New Asian Cleomenini (Coleoptera: Cerambycidae: Cerambycinae)

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Abstract. Cleomenes hainanensis sp. nov. from China (Hainan) and Epianthe vietnamica sp. nov. from Vietnam (Binh Thuan) are described. All the habitus and male genitalia are illustrated. Epianthe viridis Pascoe, 1866 is firstly recorded from Indonesia (Kalimantan, Sumatra).

INTRODUCTION

The genus *Cleomenes* was established with type species *Cleomenes dihammaphoroides* by J. Thomson (1864). Species of the genus *Cleomenes* are known only from Asia. Thirty-eight species have been described until now (Tavakilian G. (Author) & Chevillotte (Software), 2016). The authors who focused recently on this genus and described new species are Holzschuh (2009, 2011) and Vives (2009, 2015).

The genus *Epianthe* was established with type species *Epianthe viridis* by Pascoe (1866). Only two species have been described until now (Tavakilian G. (Author) & Chevillotte (Software), 2016).

In the present paper, I describe a new species of the genus *Cleomenes* from material, which was recently collected in Hainan Island and a new species of the genus *Epianthe*, recently collected by a local collector in South Vietnam (Binh Thuan). The only known *Cleomenes* species from Hainan has been so far *Cleomenes trinotatithorax* Mitono, 1944. *Cleomenes hainanensis* sp. nov. from China (Hainan) is presently described and illustrated. The new species is compared to closest species *Cleomenes takiguchii* Ohbayashi, 1936. *Epianthe vietnamica* sp. nov. from Vietnam (Binh Thuan) is presently described and illustrated. The new species is compared to closest species *Epianthe viridis* Pascoe, 1866 and *Epianthe funesta* Pascoe, 1869.

MATERIAL AND METHODS

Observation and photography. The habitus of all specimens were taken by the Canon EOS 350D digital camera with the Sigma 105 mm macro lens. Composite images were created using the software Image Stacking Software Combine ZP. Microstructures of dissected parts were observed under the DNT DigiMicro Profi USB microscope. The genitalia photographs were taken with a Canon MP-E 65mm/2.8 1-5× Macrolens on bellows attached to a Canon EOS 550D camera. Each photograph was taken as several partially focused images and afterwards composed in the Helicon Focus 3.20.2 Pro software. The photographs were modified using Adobe Photoshop CC.

Types depository. Specimens examined including type materials designated herein are deposited in following collection, of which abbreviations are shown in the text:

CPV collection of Petr Viktora, Kutná Hora, Czech Republic.

Slash (/) separates data in different lines on locality and determination labels.

TAXONOMY

Tribe Cleomenini Lacordaire, 1869

Genus Cleomenes Thomson, 1864

Type species. Cleomenes dihammaphoroides Thomson, 1864: 161.

Cleomenes hainanensis sp. nov.

(Figs. 1-2)

Type locality. China, Hainan, Mt. Jianfengling.

Type material. Holotype [♂]: 'Hainan, CHINA' / 'Ledong Li Autonomous County,' / 'Jianfeng Township, Tianchi' / 'Mt. Jianfengling, 14-IV-2017, 785m' / '18°45'12.39"N, 108°53'3.66"E′ / 'Sweep flower / *Dimocarpus longan*' / 'coll. Bin LIU', (CPV); Paratypes: [2 ♂♂, 1 ♀]: same data as holotype; [1 ♂, 3 ♀♀]: 'Hainan, CHINA' / 'Mt. Jianfengling, Tianchi, Jianfeng Township' / '13-IV-2017' / '665 m, 18°45'7.18"N, 108°54'59.53"' / '18°45'12.39"N, 108°53'3.66"E′ / 'Sweep Flower / *Dimocarpus longan* / coll. Bin LIU'; [1 ♂, 1 ♀): 'Hainan, CHINA' / 'Mt. Jianfengling, Main peak' / 'Jianfeng Township, Ledong Li Autonomous County' / '14-V-2018' / '1412 m, 18°43'0.85"N, 108°52'17.74"E′ / 'Sweep flower, coll. Yufeng WU'; [1 ♀]: 'Hainan, CHINA' / 'Mt. Jianfengling, Main peak' / 'Jianfeng Township, Ledong Li Autonomous County' / '25-V-2018' / '1412 m, 18°43'0.85"N, 108°52'17.74"E′ / 'Sweep flower, coll. Yufeng WU'; [1 ♂]: 'Mt. Jianfengling / Mingfeng Valley, Jianfeng' / 'Township, Ledong Li Autonomous County, Hainan, ' / 'China' / '10-V-2017 / 975m / 18°44'37.02"N, ' / '108°50'34.62"E / Sweep Flower / coll. Bin LIU'; [1 ♀]: 'Mt. Jianfengling / Main peak, Jianfeng Township' / 'Ledong Li Autonomous County, Hainan, China' / '11-V-2017 / 1412m / 18°43'0.85"N, / '108°52'17.74"E′ / coll. Shiliang MO'; [1 ♂]: 'Hainan, CHINA' / 'Mt. Jianfengling, Main peak' / 'Jianfeng Township, Ledong Li Autonomous County' / '8. -9 vi. 2018' / '1412 m, 18°43'0.85"N, 108°52'17.74"E′ / 'P. Viktora lgt.'; (1 ♀): 'Hainan, CHINA' / 'Mt. Jianfengling, Main peak' / 'Jianfeng Township, Ledong Li Autonomous County' / '23-V-2017' / '1412 m, 18°43'0.85"N, 108°52'17.74"E′ / 'P. Viktora lgt.'; (1 ♀): 'Hainan, CHINA' / 'Mt. Jianfengling, Main peak' / 'Jianfeng Township, Ledong Li Autonomous County' / '23-V-2017' / '1412 m, 18°43'0.85"N, 108°52'17.74"′ (coll. Bin LIU', (CPV).

The types are provided with a printed red label: 'Cleomenes hainanensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2019'.

Description of holotype. Habitus of male holotype as in Fig. 1a. Body elongate, very narrow, parallel, matte, punctuate, from ochre yellow to black. Body length 9.5 mm (male paratypes from 8.65 to 10.25 mm), widest in humeral part of elytra (1.8 mm), approximately 5.3 times longer than wide.

Head black, widest through the eyes, approximately as wide as pronotum at widest place, punctured by coarse irregular granulate punctuation, on inner side of antennal insertions with distinct glabrous tubercles. Head covered by short silver recumbent pubescence, denser in anterior part. Eyes large, black, finely faceted, strongly longitudinally emarginate. Clypeus dark brown. Mandibles blackish brown, glabrous, with a few pale setae.

Maxillary palpus ochre yellow, short and narrow, ultimate palpomere longest, cut apically.

Antennae long, distinctly longer than body length (as in Fig. 1a). Antennomeres narrow, antennomeres 2-7 distinctly widened apically. Antennomeres 3-6 reddish brown with distinctly darker apex, antennomeres 7-8 ochre yellow with dark apex, antennomeres 1-2 and 9-11 blackish brown. Antennomere 11 and antennomere 7 slightly curved. Antennae distinctly punctured (punctures small-sized), antennomere 1 broadest with large and coarse punctures. Antennae covered by very short sparse pale pubescence. Antennomeres 3-6 with a few long pale setae on inner side. Antennomeres 6-10 distinctly prolonged to short spine in outer side of apex. Antennomere 2 shortest, antennomeres 3 and 5 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.53:0.16:1.00:0.96:1.00:0.86:0.66:0.58:0.40:0.40:0.56.

Pronotum black, distinctly longer than wide, 1.4 times longer than wide at base and 1.3 times

longer than wide at widest place (before middle of pronotum from base to apex). Shape of pronotum as in Fig. 1a. Anterior margin only slightly arcuate, base almost straight. Dorsal surface with coarse punctuation, near anterior margin covered by short sparse silver pubescence, base and basal angles with dense recumbent silver pubescence.

Scutellum small, widest at apex, completely covered by silver recumbent pubescence.

Elytra 6.43 mm long and 1.8 mm wide (3.57 times longer than wide), elongate, narrow, almost parallel, slightly widened before apex, matte, from ochre yellow to black (as in Fig. 1a). Elytra punctured by large and coarse punctures, in basal third punctures larger than on rest of elytra. Apical part with microgranulation. Elytra with very sparse pale short pubescence, pubescence denser on humeri, in apical part pubescence slightly denser than in middle part. Elytral apex excised, each elytron with short spine in sutural and lateral angle.

Legs blackish brown, very narrow, femora black, apically club-shaped. Metatibiae with narrowly pale yellow apex. Pro- and mesotibiae slightly paler at apex. Meso- and metatibiae slightly curved. Legs indistinctly punctured, covered by short pale pubescence. Metatarsomeres 1-2 pale yellow, metatarsomere 3 and claws dark brown. Tarsi covered by pale pubescence and longer pale setation. Pro- and mesotibiae and pro- and mesofemora distinctly shorter than metatibiae and metafemora. Metatarsomere 1 1.35 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, almost completely covered by dense recumbent silver pubescence. Metasternum in middle and ventrites in apex without pubescence.

Genitalia as in Fig. 1b.

Female. Habitus of female paratype as in Fig. 2. Body length (female paratypes) from 7.45 to 10.4 mm. Colour of female the same as in male. Female without distinct differences, only antennae slightly shorter than in male.

Differential diagnosis. The most similar species is *Cleomenes takiguchii* Ohbayashi, 1936 (Fig. 3) from Japan. *Cleomenes hainanensis* sp. nov. distinctly differs from *C. takiguchii* by longer and narrower pronotum, by first antennomere blackish brown with coarse large-sized punctuation and by distinctly darker colour of legs and antennae; while *C. takiguchii* has shorter and wider pronotum, first antennomere reddish brown with shallow small-sized punctuation.

Etymology. Named after the place of discovery, Hainan Island.

Distribution. China (Hainan).

Cleomenes takiguchii Ohbayashi, 1936

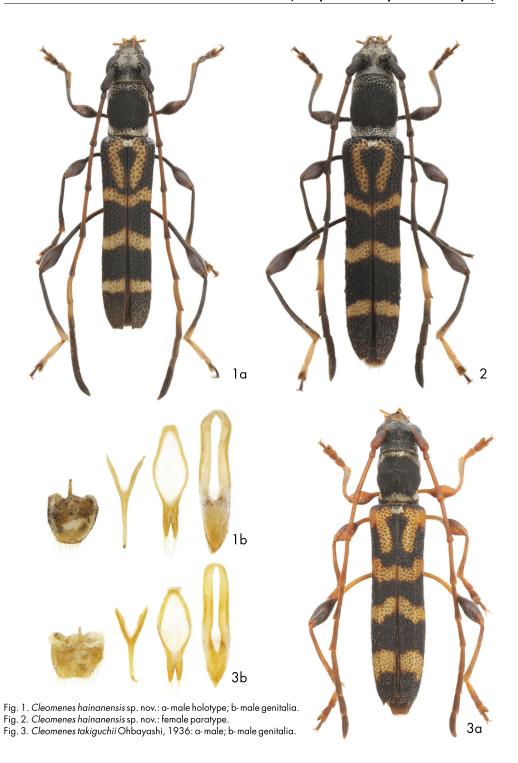
(Fig. 3)

Cleomenes takiguchii Ohbayashi, 1936: 14, pl. II, fig. 4.

Type locality. Japan, Shikoku (Kochi Prefecture), Kuroson, Tosa.

Material examined. (1 3): 'JAPAN-Kagoshima pref.' / 'Takayama-cho, Mt. Hoyoshi' / 'Takaki Mori lgt., 17. vi. 1994', (CPV).

Distribution. Japan, South Korea.



Genus Epianthe Pascoe, 1866

Type species. Epianthe viridis Pascoe, 1866: 511.

Epianthe vietnamica sp. nov.

(Fig. 4)

Type locality. Vietnam, Binh Thuan, Dong Tien.

Type material. Holotype (♂): 'VIETNAM' / 'Binh Thuan' / 'Dong Tien' / 'vii. 2018', (CPV). The type is provided with a printed red label: 'Epianthe vietnamica sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2019'.

Description of holotype. Habitus of male holotype as in Fig. 4a. Body elongate, narrow, parallel, punctuate, body blue with metallic lustre, antennae and legs from reddish brown to blackish brown. Body length 9.17 mm, widest in humeral part of elytra (1.94 mm), approximately 4.7 times longer than wide.

Head dark metallic blue, widest through the eyes, approximately as wide as pronotum at widest place, punctured by coarse irregular granulate punctuation, on inner side of antennal insertions and in apical part of head near sides before eyes with distinct glabrous tubercles. Anterior part of head with short pale setation on edges. Eyes large, goldenish black, finely faceted, strongly emarginate. Clypeus black, impunctate, shiny. Mandibles dark blue with coarse irregular punctures.

Maxillary palpus pale reddish brown, slightly shiny.

Antennae reaching to five sevenths elytral length. Antennomeres 2-7 distinctly widened apically with a few pale setae in inner side. Antennomeres from dark brown to blackish brown. Antennomere 2 shortest, antennomere 3 longest. Antennomeres 1 and 3 with coarser punctures than in rest of antennomeres. Antennomere 1 with distinct longitudinal furrow in upper part. Antennomeres 7-11 covered by very short dark pubescence. Ratios of relative lengths of antennomeres 1-11 equal to: 0.38:0.16:1.00:0.52:0.53:0.48:0.38:0.30:0.25:0.21:0.25.

Pronotum metallic blue, shape of pronotum as in Fig. 4a. Pronotum distinctly longer than wide, 1.46 times longer than wide at base and 1.34 times longer than wide at widest point (before middle of pronotum from base to apex). Anterior margin only slightly arcuate, base almost straight. Dorsal surface with coarse irregular, granulate and reticulate punctuation. Punctures large. Pronotum on antescutellar area with impunctate short longitudinal furrow. Base narrowly covered by stripe of silvery white pubescence, in middle pubescence sparser.

Scutellum completely covered by silvery white pubescence.

Elytra 5.79 mm long and 1.94 mm wide (3 times longer than wide), elongate, narrow, slightly narrowing from base to middle, metallic blue (as in Fig. 4a). Elytra punctured by large and coarse irregular, granulate and reticulate punctuation, punctures slightly smaller than those on pronotum. Elytral apex rounded, apical margin with short indistinct pale setation. Metepisternum partly visible in basal third of elytra from dorsal view.

Legs blackish brown, pro- and mesotibiae and tarsi reddish brown. Femora narrow, club shaped apically. Tibiae curved, protibiae short, irregularly widened apically (as in Fig. 4a). Pro- and mesotibiae with distinct narrow longitudinal margin in inner side. Metafemora in widened apex with metallic lustre. Protarsi distinctly wider than mesotarsi and mesotarsi distinctly wider than metatarsi. Legs covered by short pale pubescence, indistinctly punctured. Pro- and mesotibiae and pro- and mesofemora distinctly shorter than metatibiae and metafemora.

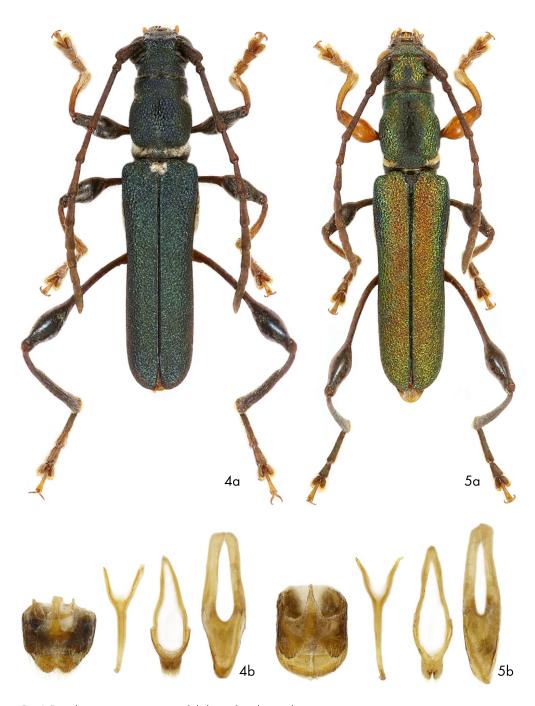


Fig. 4. Epianthe vietnamica sp. nov.: a-male holotype; b-male genitalia. Fig. 5. Epianthe viridis Pascoe, 1866: a-male; b-male genitalia.

Metatarsomere 1 1.1 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, almost completely covered by dense recumbent silvery white pubescence. Metasternum in middle and ventrites in apex without pubescence.

Genitalia as in Fig. 4b.

Female. Unknown.

Differential diagnosis. The most similar species are *Epianthe viridis* Pascoe, 1866, described from Malaysia (Fig. 5) and *Epianthe funesta* Pascoe, 1869, described from Singapore. *Epianthe vietnamica* sp. nov. distinctly differs from *E. viridis* and *E. funesta* by dorsal surface metallic blue, profemora dark blackish brown, scutellum completely covered by pubescence, middle of pronotal base with pubescence; while *E. viridis* and *E. funesta* have dorsal surface metallic green, middle of pronotum black, profemora pale reddish brown, scutellum and middle of pronotal base without pubescence.

Etymology. Named after the place of discovery (Vietnam).

Distribution. Vietnam (Binh Thuan).

Epianthe viridis Pascoe, 1866

(Fig. 5)

Epianthe viridis Pascoe, 1866: 511, pl. XLI, fig. 5.

Type locality. Malaysia (Penang).

Material examined. (1 $\stackrel{\circ}{\circ}$): 'MALAYSIA - Perak, Belum Forest' / '84km E of Gerik, alt. 950m' / '05°32′53′′N, 101°36′28′′E' / '25. iii. - 2. iv. 2014' / 'P. Viktora lgt.', (CPV); (1 $\stackrel{\circ}{\circ}$): 'INDONESIA, Kalimantan Barat Pr.' / 'SW Kalimantan, 1000 - 1500 m alt.' / 'Singkawang region, vi. 2018' / 'MT. BAWANG, Madi vill. env.' / 'local collector leg.', (CPV); (1 $\stackrel{\circ}{\circ}$): 'W Sumatra, v. 1995' / 'MT. SINGGALANG, 600 m' / 'Annai valley N.R., local collector leg.', (CPV).

Distribution. Malaysia, new for Indonesia (Kalimantan, Sumatra).

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