

## A new combination and a new subspecies in the genus *Aprophata* Pascoe, 1862 (Coleoptera: Cerambycidae) of the Philippines

Aivars Dunsķis, Arvīds Barševskis

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A new combination is proposed for *Aprophata marinduquensis marinduquensis* (Vives, 2012) comb. and stat. nov. from Marinduque island (Philippines), originally described in the genus *Pseudaprophata* Breuning, 1961 (Coleoptera: Cerambycidae). *Aprophata marinduquensis luzonensis* ssp. nov. from Luzon (Philippines) is described and illustrated. An updated check-list of the genus *Aprophata* is proposed. The genus *Aprophata* in the world fauna is now represented by eight species.

Key words: *Aprophata*, Cerambycidae, longhorn beetles, new combination, new subspecies.

Aivars Dunsķis. Daugavpils University, Institute of Life Sciences and Technology, Department of Biosystematics, Coleopterological Research Center, Vienības Str. 13, Daugavpils, LV-5401, Latvia, E-mail: aivars.dunsķis@biology.lv

Arvīds Barševskis. Daugavpils University, Institute of Life Sciences and Technology, Department of Biosystematics, Coleopterological Research Center, Vienības Str. 13, Daugavpils, LV-5401, Latvia, E-mail: arvids.barsevskis@du.lv

### INTRODUCTION

The tribe Pteropliini of the subfamily Lamiinae Latreille, 1825 (Coleoptera: Cerambycidae) is extremely rich in species and consists of more than 2000 species, distributed mainly in the Oriental region. The genus *Aprophata* Pascoe, 1862 belongs to this tribe and contains eight species, all of which are distributed in the Philippine archipelago. This genus has been studied by several entomologists in 19<sup>th</sup> and 20<sup>th</sup> century; last revision of the whole genus has been provided by Breuning (1962). Recently, there have been some taxonomic changes in the

genus *Aprophata*. Vives (2009) described *A. aurorana* Vives, 2009 from Luzon island. Later, the same author (Vives 2015) transferred *A. aurorana* and *A. quatuordecimmaculata* Breuning, 1947 to the genus *Pseudabryna* Schultze, 1916. The most recently described species of *Aprophata* is *A. nigrescens* Breuning, 1973 from Luzon (Breuning 1973).

This study presents a new combination and description of a new subspecies in *Aprophata*. Besides that, the check-list of this genus is proposed. The genus *Aprophata* in the world fauna is now represented by eight species.

## MATERIAL AND METHODS

All the studied material is deposited at the Beetle collection of Daugavpils University (DUBC), Coleopterological Research Centre, Institute of Life Sciences and Technology (Ilgas, Skrudaliena rural municipality, Daugavpils district, Latvia).

Laboratory research and measurements have been carried out using Nikon AZ100, Nikon SMZ745T and Zeiss Stereo Lumar V12 digital stereomicroscopes, NIS-Elements 6D software. The habitus photographs were obtained with a digital camera Canon EOS 6D with Canon MP-E 65 mm macro lens, using Helicon Focus auto montage and subsequently was edited with Photoshop. The maps of the Philippine Archipelago have been made by the software ArcGis 10.

### Abbreviations

**BMNH** - Natural History Museum (London, UNITED KINGDOM);

**CEV** - Eduard Vives collection (Terrasa, SPAIN);

**DUBC** - Beetle collection of Daugavpils University (Ilgas, LATVIA);

**MNHN** - Muséum National d'Histoire Naturelle (Paris, FRANCE);

**SMF** - Senckenberg Research Institute and Natural History Museum (Frankfurt am Main, GERMANY);

**SMTD** - Senckenberg Natural History Collections of Dresden (Dresden, GERMANY).

## RESULTS

*Aprophata marinduquensis marinduquensis* (Vives 2012) **comb. and stat. nov.** (Fig. 1)

**Examined material:** 28 specimens (18 males, 10 females): Philippines: Mimaropa region, Marinduque province, Marinduque island, August 2012 (1 male), October 2013 (3

females), April 2014 (1 male), September 2014 (1 female); Philippines: Mimaropa region, Marinduque province, Marinduque island, Buenavista, June 2014 (2 males), July 2014 (1 male), July 2015 (2 males), December 2015 (1 female), April 2017 (2 males); Philippines: Mimaropa region, Marinduque province, Marinduque island, Boac, July 2014 (1 male, 2 females), August 2014 (1 male, 1 female); Philippines: Mimaropa region, Marinduque province, Marinduque island, Mount Malindig, March 2015 (2 males), April 2015 (1 female), June 2015 (5 males), October 2018 (1 female).

**Remarks.** *Pseudaprophata marinduquensis* Vives, 2012 was described from Marinduque island and provisionally was compared with *P. albomaculata* Hüdepohl, 1995; *Aprophata* and *Pseudaprophata* Breuning, 1961 are closely related genera, distinguishing by some details of the external morphology of the body. During the examination of the material which are deposited in DUBC for species of *Aprophata* (except *A. eximioides* Breuning, 1961, *A. semperi* Westwood, 1863 and *A. vigintiquatuormaculata* Schwarzer, 1931) and *Pseudaprophata* (except *P. newmanni* (Westwood, 1863) and *P. puncticornis romblonica* Hüdepohl, 1987), we noticed that both these genera can be additionally distinguished by shapes of apical parts of the aedeagus: species of *Aprophata* are characterized by bilobed apices, while that in species of *Pseudaprophata* has regular, uninterrupted apices (Fig. 2). A new combination for *P. marinduquensis* proposed in the present study is based on these differences. Authors recommend to use these characters in the determination of species of both genera.

**General distribution:** Philippines: Marinduque island (Fig. 3).

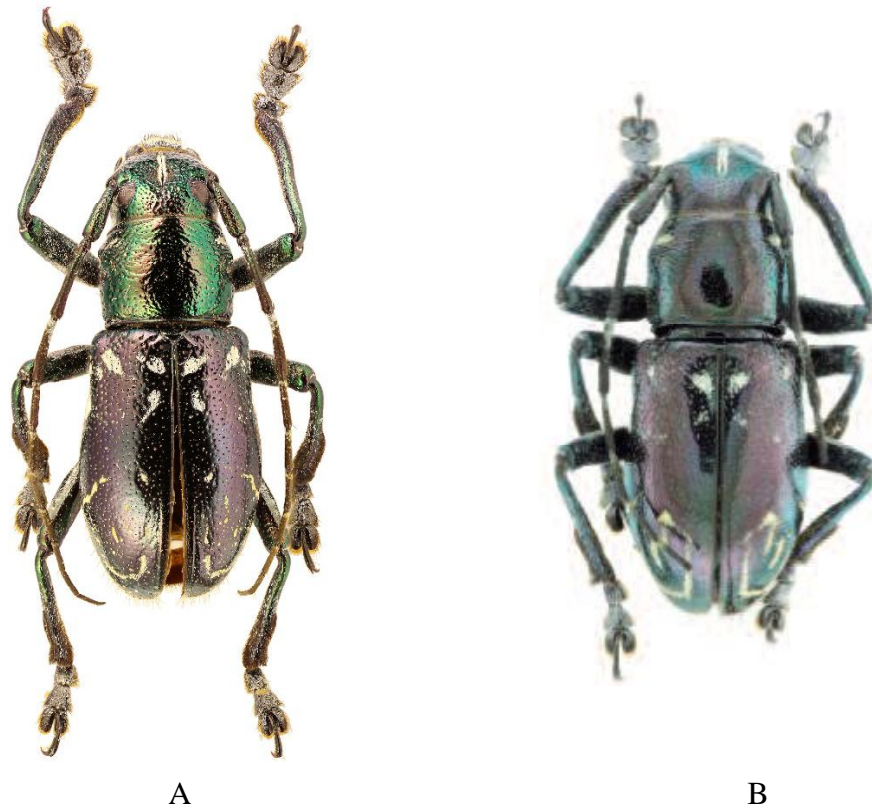


Fig. 1. Habitus (dorsal view) of *Aprophata* and *Pseudaprophata*. A - *Aprophata marinduquensis marinduquensis* (Vives, 2012)(located at DUBC); B - dorsal view of holotypus of *Pseudaprophata marinduquensis* Vives, 2012 (located at CEV (Vives 2012)).



Fig. 2. Aedeagus (ventral view) of species of *Aprophata* Pascoe, 1862 (A - E) and *Pseudaprophata* Breuning, 1961 (F - H): A - *A. eximia* (Newman, 1842); B - *A. nigrescens* Breuning, 1973; C - *A. notha* (Newman, 1842); D - *A. ruficollis* Heller, 1916; E - *A. marinduquensis* (Vives, 2012); F - *P. albomaculata* Hüdepohl, 1995; G - *P. puncticornis negrosiana* Hüdepohl, 1987; H - *P. puncticornis puncticornis* (Heller, 1924).



Fig. 3. Distribution of *A. marinduquensis* (Vives 2012)

***Aprophata marinduquensis luzonensis* ssp. nov.**

(Fig. 4)

**Type material. Holotype:** female. “PHILIPPINES: Cagayan Valley region, Luzon island, Nueva Vizcaya province, Belance, April 2018, local collector leg.” [printed on white rectangular label]. “HOLOTYPUS. *Aprophata marinduquensis luzonensis* ssp. nov., det. A. Dunskis & A. Barševskis, 2019” [printed on red rectangular label].

**Description.** Body elongated, slightly flattened dorsally. Surface shiny, with spots and irregular bands of white pubescence. Maximal length: 16.8 mm, maximal width: 6.1 mm.

Head quadrangular, flattened dorsally, metallic green, with coarse punctures, with elongated parallel-sided band of white pubescence and thin elongated keel in middle portion. Cheeks under eye with white transverse pubescent spot. Eyes not protruding. Head behind eyes with white pubescence. Clypeus yellow-brown, transverse, without pubescence. Labrum massive, concave apically, with dense, white setae on dorsal and darkened setae on frontal portions. Mandibles massive, sharp, black, with two impressions at basal part. Apical maxillar and labial palpomeres black, slightly brown apically. Antennae long and slender, reaching almost apex of elytra. Basal antennomere thickened, bronze metallic shiny; antennomeres 2 and 3 without pronounced metallic gloss, with white, sparse pubescence; remaining antennomeres black, without metallic luster, with white basal pubescence.

Pronotum metallic green, subcylindrical, slightly flattened. Dorsal disc of pronotum with dense, coarse punctures. Latero-apical portions of pronotum with two spots of white pubescence: larger, transverse, and smaller, oval below transverse spot. Scutellum with wide rounded apex.

Elytra metallic bronze, elongated, widest slightly behind middle, with irregular spots of white pubescence. Each elytron with several spots and transverse bands behind scutellum, and with longitudinal strip along suture, with wide apical U-shaped bands and several smaller spots in apical third of elytra. Apex of elytra with long setae.

Underside of body black, with metallic luster and sparse pubescence, with spots of white pubescence along margins.

Male unknown.

**Diagnosis.** Based on the general shape and proportions of the body, *A. m. luzonensis* ssp. nov. is similar to the nominative subspecies *A. m. marinduquensis*, from which it can be distinguished by denser puncturation of the



Fig. 4. Habitus (dorsal view) of *A. marinduquensis luzonensis* ssp. nov. (holotypus)



Fig. 5. Distribution of *A. marinduquensis luzonensis* ssp. nov.

pronotum, bicolor dorsal surface of the body and by the presence of many white spots and bands on the elytra, including characteristic band near suture, while the nominative subspecies has unicolor body, with much less white spots and bands, without presence of band of white pubescence along suture. Besides that, latero-apical portions of the elytra of the new subspecies have large transverse and separate small oval spots, while similar large spots on each elytron in *A. m. marinduquensis* are C-shaped.

**General distribution:** Philippines, central part of Luzon island (Fig. 5).

**Etymology.** The subspecies epithet is the Latinized adjective of Luzon, an island, where the subspecies occurs.

### Check-list of the genus *Aprophata* Pascoe, 1862

1. *A. eximia* (Newman, 1842) [type in BMNH]
  - ( = *Abryna eximia* Newman, 1842)
  - ( = *Abryna eximia* var. *cuprea* Westwood, 1863)
  - ( = *Abryna eximia* var. *purpureo-nigricans* Westwood, 1863)
  - ( = *Abryna eximia* var. *viridis* Westwood, 1863)
2. *A. eximioides* Breuning, 1961 [type in BMNH]
3. *A. nigrescens* Breuning, 1973 [type in MNHN]
4. *A. notha* (Newman, 1842) [type in BMNH]

- (= *Abryna notha* Newman, 1842)
5. **A. *marinduquensis* (Vives, 2012):**
- 5.1. **A. *marinduquensis luzonensis* Dunskis & Barševskis, 2019** [type in DUBC]
- 5.2. **A. *marinduquensis marinduquensis* (Vives, 2012)** [type in CEV]  
(= *Pseudaprophata marinduquensis* Vives, 2012)
6. **A. *ruficollis* Heller, 1916** [type in SMTD]  
(= *Aprophata hoffmeisteri* Schultze, 1916)
7. **A. *semperi* Westwood, 1863** [type in MNHN]
8. **A. *vigintiquatuormaculata* Schwarzer, 1931** [type in SMF]
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