brown, shiny, with fine longitudinal crinckles. Labrum black, shiny, with long dark pubescence, rounded at sides. Labrum significantly longer than clypeus. Mandibles massive, sharp. First antennomere black, thickened, with dense pale tomentum, with several small dark spots and coarse punctures; second antennomere short, dark, covered with fine pale pubescence; remaining antennomeres dark brown; 3rd antennomere about as long as antennomeres 4th and 5th, with light pubescence; 3rd antennomere passim and inner side of basal part 4th antennomere with white pubescence and some dark long setae.

Pronotum almost cylindrical, wider than long, expanded laterally before middle, dark brown, with acute basal angles, with sparse and coarse punctation, fine microsculpture and golden-brown pubescence, which lighter on midline. Frontal part of dorsal disc of pronotum without pubescence, smooth, with golden-brown pubescence in lateral part, with sparse and small dark spots. Anterior ventro-lateral pair of spine prominent. Pars stridens subtriangular, with wide rounded apex and with very fine transverse, reticulate microsculpture, with several sparse punctures. Scutellum small, rounded apically, with fine pubescence.

Elytra black, glossy, usually covered with white pubescence,

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with small irregular spots of golden-brown pubescence between it. Apical part of elytra covered with golden-brown pubescence, with visible sparse black punctures between it. Basis of elytra concaved at shoulders, with very sparse pubescence. Apex of elytra without sharp projections, rounded, with many long dark hairs. Apex of elytra subtruncate, with inner sharp projection.

Bottom side of body covered with dense golden-brown tomentum and small dark spots. Legs black, with dense golden-brown dark tomentum and sparse dark small spots. Tarsomeres black, covered by pale and dark tomentum.

Male. Aedeagus evenly curved, somewhat thick. Lamella with blunt, rounded, upwards oriented apex (Fig 1G).

Differential diagnosis. The new species by the general appearance of the body is similar to *C. albatus* (Fig. 1D, J), but differs from by differences in the coloration of body and by shape of the aedeagus. The head of *C. juliae* sp. n. is covered by white pubescence, while head of *C. albatus* covered by brown pubescence. The mandibles of *C. juliae* sp.n. are more massive than that in *C. albatus*. The elytra of *C. juliae* covered by white pubescence more than $\frac{3}{4}$ of surface of elytra, without rhombic area of white pubescence, while elytra of *C. albatus* covered by white pubescence, $\frac{3}{4}$ or less of surface of elytra, forming more or less strict rombic area. Anterior ventrolateral pair of spine more robust and sharp in *C. albatus* and more slender in *C. juliae* sp.n. The aedeagus of *C. juliae* sp.n. is more evently curved than that in *C. albatus*. The lamella of *C. juliae* sp.n. is wider rounded, more blunt and less facing up as by *C. albatus*.

Etymology. This species is named after Julia Kovaleva (Moscow, Russia), good friend and inspirer of my colleague, entomologist Anton Kozlov (Moscow, Russia).

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Callimetopus albatu (Newman, 1842)

Fig. 1D, J

Euclea albata; Newman, 1842: The Entomologist, 1, 17

Euclea albata; Lacordaire, 1872: Paris, Libr. Enc. Roret, 9, 2

Callimetopus albatu; Breuning, 1962: Ent. Arb. Mus. Frey, 13, 2: 453- 452

Callimetopus albatu; De la Cruz & Adorata, 2012: Philippine Ent., 26, 2:

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Type material. Holotype: *Euclea albata* Newman Entom 290; Type. [BMNH].

Additional material: Philippines: Luzon isl., Cagayan, Santa Ana, 05.2014 (1); Nueva Vizcaya, Dupax del Sur, 05.2014 (1); Nueva Vizcaya, Kayapa, 03.2013 (1), 07.2013 (1), 10.2014 (1), 03.2015 (1); Nueva Vizcaya, Malico, 05.2014 (1); Sierra Madre, Aurora, Dingalan, 07.2015 (1), Sierra Madre, Isabela, 07.2013 (1) [DUBC].

General distribution: Philippines: Luzon Island (Fig. 2D).

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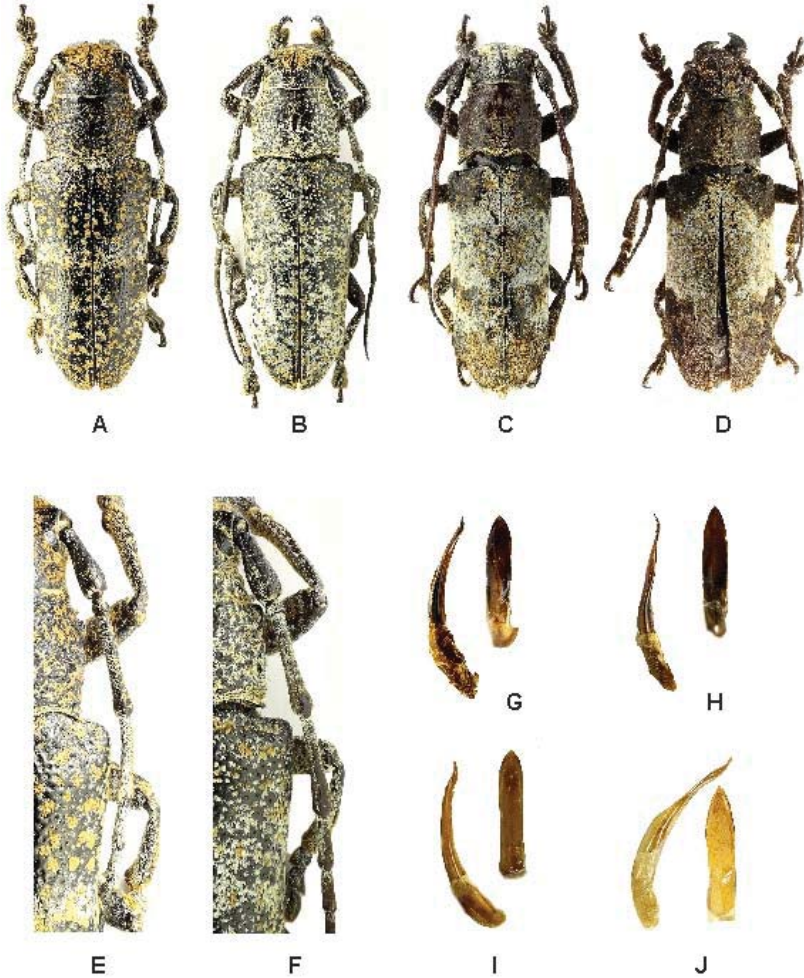


Fig. 1. *Callimetopus* species:

A - habitus of the paratype of *C. antonkozlovi* sp. n.; B - habitus of *C. variolosus*; C - habitus of the holotype of *C. juliae* sp. n.; D - habitus of *C. albatus*; E - pubescence of 4-7 antennomere and fragment of elytral coloration of *C. antonkozlovi* sp. n.; F - pubescence of 4-7 antennomere and fragment of elytral coloration of *C. variolosus*; G - aedeagus (lateral and dorsal view) of *C. antonkozlovi* sp. n.; H - aedeagus (lateral and dorsal view) of *C. variolosus*; I - aedeagus (lateral and dorsal view) of *C. juliae* sp. n.; J - aedeagus (lateral and dorsal view) of *C. albatus*.

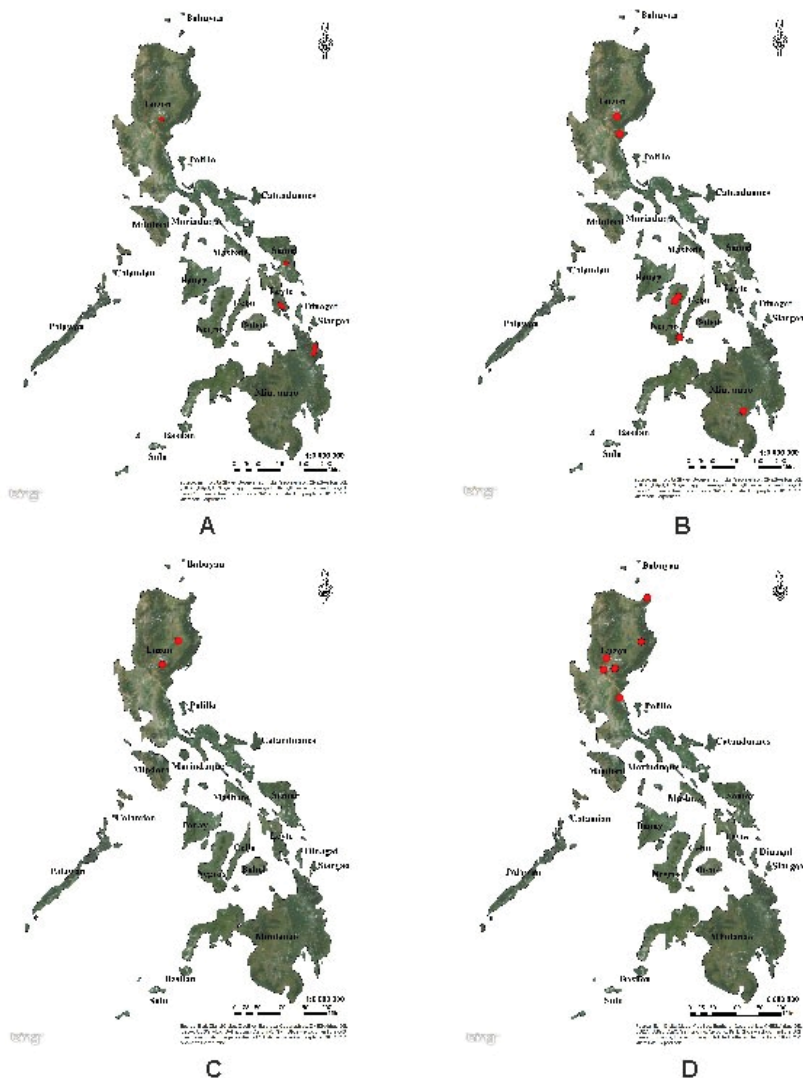


Fig. 2. Distribution maps of *Callimetopus* species (A-*C. antonkozlovi* sp. n., B - *C. variolosus*, C - *C. juliae* sp. n., D - *C. albus*)

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