Type specimens of the genera *Doliops* Waterhouse, 1841 and *Lamprobityle* Heller, 1923 (stat. nov.) (Coleoptera: Cerambycidae) and description of two new species deposited in Senckenberg Natural History collections Dresden, Germany

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The article presents the summary of information concerning the types of eleven species of the genus *Doliops* Waterh. and the types of two species of the genus *Lamprobityle* Heller, 1923 (stat. nov.) deposited in Senckenberg Natural History collections Dresden (Germany) (SMTD). New synonymy is proposed: the genus *Stenodoliops* Vives, 2009 is considered as a junior synonym of the genus *Lamprobityle* Heller, 1923. Two new species are described, one of which belongs to the genus *Doliops* Waterh, but the other to the genus *Lamprobityle* Heller, 1923. One species of the genus *Doliops* Waterh., *D. magnifica* (Heller, 1923), has been transferred to the genus *Lamprobityle* Heller, 1923. A Check-list of the genus *Lamprobityle* Heller is added. At present, the total number of *Doliops*-species is forty-four and *Lamprobityle* represented by seven species.

Key words: *Doliops, Stenodoliops, Lamprobityle*, Cerambycidae, Coleoptera, new species, Senckenberg Natural History collections Dresden

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INTRODUCTION

There are 42 species of the genus *Doliops* Waterhouse, 1841 (Coleoptera: Cerambycidae) known in the world (Barševskis 2013). The genus is distributed in the Philippines Archipelago, and one of the species in the nearby islands of Lanyu and Lu Tao, which belong to Taiwan Ar-

chipelago. The species are rather small, approximately 10 - 15 mm, longhorned beetles. Their surface is mostly bright, metallic and lustrous, with a various pattern. Those beetles mimic weevil-genera *Pachyrrhynchus, Metapocyrtus, Polycatus*, etc. (Coleoptera: Curculionidae). Some species of the genus *Doliops* Waterh. probably mimic each other. The most typical examples of mimicry have been summarized by E. Cabigas (2010).

Notwithstanding the fact that the distribution of the genus Doliops Waterh. is confined to only two small archipelagos of Oriental region, this genus has not been studied thoroughly enough, so far. This is stated in a number of recent articles by E.Vives and A.Barševskis (Vives 2005, 2009a, 2009b, 2011, 2012a, 2012b, 2013; Barševskis 2013), in which the authors have described 13 and 8 new species, correspondingly. Some of the formerly described species have not been collected in nature after their description, and they are represented in museum collections by only one or a few type specimens. In some species, the pattern of the body surface is very variable. The majority of species of the genus are of rare or very rare occurrence or they are sporadically distributed. The variability of the species and the lack of seriated material make their identification complicated. The use of male genitalia for determination of the species is also problematic, since they are not included or illustrated in the species descriptions. A.Barševskis (2013) used the form of the *aedeagus* as one of the features in determining the species of the genus Doliops Waterh. for the first time. In recent years, several new genera Stenodoliops Vives, 2009, Hemidoliops Vives, 2012 that are closely related to the genus Doliops Waterh. have been described. All the above-mentioned substantiates the necessity of the taxonomic revision of the genus Doliops Waterh ..

The present article summarizes the information on type specimens of eleven species of the genus *Doliops* Waterh. and types of two species of the genus *Lamprobityle* Heller, 1923 (stat. nov.) deposited in Senckenberg Natural History collections Dresden (Germany), and describes two new species, one of which belongs to the genus *Doliops* Waterh, but the other to the genus *Lamprobityle* Heller. In the article a new synonymy is proposed: genus *Stenodoliops* Vives, 2009 is considered as a junior synonym of the genus *Lamprobityle* Heller, 1923. As a result of the analysis of the type specimens, one species of the genus *Doliops* Waterh. has been transferred to the genus *Lamprobityle* Heller. A checklist of the genus *Lamprobityle* Heller is presented. Thus, the total number of the species of the genus *Doliops* Waterh. known in the world now is forty-four and the number of species belonging to *Lamprobityle* Heller is seven. In addition, the article presents the faunistic information on two species of the genus *Doliops* Waterh., that are deposited in the collection of Senckenberg Natural History collections Dresden, Germany, but are not the types of this genus.

MATERIAL AND METHODS

Material of following collections was used: DUBC – Daugavpils University beetles collection (Ilgas, Daugavpils Distr., Latvia); SMTD - Senckenberg Natural History collections, Museum of Zoology (Dresden, Germany).

The Museum for Zoology in Dresden is one of the oldest natural history collection and dates back to the foundation of the "Kunst- und Kuriositätenkammer"(chamber of art and oddities) by Elector of Saxony, August I in 1560. The exhibits used to be kept in the world-famous "Zwinger". The basis of today's beetle collection was created around 1870 by the first curator of insects, Theodor F. W. Kirsch, who described numerous new species, particularly from South America. Karl M. Heller, curator until 1927, extended mainly the collection of weevils, which with 7,500 primary types is the heart of the collection. In 1942, Willi Carl Max Schultze (1881-1940) acquired on behalf of the Free State of Saxony the Philippine coleoptera collection for 10,000 reichsmarks. Especially worth mentioning are the many types of Pachyrrhynchinae (Curculionidae) and the longhorn beetles, among which the material can be found that is the main subject of this paper. The coleopterological collections which survived the Second World War without major losses had been transferred to several castles and fortresses in Saxony. Today, the Dresden Beetle Collection, one of the biggest and most important collections in Central Europe, is located in a modern building with over 2,000,000 specimen of 80,000 species, among them the primary types of about 12,000 species. Since 2009, the Museum für Tierkunde is part of the Senckenberg Society for Natural Research with headquarters in Frankfurt/Main.

SMTD deposits 21 specimens of 13 species belonging to the genera *Doliops* Waterh. and *Lamprobityle* Heller. Among them there are two specimens bearing the labels of types and both represent distinct taxa, whose descriptions have not been published and therefore are considered as *nomina nuda*. Both taxa are described in this article as new species.

The laboratory research and measurements have been performed using a Nikon D 90 camera, 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 (see Fig. 2) has been drawn using the software ArcGis 10.

In this article, the species deposited in SMTD are arranged in alphabetical order. All the species are represented by photographs of the type specimens (in dorsal and lateral view) and labels. In the list of species, the description of every species includes: the name of the species in original combination, with the author and the year of description and pagination, the number of specimens, distribution (label) data, and the current taxonomic status.

RESULTS AND DISCUSSION

Taxonomic changes

In SMTD two specimens of *Doliops magnifica* (Heller, 1923) are deposited, of which one is the type specimen. Both specimens were collected

in the Philippines archipelago by G.F. Baker, first (type) in Luzon and second in Negros. The specimen collected in Negros was determined by S.Breuning as *Lamprobityle magnifica* Hell., var. (det. Breuning). Heller (1923), by monotypy, included and described this species in the new genus *Lamprobityle*. In the collection of DUBC we have a third specimen, collected in 2014 in N Luzon., The following conclusions are based on study results of all specimens.

Doliops magnifica (Heller, 1923) differs from other species of the genus by the gray surface color, the rugose appearance, the more flattened body, the more cylindrical prothorax, and a smaller head. These characteristics are typical for the genus Stenodoliops Vives, 2009 species (Vives 2009) and for the genus Lamprobityle Heller, 1923, which has hitherto been regarded as a synonym of the genus Doliops Waterh. Comparing the descriptions and collection materials of both taxa, we conclude that the genus Stenodoliops Vives, 2009 is a junior synonym of the genus Lamprobityle Heller, 1923, and Doliops magnifica (Heller, 1923) belongs into this genus as Lamprobityle magnifica Heller, 1923 nov. comb. as in original description. Stenodoliops azureus Vives, 2012, Stenodoliops conspersa (Aurivillius, 1927), Stenodoliops fasciatus Vives, 2012, Stenodoliops mariae Vives, 2009, and Stenodoliops rugulatus Vives, 2012 also belongs to the genus Lamprobityle Heller 1923 as Lamprobityle azureus (Vives, 2012) nov. comb., Lamprobityle conspersa (Aurivillius, 1927) nov. comb., Lamprobityle fasciatus (Vives, 2012) nov. comb., Lamprobityle mariae (Vives, 2009) nov. comb., and Lamprobityle rugulatus (Vives, 2012) nov. comb.

Description of new species

Doliops schultzei sp. nov. (Fig. 1)

Type material. Holotype: Male. Philippines: Polillo Isl., G.F.Baker [leg.], coll.W.Schultze, Ankauf 1942. [*Doliops polilloensis* Schultze [*nomen nu-dum*]]. Deposited in SMTD.

Description. Body black, mat, with visible luster. Surface convex, with green scales. Length: 11.5 mm, width: 4.5 mm.

Head almost square, parallel-sided, with lobate eyes and longitudinal band of green scales between eyes and antennal bases. Cheeks beneath the eyes without spots. Labrum covered with numerous setae. Head black, finely punctate and shiny. Antennae of type specimen damaged. Basal segments of antennae black, shiny and pubescent, with slight metallic luster. Prothorax cylindrical. Pronotum convex, black, shiny, along the edges with band of green scales. Dorsal disc of pronotum mat, without scales, slightly tomentose laterally and with light luster. Scutellum triangular, with rounded angles, tomentose. Elytra short, convex, black, mat, with visible light luster, with transverse, wide, irregulare bandformig spots of green scales, which converge with a green interrupted longitudinal band along the elytral suture and apex of elytra. Elongated green band starts at the basis of the elytra near the scutellum and is parallel to the suture, and then narrows slightly and converges with a transverse 8-shaped irregular spot, the upper edge of which near the suture is interrupted. In apical direction of elytra along a suture will continue with two spots, one after the other. In apical part elytra with a v-shaped strip that continues around the apex. In apical part of the elytra is another transversal irregular spot. Between these spots there are black, mat areas with a visible light lustre. Elytra on the side with protrunding shoulder bumps. Elytra behind shoulders slightly impressed, without raised nodules between the shoulder and the scutellum. Shoulders black and encircled by the green spots. Width of elytra at shoulders: 4.1 mm. Largest width of elytra behind middle: 4.5 mm. Elytra finely punctate. Anteriorly with sparse and coarse punctuation and pubescence. Meso-, metaepimera and sternites with spots at their sides. Legs short, thick. Femora with greenish spot at apex and more or less tomentose. Tibia broadened and flattened apically. Tarsi short and broad. Surface of tarsomeres covered with grey pubescence. Tibia and tarsi apically covered with numerous setae.

Distribution: Philippines: Polillo Isl.

Differential diagnosis. This new species differs from the others by a characteristic pattern of the body surface.

Mimicry. Currently we have no data about the mimicry of this species.

Etymology. This species is named after German entomogist Willi Carl Max Schultze (1881-1940), who made a significant contribution to the research of the the genus *Doliops* Waterh. and described four new species whith types deposited in SMTD.

Lamprobityle mindanaoense sp. nov. (Fig. 2)

Type material. Holotype: Male. Philippines: Mindanao, Surig., Surigao, coll.W.Schultze. [*Doliops mindanensis* Schultze [*nomen nudum*]]. Deposited in SMTD.

Description. Body black, flattened, with rugosae surface, with white scalish tomentum and with light metallic luster. Length: 8.1 mm, width: 3.6 mm.

Head small, parallel-sided, with white scalish tomentum in frontal part between eyes and antennal bases. Labrum covered with numerous setae. Head black, finely punctate and shiny. Antennae of type specimen damaged. Basal segments of antennae black, and pubescent, with slight luster. Prothorax cylindrical, pubescent, with slight



Fig. 1. Doliops schultzei sp. nov. (A-dorsal view, B-lateral view, C-labels)



Fig. 2. Lamprobityle mindanaoense spec. nov. (A - dorsal view, B - lateral view, C - labels)

luster, along the edges more pubescent. Dorsal disc of pronotum shiny, slightly tomentose, with sparse punctures. Scutellum triangular, with rounded angles, tomentose, in basal part with white scalish tomentum. Elytra elongate, black, rugose, with visible luster and white scalish tomentum, which make irregular, misty spots in basal, central and apical parts. Between these spots there are black, mat areas with a visible light lustre. Elytra on the sides with protruding shoulder bumps. Elytra behind shoulders slightly impressed, without raised nodules between the shoulder and the scutellum. Green spots encircle otherwise black shoulders. Width of elytra at shoulders: 4.1 mm. Largest width of elytra behind middle: 4.5 mm. Elytra finely punctate. Anteriorly with sparse and coarse punctuation and pubescence. Meso-, metaepimera and sternites with spots at their sides. Legs black, with slight metallic luster, covered by sparse pubescence, denser on tibiae, which are broadened and flattened apically. Foretibia flattened, with sharp external margin. Tarsi short and broad. Surface of tarsomeres covered with pubescence. Tibia and tarsi apically covered with numerous setae.

Distribution: Philippines: Mindanao Isl.

Differential diagnosis. This new species differs from the others by the characteristic pattern of the body surface. Similar to *L. mariae* Vives, 2009 from N Luzon, but differs by shape of elytra.

Etymology. The name *mindanaoense* refers to the type locality, Island Mindanao.

List of species, deposited in Senckenberg Natural History collections Dresden

1. Doliops bakeri Heller, 1924 (Fig. 3)

Doliops bakeri Heller, 1924: 204 Material: 2 specimens, incl. Holotype. Distribution (labels data): Negros Isl. (2 ex). Current status: Valid species.

2. Doliops basilana Heller, 1923 (Fig. 4)

Doliops basilana Heller, 1923: 45 Material: 1 specimen, Holotype. Distribution (labels data): Basilana Isl. Current status: Valid species.

3. Doliops curculionoides Waterhouse, 1841?

Doliops curculionoides Waterhouse, 1841: 222 Material: 3 specimens.

Distribution (labels data): Bucas Isl. (1 ex), Samar Isl. (2 ex).

Current status: Valid species.

Remarks: All three specimens have a v-shaped apical spot on elytra.

4. Doliops duodecimpunctata Heller, 1923 (Fig. 5)

Doliops duodecimpunctata Heller, 1923: 46 Material: 3 specimens, incl. Holotype. Distribution (labels data): Mindanao Isl., Surigao (3 ex).

Current status: Valid species.

5. *Doliops frosti* Schultze, 1923 (Fig. 6)

Doliops frosti Schultze, 1923: 598 Material: 1 specimen, Holotype. Distribution (labels data): Samar Isl. Current status: Valid species.

6. Doliops geometrica Waterhouse, 1842

Doliops geometrica Waterhouse, 1842: 44 Material: 2 specimens. Distribution (labels data): Bucas Isl. (1 ex), Mindanao Isl. (1 ex) Current status: Valid species.







Fig. 4. Doliops basilana Heller, 1924 (A-dorsal view, B-lateral view, C-labels)



Fig. 5. Doliops duodecimpunctata Heller, 1923 (A-dorsal view, B-lateral view, C-labels)



Fig. 6. Doliops frosti Schultze, 1923 (A – dorsal view, B – lateral view, C – labels)



Fig. 7. Doliops imitator Schultze, 1918 (A-dorsal view, B-lateral view, C-labels)



Fig. 8. Doliops metallica Breuning, 1938 (A-dorsal view, B-lateral view, C-labels)



Fig. 9. Doliops multifasciata Schultze, 1922 (A-dorsal view, B-lateral view, C-labels)



Fig. 10. Doliops pachyrrhynchoides Heller, 1916 (A-dorsal view, B-lateral view, C-labels)



Fig. 11. Doliops siargaoensis Schultze, 1919 (A-dorsal view, B-lateral view, C-labels)

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Fig. 12. Doliops villalobosi Heller, 1926 (A-dorsal view, B-lateral view, C-labels)



Fig. 13. *Lamprobityle magnifica* Heller, 1923 (*=Doliops magnifica* (Heller, 1923)) (A–dorsal view, B–lateral view, C–labels)

7. Doliops imitator Schultze, 1918 (Fig. 7)

Doliops imitator Schultze, 1918: 377 Material: 1 specimen, Holotype. Distribution (labels data): Luzon Isl. Current status: Valid species.

8. Doliops metallica Breuning, 1938 (Fig. 8)

Doliops metallica Breuning, 1938: 348 Material: 1 specimen, Holotype. Distribution (labels data): Luzon Isl. Current status: Valid species.

9. Doliops multifasciata Schultze, 1922 (Fig. 9)

Doliops multifasciata Schultze, 1922: 572 Material: 1 specimen, Holotype. Distribution (labels data): Mindanao Isl. Current status: Valid species.

10. *Doliops pachyrrhynchoides* Heller, **1916** (Fig. 10)

Doliops pachyrrhynchoides Heller, 1916: 309 Material: 1 specimen, Holotype. Distribution (labels data): Luzon Isl. Current status: Valid species.

11. *Doliops schultzei* Barševskis & Jäger, 2014 (sp. nov.) (Fig. 1)

Doliops polilloensis Schultze [nomen nudum] Material: 1 specimen, Holotype. Distribution (labels data): Polillo Isl. Current status: Valid species.

12. Doliops siargaoensis Schultze, 1919 (Fig. 11)

Doliops siargaoensis Schultze, 1919: 548 Material: 1 specimen, Holotype. Distribution (labels data): Siargao Isl. Current status: Valid species.

13. *Doliops villalobosi* Heller, 1926 (Fig. 12)

Doliops villalobosi Heller, 1926: 43 Material: 1 specimen, Holotype. Distribution (labels data): Samar Isl. Current status: Valid species.

14. Lamprobityle magnifica Heller, 1923 (Fig. 13)

Lamprobityle magnifica Heller, 1923: 420 Material: 2 specimens, incl. Holotype. Distribution (labels data): Luzon Isl. (1 ex), Negros Isl. (1 ex). Current status: Valid species.

15. *Lamprobityle mindanaoense* Barševskis & Jäger, 2014 (sp. nov.) (Fig. 2)

Doliops mindanensis Schultze [nomen nudum] Material: 1 specimen, Holotype. Distribution (labels data): Mindanao Isl. Current status: Valid species.

A Check-list of the genus *Lamprobityle* Heller, 1923

1. Lamprobityle azureus (Vives, 2012)

Stenodoliops azureus Vives, 2012: 79 Distribution: Philippines, Samar Isl.

2. Lamprobityle conspersa (Aurivillius, 1927)

Lamprobityle conspersa (Aurivillius, 1927: 563 Distribution: Philippines, Sibuyan Isl.

3. Lamprobityle fasciatus (Vives, 2012)

Stenodoliops fasciatus Vives, 2012: 45 Distribution: Philippines, Mindanao Isl.

4. Lamprobityle magnifica Heller, 1923

Lamprobityle magnifica Heller, 1923: 420 Distribution: Philippines, Luzon Isl., Negros Isl.

5. Lamprobityle mariae (Vives, 2009)

Stenodoliops mariae Vives, 2009: 17 Distribution: Philippines, Luzon Isl.

6. *Lamprobityle mindanaoense* Barševskis & Jäger, 2014 (sp. nov.)

Lamprobityle mindanaoense Barševskis & Jaeger, 2014: 11 Distribution: Philippines, Mindanao Isl.

7. Lamprobityle rugulatus (Vives, 2012)

Stenodoliops rugulatus Vives, 2012: 78 Distribution: Philippines, Luzon Isl.

CONCLUSIONS

The Museum for Zoology in Dresden (in present moment - Senckenberg Natural History collections Dresden (SMTD)) is one of the oldest natural history collection in Germany, which founded as chamber of art and oddities by Elector of Saxony, in 1560. The basis of the beetle collection of SMTD was created around 1870 by famous German coleopterologists Theodor F. W. Kirsch, Karl M. Heller, Willi C. M. Schultze etc. In SMTD are deposited the types of eleven species of the genus Doliops Waterh. and the types of two species of the genus Lamprobityle Hell. This article summarizes the information about the genus Doliops Waterh. and Lamprobityle Hell. types stored in the SMTD plays an important role in future studies of this genus.

Comparing the descriptions and collection materials of genera Stenodoliops Vives 2009 and Lamprobityle Heller, 1923, we conclude that the genus Stenodoliops Vives is a junior synonym of the genus Lamprobityle Heller, and Doliops magnifica (Heller, 1923) belongs into the genus Lamprobityle Heller as Lamprobityle magnifica Heller, 1923 nov. comb. as in original description. Stenodoliops azureus Vives, 2012, Stenodoliops conspersa (Aurivillius, 1927), Stenodoliops fasciatus Vives, 2012, Stenodoliops mariae Vives, 2009, and Stenodoliops rugulatus Vives, 2012 also belongs to the genus Lamprobityle Heller 1923 as Lamprobityle azureus (Vives, 2012) nov. comb., Lamprobityle conspersa (Aurivillius, 1927) nov. comb., Lamprobityle fasciatus (Vives, 2012) nov. comb., Lamprobityle mariae (Vives, 2009) nov. comb., and Lamprobityle rugulatus (Vives, 2012) nov. comb..

In this article we describe two new species: *Doliops schultzei* Barševskis & Jäger, 2014 and *Lamprobityle mindanaoense* Barševskis & Jäger, 2014

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REFERENCES

- Barševskis A. 2013. Contribution to the knowledge of the genus *Doliops* Waterhouse, 1841 (Coleoptera: Cerambycidae). *Baltic J. Coleopterol.*, 13 (2): 73 – 89.
- Breuning S. 1938. Novae species Cerambycidarum VI. Festschr. E. Strand, 4 : 180-392.
- Cabigas E. 2010. A Folio of genus *Pachyrrhynchus* Germar model and its mimics. Salagubang, 1-51.
- Heller K. M. 1926. Neue, altweltliche Bockkäfer. Tijdschr. Ent., 69 : 19-150, 1 pl.
- Heller K. M. 1924. Neue, vorwiegend philippinische Bockkäfer. Ent. Mitteil., 13, 4-5:195-214, 16 fig.
- Heller K. M. 1923. Neue Bokkäfer von den Philippinen und aus Borneo. Deutsche Ent. Z.: 414-425, 6 fig.
- Heller K. M. 1923. Neue malayische, meist philippinische Bockkäfer und ein neuer Rüsselkäfer. Tijdschr. Ent., 66: 33-48, 1 pl.
- Heller K. M. 1916. Philippinische Käfer gesammelt von Prof. Fuller-Baker, Los Bańos. Deutsche Ent. Z. : 269-311, 1 pl.

- Schultze W. 1923. Eleventh contribution to the *Coleoptera* fauna of the Philippines. The Philipp. Journ. Sc., 23, 6: 595-607, 1 pl.
- Schultze W., 1922. X. Beitrag zur Coleopteren Fauna der Philippinen. The Philipp. Journ. Sc., 21, 6: 569-574, 4 pl.
- Schultze W. 1919. Seventh contribution to the *Coleoptera* fauna of the Philippines. The Philipp. Journ. Sc., 15, 6: 545-561, 1 pl., 3 fig.
- Schultze W. 1918. Sixth contribution to the *Coleoptera* fauna of the Philippines. The Philipp. Journ. Sc., 13, D, 6: 371-381, 1 pl.
- Vives E. 2013. New or interesting Cerambycidae from the Philippines (Part VII) (Coleoptera, Cerambycidae). Les Cahiers Magellanes, NS, 11: 62–75.
- Vives E. 2012a. New or interesting Cerambycidae from the Philippines (Part V) (Coleoptera, Cerambycidae). Les Cahiers Magellanes, NS, 7:70–82.
- Vives E. 2012b. New or interesting Cerambycidae from the Philippines (Part VI) (Coleoptera, Cerambycidae). Les Cahiers Magellanes, NS, 9: 34–46.
- Vives E. 2011. New or interesting Cerambycidae from the Philippines (Part IV) (Coleoptera, Cerambycidae). Les Cahiers Magellanes, NS, 3: 9–19.
- Vives E. 2009a. New or interesting Cerambycidae from the Philippines (Part II) (Coleoptera, Cerambycidae). Les Cahiers Magellanes, 88: 1–25.
- Vives E. 2009b. New or interesting Cerambycidae from the Philippines (Part III) (Coleoptera, Cerambycidae). Les Cahiers Magellanes, 105: 1–20.
- Vives E. 2005. New or interesting Cerambycidae from the Philippines (Part I) (Coleoptera, Cerambycidae). Les Cahiers Magellanes, 49: 1–13.

- Waterhouse G. R., 1845. Descriptions of some new Coleopterous Insects from the Philippine Islands, collected by H. Cuming, Esq. The Trans. Linn. Soc. London, 1, 4: 36-45.
- Waterhouse G. R., 1841. Descriptions of various Coleopterous Insects brought from the Philippine Islands by Mr. Cuming. The Ann. Mag. Nat. Hist., 8, 50 : 221-222.

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