

# SYNOPSIS OF THE TRIBE DORCASHEMATINI THOMSON, 1860 (COLEOPTERA, CERAMBYCIDAE, LAMIINAE) OF THE PHILIPPINES WITH THE DESCRIPTION OF *OLENECAMPTUS CABRASAE* SP. NOV. FROM DAVAO ORIENTAL

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Medina M.N. 2023. Synopsis of the tribe Dorcaschematini Thomson, 1860 (Coleoptera, Cerambycidae, Lamiinae) of the Philippines with the description of *Olenecamptus cabrasae* sp. nov. from Davao Oriental. *Acta Biol. Univ. Daugavp.*, 23(2): 113-126.

## Abstract

A synopsis of the tribe Dorcaschematini in the Philippines consists of sixteen species of *Cylindrepomus* Blanchard, 1853, and five species and five subspecies of *Olenecamptus* Chevrolat, 1835. *Cylindrepomus peregrinus samarensis* Dillon & Dillon, 1948 is placed back as a synonym of *C. peregrinus* Pascoe, 1858. Distribution data of *C. peregrinus* is now extended in the Davao Region of Mindanao Island Philippines. A comparison of the number of species and endemism between several countries in Asia is also provided. A description of *Olenecamptus cabrasae* sp. nov. from Mindanao Island is presented.

Keywords: Checklist, *Cylindrepomus*, longhorns, *Olenecamptus*, Philippines

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## INTRODUCTION

The tribe Dorcaschematini Thomson, 1860 is a widely distributed tribe of Lamiinae occurring in almost all biogeographic regions. Most species are found in Asia, the Palearctic region, and Oceania, including the Australian region, Africa, and Palearctic. It is easily distinguished from the subfamily Lamiinae for having a unique antennal scape: shorter than the head, asperous on one side or both, and robust or strongly expanded (Dillon & Dillon 1948). The world fauna of the tribe consists of ten genera: *Brachyole-necamptus* Breuning,

1948, *Dorcaschema* Chevrolat, 1844, *Falsocularia* Breuning, 1942, *Olenecamptus*, Chevrolat, 1835, *Cylindrecamptus* Breuning, 1940, *Microlene-camptus* Pic, 1925, *Macrocamptus* Dillon & Dillon, 1948, *Momisofalsus* Pic, 1950, *Nano-camptus* Vives, 2022, and *Cylindrepomus* Blanchard, 1853. In the Philippines, the tribe is represented by two genera, *Cylindrepomus* and *Olenecamptus*.

The genus *Cylindrepomus* can be easily distinguished from *Olenecamptus* for having forelegs a little longer than the middle and hind legs. The difference in length is almost unnoticeable (vs. forelegs prominently longer

compared to middle and hind legs in *Olenecamptus*), and body slenderer in *Cylindrepomus*, more robust in *Olenecamptus*. The recent catalog of Philippine *Cylindrepomus* listed fifteen species and one subspecies (Medina et al. 2022) while *Olenecamptus* is composed of five species and five subspecies (Roguet 2023, Tavavilian & Chevillotte 2023). Regarding *Cylindrepomus peregrinus samarensis* Dillon & Dillon, 1948, the species is considered as a variation of *C. peregrinus* Pascoe, 1858, not a subspecies. The correct list of *Cylindrepomus* in the Philippines includes 16 species.

As a megadiverse country, the Philippines is considered a treasure chest for beetle research, particularly its long-horned beetles. Unfortunately, taxonomic work on Coleoptera in the Philippines is being hampered by a lack of access to type material, few researchers, almost no government funding, and limited literature access. Fortunately, there are already existing websites in which researchers can access information regarding the world's long-horned beetle fauna (Vitali & Vitali 2023, Roguet 2023, Tavakillian & Chevillotte 2023, Zoological Institute of the Russian Academy of Sciences 2023, Bezark 2023). The primary intention of this paper is to provide an updated checklist of Dorcaschematini species in the Philippines as supplementary data in providing the Catalog of Philippine Cerambycidae. A new species of *Olenecamptus* from Davao Oriental in Mindanao Island is also described and illustrated.

## MATERIAL AND METHODS

The species checklist was primarily obtained from various databases and species catalogs (Breuning 1962, Dillon & Dillon 1948, Hüdelpohl 1987, Medina et al. 2022). The morphological characters of the examined materials were observed under the Leica MZ 12.5 stereomicroscope. Habitus images were taken using a Canon EOS 6D digital camera equipped with an MP-E 65mm macro lens mounted in StackShot macro rail automated

with Helicon Remote version 4.3.0.w. All images were stacked using Helicon Focus version 8.1.1 and processed using a licensed Photoshop CS6 Portable software version.

Measurements of the various body parts were noted as follows: LB (LH+LP+LE) = sum of LH+LP+LE; LH = length of the head, dorsally; WH = maximum width across a head from the outer margin of a gena to that of another; LG = length of gena from upper margin to lower margin; LL = length of lower eye lobe from upper margin to lower margin; WL = maximum width across lower eye lobe; LP = length of pronotum from base to apex along midline; WP = maximum width across pronotum; LE = length of elytra from a level of basal margins to apices of clothed elytra; WEH = width of elytra at humeri; / separates different lines on a label; // separates different labels. All measurements are given in millimeters (mm).

Materials mentioned in the checklist are deposited in the following museums and collections:

AMNH	American Museum of Natural History, New York.
ANSP	Academy of Natural Sciences of Philadelphia, USA.
CAS	California Academy of Sciences, San Francisco, USA.
MMCP	Milton Medina Collection, Tagum City, Philippines.
MfN	Museum für Naturkunde - Leibniz Institute for Evolution and Biodiversity Science, Berlin.
MNHNP	Muséum National d'Histoire Naturelle, Paris, France.
NHML	The Natural History Museum, London.
NRM	Naturhistoriska Riksmuseet, Stockholm, Sweden.
NMNH	United States National Museum (Smithsonian), Washington, DC, USA.
PNM	Philippine National Museum, Ermita, Manila, Philippines.

SMF	Natur-Museum und Forschungs-Institut Senckenberg, Frankfurt am Main, Germany.	Capiz Western Visayas; Mindanao: Zamboanga).
SNSD	Senckenberg Naturhistorische Sammlungen Dresden, Germany.	Type deposition: Holotype, SNSD.
ZMK	Zoologisk Museum, Copenhagen	<b><i>Cylindrepomus ansihagani</i> Medina &amp; Cabras, 2022</b>
ZSM	Zoologische Staatssammlung des Bayerischen Staates, München.	<i>Cylindrepomus ansihagani</i> Medina & Cabras, 2022: 28.

## RESULTS AND DISCUSSION

The following section below shows the catalog of *Cylindrepomus* and *Olenecamptus* species in the Philippines. The catalog includes articles citing the species, distribution, type deposition, synonymies, and other taxonomic notes for some species. Species with asterisk (\*) means new distribution record. The species with a wide range of distribution, the countries are arranged in alphabetical order and the specific provinces or areas are inclosed in parenthesis as in *O. bilobus bilobus*. The country's historical names are retained but modern names are already included.

### The tribe Dorcaschematini in the Philippines

#### Genus *Cylindrepomus* Blanchard, 1853

*Cylindrepomus nigrofasciatus* Blanchard, 1853: 268. (Type species)

#### ***Cylindrepomus albomaculatus* Breuning, 1947**

*Cylindrepomus albomaculatus* Breuning, 1947: 26; Breuning 1962: 417; Hüdepohl 1987: 74.

Distribution: Philippines.

Type deposition: Holotype male, NRM.

#### ***Cylindrepomus albosignatus* Breuning, 1974**

*Cylindrepomus albosignatus* Breuning 1974: 38; Hüdepohl 1987: 74.

Distribution: Philippines (Luzon: Panay, Gulasí, Zambales; Visayas: Mt. Macosolon in

Type deposition: Holotype male, MMCP.

Material examined: *C. ansihagani*, male holotype, MMCP.

#### ***Cylindrepomus astyochus* Dillon & Dillon, 1948**

*Cylindrepomus astyochus* Dillon & Dillon, 1948: 258, 262; Breuning 1962: 417; Hüdepohl 1987: 73.

Distribution: Philippines (Palawan; Visayas, Negros).

Type deposition: Holotype male, ANSP.

#### ***Cylindrepomus atropos* Dillon & Dillon, 1948**

*Cylindrepomus atropos* Dillon & Dillon, 1948: 257, 260; Breuning 1962: 416; Hüdepohl 1987: 73; Lingafelter *et al.* 2014: 21; Vives 2017: 52.

Distribution: Philippines (Luzon: Apayao; Visayas: Mt. Halcon in Mindoro, Samar).

Type deposition: Holotype female, NMNH (Smithsonian), USA.

#### ***Cylindrepomus bayanii* Hüdepohl, 1987**

*Cylindrepomus bayanii* Hüdepohl, 1987: 74.

Distribution: Philippines (Romblon).

Type deposition: Holotype male, ZSM.

#### ***Cylindrepomus bivitticollis* Breuning, 1947**

*Cylindrepomus bivitticollis* Breuning, 1947: 27; Breuning 1962: 416; Hüdepohl 1987: 74; Vives 2013: 72.

Distribution: Philippines (Mindanao: Mt. Kitanglad, Bukidnon).

Type deposition: Holotype male, NRM.

***Cylindrepomus cicindeloides* Schwarzer, 1926**

*Cylindrepomus cicindeloides* Schwarzer, 1926: 290; Breuning 1940: 528, 537; Breuning 1962: 417; Hüdepohl 1987: 74.

Distribution: Philippines (Luzon: Mt. Banahao).

Type deposition: Holotype, SMF.

***Cylindrepomus elisabethae* Hüdepohl, 1987**

*Cylindrepomus elisabethae* Hüdepohl, 1987: 74-75.

Distribution: Philippines (Mindanao: Tandag Surigao del Sur).

Type deposition: Holotype female, ZSM.

***Cylindrepomus flavicollis* Breuning, 1947**

*Cylindrepomus flavicollis* Breuning, 1947: 25; Breuning 1962: 416; Hüdepohl 1987: 74.

Distribution: Philippines.

Type deposition: Holotype male, NRM.

***Cylindrepomus mucronatus* Schwarzer, 1926**

*Cylindrepomus mucronatus* Schwarzer, 1926: 290; Breuning 1940: 528, 537; Breuning 1962: 416; Hüdepohl 1987: 73.

Distribution: Philippines (Luzon: Imugan).

Type deposition: Holotype male, SMF.

***Cylindrepomus nigerrimus* Vives, 2017**

*Cylindrepomus nigerrimus* Vives, 2017: 52.

Distribution: Philippines, Luzon, Nueva Vizcaya, Dupax del Sur.

Type deposition: Holotype male, Collection E. Vives, Terrassa, Spain.

***Cylindrepomus peregrinus* Pascoe, 1858**

*Cylindrepomus peregrinus* Pascoe, 1858: 241; Gemminger & Harold 1873: 3060; Nonfried 1894: 196; Shelford 1902: 282; Heller 1916: 306; Aurivillius 1922a: 213; Breuning 1940: 528, 540; Dillon & Dillon 1948: 264; Gilmour 1950: 222; Breuning 1962: 417; Breuning & Chûjô 1964: 249; Hüdepohl 1947: 74; Lingafelter et al. 2014: 297; Yokoi & Heffern 2016: 58; Medina et al. 2022: 27.

Synonym:

*Cylindrepomus peregrinus samarensis* Dillon & Dillon, 1948: 264

Distribution: Indonesia (Java, Sarawak). Malaysia (Borneo). Philippines (Luzon. Visayas: Samar, Negros, Panay. Mindanao: Davao Oriental).

Type information and deposition: *Cylindrepomus peregrinus* Pascoe, 1858, male Holotype, NHM. *Cylindrepomus peregrinus samarensis* Dillon & Dillon, 1948, Holotype male, NMNH. *Cylindrepomus peregrinus* var. *connexa* Gilmour, 1950, Holotype male, NHM.

Material examined: *C. peregrinus*, female, Maragusan, Davao de Oro (MMCP).

Taxonomic notes: The slight differences in the elytral bands of *Cylindrepomus peregrinus samarensis* Dillon & Dillon, 1948 are considered a variation and not a sub-species of *C. peregrinus* (Hüdepohl 1987, p. 74). Hence, correcting the previous catalog (Medina et al. 2022) and placing back *C. peregrinus samarensis* as synonymous with *C. peregrinus*.

***Cylindrepomus rufofemoratus* Breuning, 1947**

*Cylindrepomus rufofemoratus* Breuning, 1947: 47; Breuning 1962: 418; Hüdepohl 1987: 73.

Distribution: Philippines.

Type deposition: Holotype male, NRM.

***Cylindrepomus sexlineatus* Schultzze, 1934**

*Cylindrepomus sexlineatus* Schultzze, 1934: 312; Breuning 1940: 529, 538; Breuning 1947: 6; Breuning 1950: 527; Breuning 1962: 416; Hüdepohl 1987: 74.

Distribution: Philippines (Mindanao: Lanao Province).

Type deposition: Holotype female, SNSD.

Synonyms: *Cylindrepomus sexlineatus* m. *ininterruptus* Breuning, 1950: 527; *Cylindrepomus sexlineatus* m. *reductevittatus* Breuning, 1947: 416.

***Cylindrepomus ysmaeli* Hüdepohl, 1987**

*Cylindrepomus ysmaeli* Hüdepohl, 1987: 74.

Distribution: Philippines (Luzon: Mountain Province).

Type deposition: Holotype female, ZSM.

**Genus *Olenecamptus* Chevrolat, 1835**

*Olenecamptus serratus* Chevrolat, 1835: 324 (Type species)

***Olenecamptus affinis* Breuning, 1936**

*Olenecamptus affinis* Breuning, 1936: 319; Breuning 1940: 531; Breuning 1962: 419; Lingafelter et al. 2014: 11.

Distribution: Indonesia: Sarawak; West Kalimantan. Borneo: Pontianak (type locality). Philippines: Mindanao, Davao, Lupon.

Type deposition: Holotype female, (NHM).

***Olenecamptus bilobus bilobus* (Fabricius, 1801)**

*Saperda biloba* Fabricius, 1801 replacement name.

*Olenecamptus bilobus bilobus* (Fabricius, 1801): 324; Erichson 1834: 269, pl. 39; Boisduval 1835: 527; Chevrolat 1835: 2; Montrouzier 1855: 63; Pascoe 1866: 63; Gahan 1894: 100; Gahan 1900: 351; Maxwell-Lefroy 1909: 376; Stebbing 1914: 375; Aurivillius 1922b: 437; Heller 1923: 39; Schwarzer 1925: 64; Kriesche 1926: 375; Matsushita 1933: 352; Breuning 1940: 530, 554; Breuning 1940: 556; Gressitt 1940: 134; Breuning 1940: 555; Breuning 1940: 556; Breuning 1962: 420-421; Zimsen 1964: 175; Breuning 1969: 665; Rondin & Breuning 1970: 479; Khan 1985: 436; Sudre & Teocchi 1996: 178; Mukhopadhyay & Biswas 2000: 140-141; Sudre & Teocchi 2000: 227; Hua 2002: 221; Makihara 2004: 15; Mukhopadhyay & Biswas 2011: 81; Weigel 2012: 408; Slipinskis & Escalona 2013: 174; Saha et al. 2013: 3; Kumawat et al. 2015: 7892; Bhawane et al. 2015: 683; Mitra et al. 2016: 24, 43; Majumder et al. 2016: 322, 324; More et al. 2017: 1685; Kariyanna et al. 2019: 123; Lazarev 2019: 160; Lazarev & Murzin 2019: 801; Rapuzzi et al. 2019: 77; Grosser & Ambrus 2021: 44; Geetha & Agarwala 2022: 421.

**Distribution** (countries in bold and in alphabetical order).

**Australia** (Queensland). **Bhutan**. **Brunei**. **Cambodia**. **China** (Hainan Island, Liaoning, Hebei, Zhejiang, Fujian, Guangdong, Guangxi, Sichuan, Yunnan). **Comores Islands**.

**East Timor**. **Federated States of Micronesia** (FSM) (Caroline Islands or Carolines).

**France** (Mayotte, Dapani Islands including Mount Choungui, Reunion Island).

**Hongkong**. **India** (Andaman and Nicobar Islands, Bengal, Chennai also known as Madras, Dehra Dun, Tripura, Maharashtra, Orissa, Sikkim et Birmanie, Tripura, Uttarakhand, West Bengal).

**Indonesia** (Amboyna Island, Banca, Batchian, Célèbes, Mollucas or Molukken Islands, Damma Island, Java, Flores, Dorey Islands, île Mentawai, Sumatra, Batjan (Dutch name) formerly known as Batchian or Bachian, île Bourou, East Kalimantan part of Borneo). **Japan** (Ryu kiu Islands). **Laos**. **Madagascar**. **Malaysia** (Malacca formerly known as Malakka, Sarawak).

**Mauritius**. **Myanmar** was formerly known as Burma. **Nepal**. **Pakistan**. **Papua New Guinea** (Neupommern also known as New Britain, Ralum, île Woodlark).

**Philippines** (Sulu. Palawan. Babuyan Islands. Mindanao: Davao Region\*, Lake Sebu\*, South Cotabato\*).

**Seychelles** (Silhouette Island, Mahe). **Singapore**.

**Sri Langka** (Historically known as 'Ceylon Island'). **Thailand** (Historically known as 'Siam').

**Taiwan** was formerly known as Formosa (Kôsempo, Akô, Taihōrin, Kôtōsho, Lanyu Island, Lutaio Island).

**Vanuatu** (Atchin Island). **Vietnam** (Cochinchine, Annam, Tonkin also spelled as Tongkin).

**Type information and deposition:** *Saperda biloba* Fabricius, 1801 (type species), from Australia, ZMK. *Olenecamptus bilobus dahli* Kriesche, 1926, from Papua New Guinea, holotype, MfN. *Olenecamptus bilobus* m. *quinquemaculata* Breuning, 1940, from India, holotype female, MNHNP. *Olenecamptus bilobus* m. *confluens* Breuning, 1940, from Papua New Guinea, holotype male, MNHNP. *Olenecamptus bilobus* m. *reductemaculatus* Breuning, 1969, from Vanuatu, holotype male, MNHNP.

Synonyms:

*Olenecamptus lacteoguttatus* Fairmaire, 1881: 359.

*Olenecamptus bilobus dahli* Kriesche, 1926: 375.

*Olenecamptus bilobus m. quinquemaculata* Breuning, 1940: 555.

*Olenecamptus bilobus m. confluens* Breuning, 1940: 556.

*Olenecamptus bilobus m. reductemaculatus* Breuning, 1969: 665.

***Olenecamptus bilobus luzonensis* Dillon & Dillon, 1948**

*Olenecamptus bilobus luzonensis* Dillon & Dillon, 1948: 228; Breuning 1926: 420; Hayashi 1974: 48; Hua 2002: 22.

Distribution: Philippines: Luzon (Manila). Taiwan: Lu Tao Island. China.

Type deposition: Holotype, male, AMNH.

***Olenecamptus bilobus mindanaensis* Dillon & Dillon, 1948**

*Olenecamptus bilobus mindanaensis* Dillon & Dillon, 1948: 228; Breuning 1926: 420.

Distribution: Philippines (Mindanao: Basilan, Davao Oriental).

Type deposition: Holotype, female, Academy of Natural Sciences of Philadelphia.

Material examined: *Olenecamptus bilobus mindanensis*, male, Milton Medina Collection, Tagum City, Philippines.

***Olenecamptus circulifer* Heller, 1923**

*Olenecamptus circulifer* Heller 1923: 37; Breuning 1940: 550; Breuning 1962: 419; Breuning 1980: 176; *Olenecamptus affinis m. circulifer* Heller, 1923.

*Olenecamptus mindanaonis* Breuning, 1980 Hüdelpohl 1983: 186; Chemin & Vives 2017: 15.

Distribution: Philippines (Mindanao: Dapitan).

Type information: *Olenecamptus circulifer* Heller, 1923, Holotype male, SNSD; *Olenecamptus mindanaonis* Breuning, 1980, Holotype, MNHN.

***Olenecamptus lumawigi* Breuning, 1980**

*Olenecamptus lumawigi* Breuning, 1980: 170. Distribution: Philippines (Mindanao: Basilan).

Type deposition: Holotype, MNHN.

***Olenecamptus palawanus* Dillon & Dillon, 1948**

*Olenecamptus palawanus* Dillon & Dillon, 1948: 181, 206; Breuning 1962: 419.

Distribution: Philippines (Palawan).

Type information: Holotype female, ANSP.

***Olenecamptus tagalus tagalus* Heller, 1923**

*Olenecamptus tagalus tagalus* Heller, 1923: 38; Breuning 1940: 531, 545; Dillon & Dillon 1948: 250; Breuning, 1962: 422.

Distribution: Philippines (Luzon: Mt. Makiling, Laguna).

Type information: *Olenecamptus tagalus* Heller, 1923, Holotype, SNSD.

***Olenecamptus tagalus zamboanga* Dillon & Dillon, 1948**

*Olenecamptus tagalus zamboanga* Dillon & Dillon, 1948: 250; Breuning 1962: 422.

Distribution: Philippines (Mindanao: Kabasalan, Zamboanga).

Type information: Holotype male, CAS.

***Olenecamptus vittaticollis* Heller, 1923**

*Olenecamptus vittaticollis* Heller, 1923: 38; Breuning 1940: 550; Gilmour 1956: 754; Breuning 1962: 419.

Distribution: Philippines (Luzon: Mt. Makiling, Laguna).

Type information: *Olenecamptus optatus* subsp. *vittaticollis* Heller, 1923, Holotype, SNSD; *Olenecamptus vittaticollis v. divisus* Gilmour, 1956, Holotype male, NHML.

**Description**

***Olenecamptus cabrasae* sp. nov.** (Figs. 1-2)

**Type material.** Philippines – Eastern Mindanao/ Davao Oriental/ Mun. San Isidro/ ii.2023/ T.K. Taño leg (Typed on white card) // HOLOTYPE male / *Olenecamptus cabrasae* sp. nov. / Medina, 2023 (typed on red card), deposited in PNM. PARATYPE, female, same label as holotype, deposited at MMCP.

**Description.** Measurements: Holotype male: LB (LH+LP+LE): 13.0 mm. LH: 2.0 mm. WH: 2.5 mm. LG: 0.5 mm. LL: 1.0 mm. WL: 0.8-1.0 mm. LP: 3.0 mm. WP: 2.5 mm. LE: 9.0 mm. WEH: 3.5 mm. Paratype female: LB (LH+LP+LE): mm. LH: 2.0 mm. WH: 2.5 mm. LG: 0.5 mm. LL: 1.0 mm. WL: 0.8-1.0 mm. LP: 2.5 mm. WP: 2.5 mm. LE: 10.0 mm. WEH: 4.0 mm.

**Adult male.** Integuments: Head from epicranium to frons matte black; lateral side lustrous black, underside lustrous light brown; prothorax dark brown to black; elytra, mesothorax, and abdomen light to dark brown, legs dark brown.

Head longer than wide; epicranium densely covered with recumbent whitish pubescence with few erect yellowish setae randomly arranged from near upper eye towards the center of epicranium; epicranium separated by a line along midline from base of frons up to base of epicranium (Figs. 1A&C); antennal support raised; vertex short, deep, lined with two bands of whitish pubescence; underside glabrous, lustrous dark brown; thick band of whitish pubescence at the side of lower eye not reaching the base forming an interrupted band when viewed laterally; genae covered with dense whitish pubescence, twice shorter than eye; eyes matte black, inferior lobe as long as wide, widened posteriorly, slightly tapering towards frons.

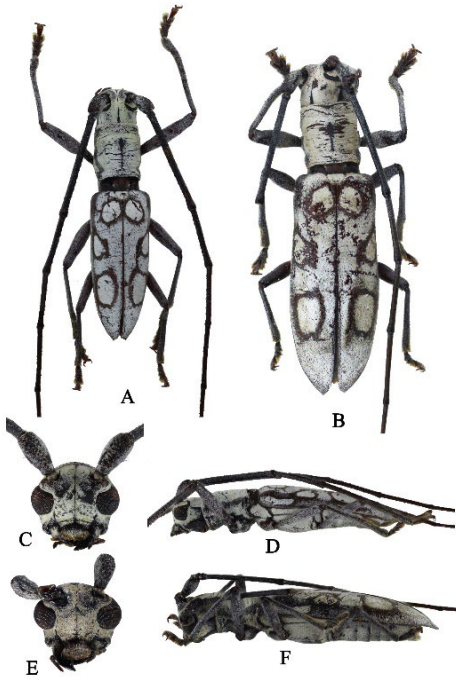
Antennae matte dark brown to black, scape robust covered with wrinkles at front side, densely covered with whitish recumbent pubescence; pedicel short; antennomere III long and slender, reaching basal third of elytra, highly serrated arranged in random, twice longer than antennomere IV; antennomeres IV to X sparsely serrated; antennomere XI smooth with few fine erect setae.

Pronotum longer than wide, widest at the middle, narrowest at near the base; pronotal disc slightly bulging, microsculptured, densely covered with whitish to yellowish recumbent pubescence. Propleuron densely covered with

whitish recumbent pubescence interrupted with a band of yellowish pubescence, the base of propleuron highly sinuate. Prosternum matte dark brown, sparsely covered with recumbent whitish pubescence, slightly concave near apex.

Elytra is almost three times longer than wide, widest at humeri, tapering towards the elytral apex. The humeral angle is slightly raised, densely punctate randomly distributed finer towards the apex, dorsally with three prominent circular or triangular bands of whitish pubescence arranged as follows: one near elytral apex not reaching suture, the second triangular band before the median near elytral carina, the third broad oblong band near apical third. Each band is more pronounced as each is lined with thin pubescence (Fig. 1A). Elytral disc is relatively flat and uniformly clothed with dense recumbent whitish or yellowish pubescence. Laterally, an elongated band of whitish pubescence lined the elytral carina from the humeral angle up to the basal third. Scutellum rounded, densely covered with yellowish recumbent pubescence.

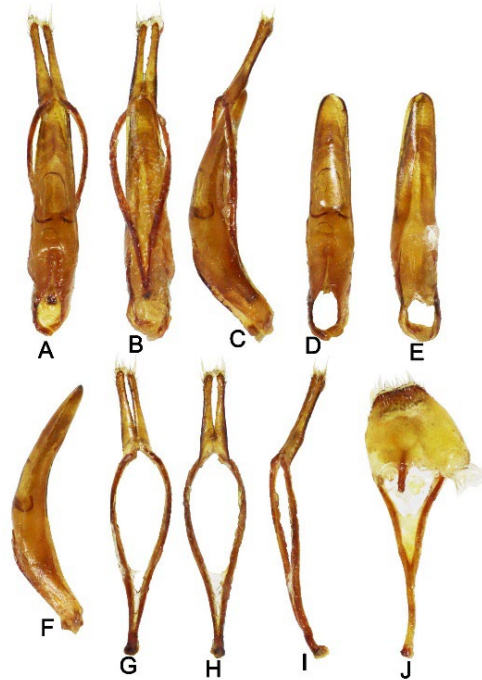
Procoxae matte dark brown, raised, partially covered with recumbent whitish pubescence; procoxal cavity closed; mesocoxae slightly raised partially covered with; metacoxae not raised. Profemora prominently longer than meso and metafemora; densely covered with whitish recumbent pubescence. Protibia is visually longer than meso and metatibia, densely covered with whitish recumbent pubescence, slightly recurved towards the apex, with ten or more small spines lined at the underside. Mesotibia and metatibia are lined with goldish sub-erect setae near the apex. Tarsi matte goldish brown, covered with sub-erect whitish to goldish setae. Claws glabrous, dark brown to black, simple.



**Figure 1.** *Olenecamptus cabrasae* sp. nov.: A. dorsal habitus, holotype, male. B. dorsal habitus, paratype, female. C. holotype, male, frons. D. holotype, male, lateral aspect. E. paratype, female, frons. F. paratype, female, lateral aspect. Photo: M. N. Medina.

Mesosternum is slightly depressed partially covered with recumbent whitish pubescence. Metaventricle as long as wide, densely covered with whitish Mesepimeron, mesepisternum, and metanepisternum densely covered with recumbent whitish pubescence; metepisternum pubescence interrupted at the base, elongated. Abdominal ventrites matte goldish brown to black, densely covered with recumbent pubescence; ventrite I broader than ventrites II-V.

The whole system of genitalia is lustrous light brown. Aedeagus highly recurved when viewed laterally, slightly shorter than tegmen (2.5 mm vs. 3 mm), robust at the middle, and apex almost rounded. Parameres are slender, elongated, slightly bottle-shaped, separated, and lined with erect yellowish setae. Tergites VIII (Figs. 2J).



**Figure 2.** Male genitalia of *Olenecamptus cabrasae* sp. nov., holotype: A-C: Whole system of genitalia, A. dorsal aspect, B. ventral aspect, C. lateral aspect. D-F: aedeagus, median lobe, D. dorsal aspect, E. ventral aspect, F. lateral aspect. G-I: Tegmen G. dorsal aspect, H. ventral aspect, I. lateral aspect. J. 8<sup>th</sup> tergite. Scale bar = 1mm. Photo: M. N. Medina.

**Adult Female (Paratype).** Significant morphological variation compared to the holotype male was not found, except the following differences: body more robust than male; stouter pronotum (as wide as long) compared to male (longer than wide); more robust elytra, widest near the apical third (vs. male slenderer, tapering towards elytra apex), and shorter antennae.

**Differential diagnosis.** The new species is distinct and can be easily distinguished from other *Olenecamptus* species for having a white pubescence covering its body (vs. finely covered with yellowish pubescence amongst *O. bilobus* species group). *Olenecamptus circulator* is close to the new species for having white pubescence in the body integument but



easily distinguished for having three bands of circular pubescence in elytra (vs. four circular white bands of pubescence in *O. circulifer*).

**Etymology.** *Olenecamptus cabrasae* is named after Dr. Analyn Cabras, a scientific worker and conservationist on Philippine weevils who dedicated her life to understanding the world of Entiminae. A colleague, a great coleopterist, and a good friend.

**Distribution.** Philippines (Mindanao: San Isidro, Davao Oriental).

## CONCLUSIONS

As a megadiverse country, the Philippines arguably has the highest species diversity and endemism in terms of *Cylindrepomus* species worldwide. The current endemism rate for Philippine *Cylindrepomus* is 94% (15 out of 16 endemic species) and 70% for *Olenecamptus* species (7 out of 10 endemic species). Indonesia comes in second in terms of *Cylindrepomus* species endemism and diversity with roughly 81% (13 out of 16 endemic species). This is followed by Vietnam with roughly 60% (3 out of 5 endemic species), and Thailand with 33% (1 out of 3 endemic species). The most widely spread species of *Cylindrepomus* is *C. peregrinus* which is documented to occur in most Southeast Asian Countries like the Philippines, Indonesia, Malaysia, and Thailand. The number of *Olenecamptus* species in the Philippines is also inarguably one of the highest in the world as compared to other megadiverse countries like Indonesia and India which are seven and eleven times bigger than the Philippines respectively. The country with the highest number of *Olenecamptus* species is China with roughly 14-15 species, followed by the Philippines (including the new species), Indonesia, and Malaysia with roughly 11 each, India and Vietnam with roughly 10 species, and Japan with 5 species. The most widely spread species of *Olenecamptus* is *O. bilobus* which has a circumtropical distribution.

## ACKNOWLEDGEMENTS

My gratitude to Dr. Francesco Vitali (Musée national d'histoire naturelle de Luxembourg, Luxembourg) for the valuable comments and suggestions. To Dr. Chris Grinter and Dr. Matthew Van Dam (CAS, San Francisco, California, USA) for giving me access to examine the specimens at CAS, San Francisco, California, USA. Additional gratitude to Dr. Matthew Van Dam (CAS, San Francisco, California, USA) for proofreading the manuscript. Lakeside Fund for the funds of my visit to California Academy of Sciences, San Francisco, California, USA. To Olaf Jäger and Dr. Klaus-Dieter Klass (both from SNSD, Germany) for their warm accommodation and assistance at Senckenberg Natural History Collections, Dresden, Germany. To Dr. Mattias Forshage (NRM, Sweden) for the warm assistance at Naturhistoriska Riksmuseet Stockholm Sweden. To Ms. Treena Karylle Taño (DOrSU Biology Program, Philippines) for the specimens collected in San Isidro, Davao Oriental. Thanks to anonymous reviewers.

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Zoological Institute of the Russian Academy of Sciences 2023. Zoological Institute of the Russian Academy of Sciences.

*Received: 07.09.2023.*

*Accepted: 27.10.2023.*