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## A new genus and four new species of false click beetles (Coleoptera: Eucnemidae) from Southeast Asia

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**Abstract.** A new genus and four new species of false click beetle (Coleoptera: Eucnemidae) are described. *Bermilloides* **new genus** is described from Bornean Malaysia. New species are: *Calyptocerus iridis* **new species** (Philippines), *Bermilloides lumawigi* **new species** (Malaysia), *Spinifornax elongatus* **new species** (Malaysia) and *Ceratus antennatus* **new species** (Thailand). Dorsal and ventral habitus, as possible, for each species are illustrated. Male aedeagi are illustrated for *Calyptocerus iridis* and *Ceratus antennatus*. A new key is provided for *Calyptocerus* species in Southeast Asia.

**Key words.** Calyptocerini, Anelastidini, Macraulacini, *Calyptocerus*, *Bermilloides*, *Spinifornax*, *Ceratus*

### Introduction

Much of the research on Eucnemidae in Southeast Asia was undertaken by Fleutiaux in the 19th and 20th Centuries, with more than 30 papers published throughout his career. Most recently, others like Cobos (1965, 1978, 1979, and 1986), Leiler (1985, 1990), Lucht (1982, 1984, 1986, 1987, 1989, 1990, 1992, and 1999) and Muona (1988, 1991a,b) have published research on Eucnemidae from the region, largely focused on new species descriptions. One study by Muona (1991a) explored the biogeography of the family in Southeast Asia and the Pacific regions. The region as a whole is rich in species diversity, with the potential of uncovering many undescribed species. Research on Southeast Asian Eucnemidae, including faunal surveys and group revisions, is currently being undertaken by both Dr. Muona and myself.

While conducting a faunal survey of Eucnemidae from Laos, additional specimens from Southeast Asia also were also studied for identification from the British Museum. From those specimens, two new species were discovered from Thailand and Malaysia. A third new species was later discovered in the project's collection which was given to me as a gift from my friend Ismael Lumawig in the Philippines. The last new species was discovered after examining specimens from the collections of Albert Allen, Boise, ID and the Florida State Collection of Arthropods. An additional specimen of a fourth new species was obtained from my friend, Ismael Lumawig.

### Materials and Methods

Habitus and aedeagus images were taken with a JVC KY-F75U digital camera attached to a Leica® Z16 APO dissecting microscope with apochromatic zoom objective and motor focus drive, using a Synchroscope Auto-Montage® System and software. Resulting image stacks were processed using CombineZP®. Aedeagi were removed and glued directly on the mounting board for imaging. Label data for types is reported verbatim.

Specimens studied are deposited in the following collections: **AAC** — Albert Allen personal collection, Boise, ID; **BMNH** — British Museum of Natural History, London, United Kingdom; **FSCA** — Florida State Collection of Arthropods, Gainesville, FL; **GERP** — Global Eucnemid Research Project, UW-Madison, Dept. of Entomology, Madison, WI; **JMC** — Jyrki Muona personal collection, Helsinki, Finland; **WIRC** — Wisconsin Insect Research Collection, UW-Madison, Dept. of Entomology, Madison, WI.

Kovalev (2013) replaced the term clypeus with “epistomal part of epicranium”. Eucnemidae lack an epistomal sulcus, which would separate the clypeus from the frons below antennal insertions on the front, lower side of the head. The replacement term will be used instead of clypeus in these descriptions.

### Subfamily Melasinae Fleming, 1821

### Tribe Clyptocerini Muona, 1993

### Genus *Calyptocerus* Guérin-Ménéville, 1843

**Diversity and Distribution.** *Calyptocerus* is a small group consisting of five described species, largely distributed in two tropical regions. *Calyptocerus gilvipes* Bonvouloir, *Calyptocerus leboucheri* Guérin-Ménéville and *Calyptocerus violaceus* Chassain are distributed in South America. *Calyptocerus favipunctatus* Lucht and the new species are distributed in Southeast Asia.

**Diagnosis.** Characters of Clyptocerini, with apical margin of epistomal part of epicranium feebly trilobed and more than twice as wide as the distance between antennal sockets; antennal grooves absent; antennomeres II and III short, subequal, together shorter than IV; antennomeres IV–X pectinate or flabellate; male prothoracic tarsomere I simple, without sex combs; metathoracic coxal plates laterally wider than medially; last visible produced caudally; tarsal claws simple; lateral surfaces of mesothoracic and metathoracic tibiae with hairs.

### *Calyptocerus iridis* Otto, new species

Fig. 1–3

**Diagnosis.** Metallic blue-green body will readily distinguish the species from all known species from Southeast Asia and the Neotropical regions.

**Description. Male holotype:** Length, 9.25 mm. Width, 2.75 mm. Body subcylindrical, elongate, tapering towards the elytral apex; integumental coloration metallic blue-green with surficial reflection of blue and violet on elytra when viewed from the top and oblique angles, with little orange and yellow at lateral angle when viewing the pronotum; venter metallic dark blue-green; antennae black; femur black with surficial reflection of metallic violet; tibiae black; tarsi dark brown with tarsomere V infusate reddish; head, pronotum and elytra clothed with sparse, very short, yellow recumbent setae (Fig. 1).

**Head:** Sparsely punctate, subspherical; frons convex, with median carina and circular fovea above base of epistomal part of epicranium; surface shiny; apical margin of epistomal part of epicranium feebly trilobed, about 2 times wider than base; mandibles stout, bidentate, densely punctate.

**Antennae:** Flabellate from antennomeres IV–X, attaining the hind angles of the pronotum; antennomere III short, as long as II; ramus arising from base of antennomere IV; rami arising from apex of antennomeres V–X; antennomere XI elongate.

**Pronotum:** Surface shiny, with widely spaced granules; as long as wide, with moderate, sharp, slightly divergent hind angles; lateral sides sinuate above hind angles, widest near middle, arcuate towards apex; disc convex, with deep median groove and pair of circular gibbosities and horizontal impressions near center; base sinuate.

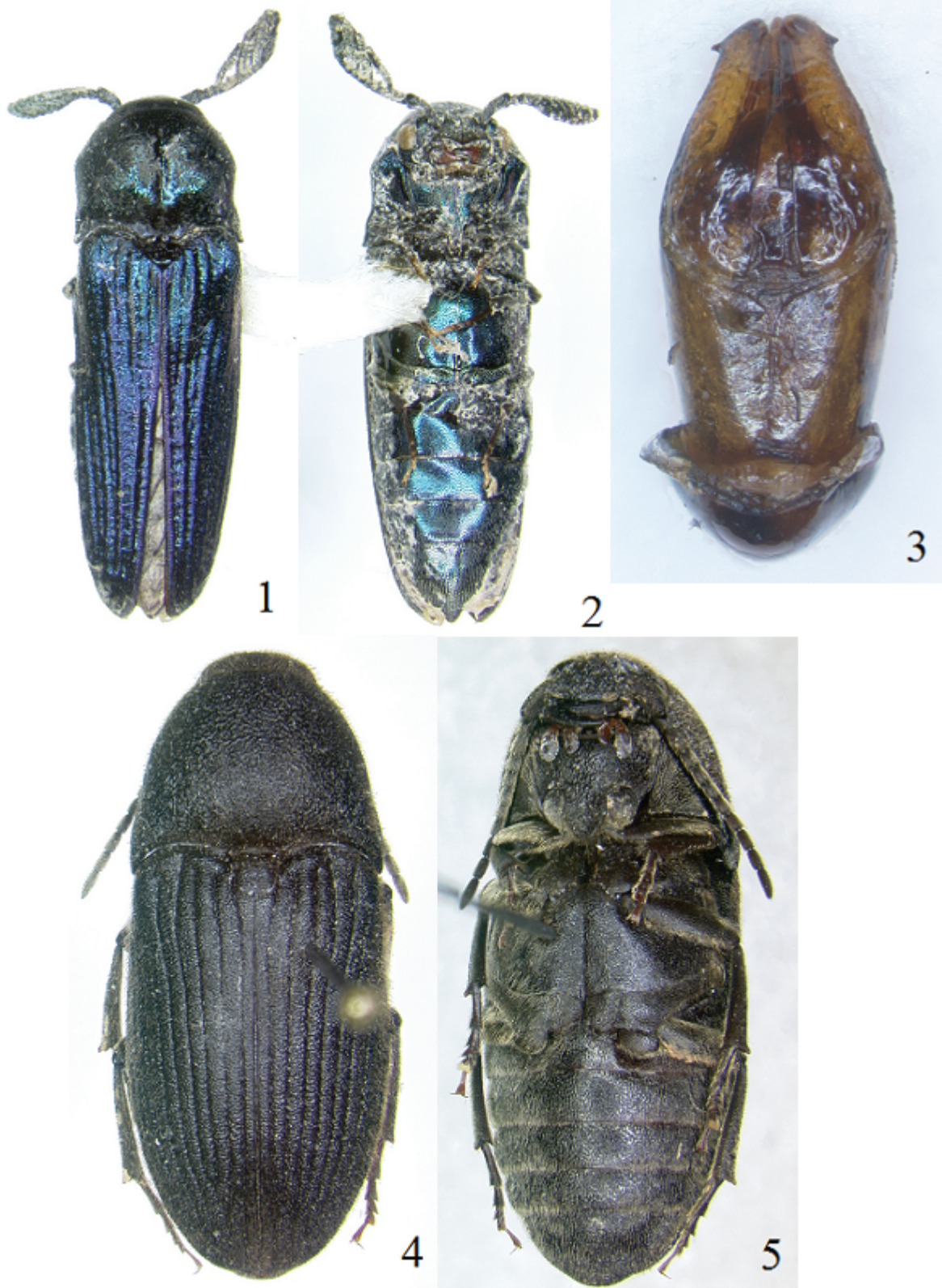
**Scutellum:** Shiny, short, sub-triangular, apically depressed and distally rounded.

**Elytra:** Strongly striate; interstices elevated, keeled, rugose.

**Legs:** First tarsomere as long as the combined lengths of the remaining four on mesothoracic and metathoracic tarsi; tibiae rounded in cross section; metathoracic tarsomeres I–III simple; metathoracic tarsomeres IV excavate-emarginate; metathoracic tarsomere V elongate with simple claws.

**Venter** (Fig. 2): Closely punctate, with short, sparse recumbent yellow setae; hypomeron simple, without antennal grooves; metathoracic episternum partially concealed under elytral epipleura; metathoracic coxal plates laterally wider than medially.





**Figures 1–5.** Two new species of Eucnemidae. 1) *Calyptocerus iridis* Otto, n. sp., dorsal of holotype. 2) *Calyptocerus iridis* Otto, n. sp., venter of holotype. 3) *Calyptocerus iridis* Otto, n. sp., aedeagus of paratype, dorsal view. 4) *Bermilloides lumawigi* Otto, n. sp., dorsal of holotype. 5) *Bermilloides lumawigi* Otto, n. sp., venter of holotype.

**Male aedeagus** (Fig. 3): Basal piece short, rounded, caudally bifid; remaining aedeagus slightly elongate, basally narrowed, widest near base of lateral lobes; median lobe short, narrowly bilobed; lateral lobes wide, short with lateral tooth.

**Variation.** Two adult male and three female paratypes are known. Lengths of two male specimens are 7.0–8.0 mm, both shorter than the holotype. Lengths of three female specimens ranged 7.5–10.3 mm. One female is longer than the holotype. One female specimen has a stronger golden coppery hue laterally. There are no variations in the exoskeletal structures among these paratypes in relation to the holotype.

**Type material. Holotype**, male, with label data: “PHILIPPINES, N. Luzon, Abra, December 2002” / “**HOLOTYPE**:, *Calyptocerus, iridis*, Otto, det. R.L. Otto, 2014” (♂ handwritten behind species name on label) [red printed label]. Holotype transferred from GERP to BMNH.

**Paratypes**. 5, each with label data: 1, “PHILIPPINES, N. Luzon, Abra, December 2002” (WIRC); 1, “PHILIPPINES, North Luzon, Bergnet, November 2013, Ismael Lumawig” (GERP); 1, “Philippines, Luzon, Ifugao, Banaue, IV-2014, native collector leg.” (JMC); 1, “Philippines, Luzon, Mountain province, Mt. Polis, IV-2014, local collector leg.” (JMC); 1, “Philippines, Luzon, Ifugao, Banaue, VIII-2014, local collector leg.” (JMC). Each paratype labeled: “**PARATYPE**:, *Calyptocerus, iridis*, Otto, det. R.L. Otto, 2014” (either ♂ or ♀ handwritten behind species name on label) [yellow printed label]. Paratypes in GERP, JMC, and WIRC.

**Distribution.** The species is known from four localities in the northern areas of Luzon in the Philippines.

**Biology.** A number of specimens were collected in the upper montane cloud forests of Luzon. Developmental stages remain unknown.

**Etymology.** The specific epithet is derived from a Latin term “*iridis*” for rainbow; in reference to the remarkable metallic colorations associated with the species.

**Remarks.** Metallic coloration is quite rare for members of the family. Metallic coloration for the most part is normally confined as surficial reflections over a dark base color (*i.e.* some *Fornax* Laporte, *Namoliulus lacordairei* Bonvouloir, *Plesiofornax nigrinus* Fisher, species of *Procladidus* Fleutiaux, and some *Semnodemus* Bonvouloir) or confined in dense setae on pronotal and elytral surfaces (*i.e.* some species of *Galbites* Fleutiaux and *Lamprotrichus* Bonvouloir). *Calyptocerus iridis*, along with the South American *C. violaceus* Chassain are true representations of metallic Eucnemidae, where integuments exhibit metallic coloration either throughout or confined to the elytra as in the case in the latter.

#### Key to the species of Southeast Asian *Calyptocerus*

- 1. Body metallic blue-green with blue and violet reflections on elytra ..... *C. iridis*, new species
- Body dull black ..... *C. favipunctatus* Lucht

#### Subfamily Macraulacinae Fleutiaux, 1922

##### Tribe Anelastidini Muona, 1993

#### Genus *Bermilloides* Otto, new genus

**Type Species.** *Bermilloides lumawigi* Otto, new species, designated here.

**Description.** Female. Body globulose, approximately 2.5 times longer than wide, dorsally convex and ventrally well sclerotized.

**Head:** Rugose with short, erect setae. Antennae tubular, filiform with 11 antennomeres, setose; scape 4.0 times longer than pedicel; pedicel globular, shorter than antennomere III; antennomere III longer than antennomere IV; antennomeres IV–VIII subequal in lengths, slightly longer than wide and rounded in cross sectional view; antennomeres IX–X longer than wide; antennomere XI slightly longer than X. Eyes round, well developed, small. Antennal groove present in genal regions between base of mandible and compound eye. Epistomal part of epicranium subtriangular, apically rounded, about 2 times wider than the distance between antennal sockets. Mandibles well developed, slender, without lateral secondary tooth, laterally grooved. Maxillary and labial palpi concealed behind mandibles. Labrum concealed.

**Pronotum:** Arcuate, convex and setose. Laterally strongly narrowed apically. Slightly wider than long. Lateral pronotal ridge entire, slightly sinuate near apical third. Disc convex; base sinuate.

**Scutellum:** Punctate, wider than long, sub-triangular, distally rounded.

**Elytron:** Elongate, convex, laterally marginate, setose. Disc with well-developed, punctate striae. Humeral region striate. Interstices elevated.

**Legs:** Prothoracic legs shortest, metathoracic legs longest. Prothoracic tibia apically truncated, flattened, setose with one apical spur. Lateral side of mesothoracic and metathoracic tibiae with setae and flat spines. Metathoracic tarsi, including claws as long as the tibia. First metathoracic tarsi shorter than combined lengths of remaining four. Metathoracic tarsi I–III simple, flatter, wider. Metathoracic tarsi IV excavated-emarginated, narrower than III. Metathoracic tarsi V elongate with basally toothed claws. Tarsal formula 5-5-5.

**Venter:** Rugose with elongate setae. Prothoracic sternal peg basally broad, short. Notosternal suture about as long as the hypomeral base. Hypomeron with medially undefined basally open, shallow lateral antennal grooves. Epipleura not grooved. Metathoracic episterna caudally widened. Metathoracic coxal plate medially 1.2–2.5 times wider than laterally, medially angulated. Tarsal grooves absent on mesothoracic and metathoracic sterna. Abdomen with 5 visible ventrites, convex medially. Last visible ventrite rounded caudally.

**Etymology.** The generic name is a combination of two words, the stem of the new name is based on a eucnemid genus, *Bermillus* Bonvouloir, 1871, “*Bermill-*” and the root ‘-oides’, in which the new group superficially resembles a Southeastern Asian eucnemid group in form. Gender: masculine.

### *Bermilloides lumawigi* Otto, new species

Fig. 4–5

**Description. Female holotype:** Length, 14.0 mm. Width, 5.5 mm. Body color uniformly dark brown-black (Fig. 4).

**Head:** Densely rugose; subspherical; surface dullish; delicate, median carina extremely short, confined to the vertex; epistomal part of epicranium with delicate, short median carina eyes slightly protuberant.

**Antennae:** Filiform, reaching just beyond the pronotal hind angles; dark brown.

**Pronotum:** Dark brown-black, dullish with short, yellow erect setae; surfaces densely rugose; wider than long, with large sharp, hind angles; lateral sides arcuate; disc convex; base sinuous.

**Scutellum:** Dark brown-black, dull, wide, sparsely setose, with median carina, sub-triangular and distally rounded.

**Elytron:** Convex, elongate, gradually narrowed from humeri to apices; conjoined tightly at apex; somewhat dullish with short, yellow recumbent setae; dark brown-black; length 10.0 mm; width 2.75 mm at humeri; humeri striate; disc striate; interstices elevated, transversely rugose.

**Legs:** Femur and tibiae dark brown; tarsi dark brown and somewhat shiny; surfaces closely punctate to rugose, with short, yellow recumbent setae.

**Venter** (Fig. 5): Somewhat shiny; dark brown-black; surface with elongate, yellow recumbent setae; rugose.





**Figures 6–10.** Two new species of Eucnemidae. **6)** *Spinifornax elongatus* Otto, n. sp., dorsal of holotype. **7)** *Ceratus antennatus* Otto, n. sp., dorsal of holotype. **8)** *Ceratus antennatus* Otto, n. sp., antenna of paratype. **9)** *Ceratus antennatus* Otto, n. sp., venter of paratype. **10)** *Ceratus antennatus* Otto, n. sp., aedeagus of paratype, dorsal view.

**Variation.** Two paratypes were examined. The single male paratype is smaller than the holotype, measuring 8.5 mm long. Antennae are longer, extending beyond the pronotal hind angles by three segments. Antennomeres III–VII are quadrate, while antennomeres VIII–X are longer than wide in the male paratype. Median carina is strongly indicated on the pronotum, but shorter on the head, confined to the vertex in the male specimen. The single female paratype is slightly smaller than the holotype, measuring 11.0 mm long. Exoskeletal structures are similar to the holotype, except for the presence of a median fovea above the base of the epistomal part of epicranium. A median carina is feebly indicated on the pronotum, but strong on the head, extending from vertex midway down the frons in the female paratype.

**Type material.** **Holotype**, female, with label data: “MALAYSIA: SABAH:, (Borneo) Crocker, Range; 14-VI-2005” / “*Bermillus*, sp., Det. R.L. Otto, 2012” / “**HOLOTYPE**:, *Bermilloides, lumawigi*, Otto, det. R.L. Otto, 2014” (♀ handwritten behind species name on label) [red printed label]. Holotype in FSCA.

**Paratypes.** 2, each with label data: 1, “PHILIPPINES, MINDANAO, MASARA, COMPOSTELA, VALLEY, ii 2014, lg: I. LUMAWIG” (AAC); 1, “PHILIPPINES:, Mindanao, Panamokan, Bukidnon, May 2014, Ismael Lumawig” (GERP). Each paratype labeled: “**PARATYPE**:, *Bermilloides, lumawigi*, Otto, Det. R.L. Otto, 2014” (either ♂ or ♀ handwritten behind species name on label) [yellow printed label]. Paratypes in AAC and GERP.

**Distribution.** The species is known from a single locality in Malaysia and two localities on Mindanao in the Philippines.

**Biology.** The type locality is an upper montane forested environment. Two Philippine specimens were taken in tropical montane forests and mountainous forests. Developmental stages remain unknown.

**Etymology.** The specific epithet is named in honor of my friend Ismael Lumawig from the Philippines.

**Remarks.** Adults of *Bermilloides* superficially resemble the Southeast Asian genus *Bermillus*, but differ in the structure of the antennae, being quadrate to longer than wide and filiform in *Bermilloides* and wider than long in *Bermillus*. The antennal grooves are medially undefined in *Bermilloides* and well defined in *Bermillus*. Slender mandibles, as well as straight sex combs along with the length of the prothoracic tarsomere I in males, places the new genus in the tribe Anelastidini. Form and basally toothed tarsal claws will distinguish it from *Anelastidius* Du Val within the tribe Anelastidini.

### Tribe Macraulacini Fleutiaux, 1902

#### Genus *Spinifornax* Fleutiaux, 1926

**Diversity and Distribution.** *Spinifornax* is a moderate sized group consisting of approximately 15 species, largely distributed in Southeast Asia. One species, *Spinifornax alverengai* Cobos, however, is present in Brazil. Muona (1993) described the extinct, *Spinifornax donneri* from Baltic amber. A few misplaced species of *Fornax* Laporte also belong to the group (Otto pers. obs.). A number of undescribed species are known from both South America and Southeast Asia (Muona 1991a, 1993).

**Diagnosis.** Characters of Macraulacini: with apical margin of epistomal part of epicranium evenly rounded and more than twice as wide as the distance between antennal sockets; basally open, deep, lateral antennal grooves well developed, usually with smooth surfaces; male prothoracic tarsomere I simple, with basal sex combs; metathoracic coxal plates narrowing laterad; evenly rounded apex of last ventrite; spiniform, declivous elytrial apex; basally toothed tarsal claws; lateral surfaces of mesothoracic and metathoracic tibiae with hairs and transverse rows of spine combs; male aedeagus dorsoventrally compressed, with laterally attached secondary lobes; median lobe simple, moderately and narrowly bifurcate apically; flagellum simple.

***Spiniformax elongatus* Otto, new species**

Fig. 6

**Diagnosis.** Very elongate body form, along with tricoloration will distinguish the new species from all other *Spiniformax* species in Southeast Asia.

**Description. Female holotype:** Length, 13.0 mm. Width, 3.0 mm. Body elongate, tapering towards the elytral apex; tri-colored with head, antennae, apical pronotal margin, scutellum, apical third of elytra, venter, and legs black; remaining areas of pronotum red; basal two-thirds of elytra orange; head, pronotum and elytra clothed with dense, short, recumbent setae (Fig. 6).

**Head:** Very closely and shallowly punctate, subspherical; frons convex, without median keel or groove; surface shiny; apical margin of epistomal part of epicranium evenly rounded, about 2.5 times wider than base; mandibles stout, bidentate.

**Antennae:** Filiform, reaching about half the length of the body; antennomere III slightly longer than IV; antennomeres IV–X each longer than wide, subequal; antennomere XI slightly longer than X.

**Pronotum:** Very closely, shallowly punctate; surface shiny; as long as wide, with short hind angles; lateral sides gradually narrowing anteriorly; disc convex, simple; base sinuate.

**Scutellum:** Shining; closely, shallowly punctate; sub-triangular and distally rounded.

**Elytra:** Striate; interstices elevated; surfaces closely, shallowly punctate.

**Legs:** First tarsomere as long as the combined lengths of the remaining four on mesothoracic and metathoracic tarsi; tibiae rounded in cross section; metathoracic tarsomeres I–III simple; metathoracic tarsomeres IV excavate-emarginate; metathoracic tarsomere V short with basally toothed claws.

**Venter:** Shallowly punctate, with recumbent white setae; hypomeron with well developed, basally opened lateral antennal grooves; metathoracic episternum parallel-sided; metathoracic coxal plates medially 3.0–6.0 times wider than laterally.

**Type material. Holotype**, female, with label data: “MALAYSIA, SABAH, Kinabalu National Park, headquarters, 6° 00'N 116° 32'E, 1550-1650m, 12–15.VII.2012” / “BMNH {E}, 2013–134, M. Geiser” / “**HOLOTYPE**:, *Spiniformax, elongatus*, Otto, det. R.L. Otto, 2014” (♀ handwritten behind species name on label) [red printed label]. Holotype in BMNH.

**Distribution.** The species is known from a single locality in the Malaysian Peninsula.

**Biology.** The type locality is a middle montane environment. Developmental stages remain unknown.

**Etymology.** The specific epithet of the new species is derived from the elongate form of the body.

**Remarks.** Many species within the group are either bicolored or unicolored. Tricoloration of orange, red, and black as present in this species, and, along with its elongate body form, is quite unique for the genus and will distinguish it from all known species of *Spiniformax* distributed in the Asian, Oceanic, and Neotropical regions.

**Genus *Ceratus* Bonvouloir, 1871**

**Diversity and Distribution.** *Ceratus* is a moderate sized group consisting of 23 described species. Eleven species are precinctive on the Philippines. Eight species have been taken in Indonesia (Java, Sulawesi, and Sumatra), Malaysia (Bornean and Penninsular) and Papua New Guinea. Two species, *Ceratus remotus* (Fleutiaux) and *Ceratus scotti* Fleutiaux are present on Seychelles. Muona (1993) described the extinct, *Ceratus woltani* from Baltic amber. Two new species have been taken on the Asian mainland, including one described here. Additional undescribed species may be present elsewhere in Southeastern Asia.

**Diagnosis.** Characters of Macraulacini: with apical margin of epistomal part of epicranium evenly rounded and more than twice as wide as the distance between antennal sockets; well-developed basally open lateral antennal grooves present; antennomeres II and III short, subequal, together shorter than IV; male prothoracic tarsomere I simple, with hidden curved basal sex combs; metathoracic coxal plates medially 3.0–6.0 times wider than laterally; last visible ventrite rounded; tarsal claws simple; lateral surfaces of mesothoracic and metathoracic tibiae with hairs and transverse rows of spine combs.

***Ceratus antennatus* Otto, new species**

Fig. 7–10

**Diagnosis.** Much longer than wide, asymmetrically serrate antennomeres will distinguish this new species from other *Ceratus* species in the Philippines and remaining Southeast Asia.

**Description. Male holotype:** Length, 5.0 mm. Width, 1.5 mm. Body subcylindrical, moderately elongate, tapering towards the elytral apex; uniformly black; antennae dark brown; legs dark reddish-brown; head, pronotum and elytra clothed with short, white recumbent setae (Fig. 7).

**Head:** Very closely punctate, subspherical; frons convex, with very delicate median carina; surface shiny; epistomal part of epicranium with interocular carina at base; apical margin of epistomal part of epicranium feebly trilobed, more than 2.5 times wider than base; mandibles stout.

**Antennae** (Fig. 8): Strongly, asymmetrically serrate; nearly as long as the length of the body; setose; antennomere II and III short, combined shorter than IV; antennomeres IV weakly serrate, slightly shorter than V; antennomere V serrate, slightly shorter than VI; antennomeres VI–X each strongly and asymmetrically serrate, subequal and longer than wide; antennomere XI elongate, slightly longer than X.

**Pronotum:** Very closely punctate, almost rugose; surface shiny; slightly longer than wide, with short, sharp hind angles; laterally parallel-sided, rounded anteriorly; disc simple, convex; base sinuate, with short, median groove above scutellum.

**Scutellum:** Shallowly punctate, shining, oblong, sub-triangular and distally rounded.

**Elytra:** Very shallowly striate; interstices flattened; surfaces very closely punctate.

**Legs:** First tarsomere shorter than the combined lengths of the remaining four on mesothoracic and metathoracic tarsi; tibiae rounded in cross section; metathoracic tarsomeres I–III simple; metathoracic tarsomeres IV excavate-emarginate; metathoracic tarsomere V elongate with simple claws.

**Venter** (Fig. 9): Closely punctate, with short, recumbent white setae; hypomeron with well-developed basally opened lateral antennal grooves, widest near middle; hypomeral pit present near anterior end of antennal groove; metathoracic episternum caudally widened; metathoracic coxal plates medially 3.0–6.0 times wider than laterally.

**Male aedeagus** (Fig. 10): Basal piece oblong, apically tapered; median lobe elongate, narrowly bilobed; lateral lobes short, apically rounded; secondary lateral lobes basally attached to lateral lobes, elongate, apically rounded.

**Variation.** Five adult male paratypes were examined. Lengths of five specimens measured 5.0 mm; consistent with the holotype. Three paratypes were measured at 1.5 mm wide. The remaining two were wider, measuring 1.75 mm. Several specimens show a slight brownish coloration on the elytra, which may be attributed to its slight teneral state at the time of collection. On those same three specimens, antennal and leg colorations are slightly lighter. There are no variations in the exoskeletal structures among the paratypes in relation to the holotype.

**Type material. Holotype**, male, with label data: “W. THAILAND: 300 m., Thung Yai Wildlife Sanctuary, 15° 30' N-98° 48' E” / “Tak Province, Umphang District, Mae Chan/Mae Klong confluence, 27.iv.–6.v.1988” / “oak/bamboo forest, M.J.D. Brendell, B.M. 1988–183.” / “**HOLOTYPE**:, *Ceratus, antennatus*, Otto, det. R.L. Otto, 2014” (♂ handwritten behind species name on label) [red printed label]. Holotype in BMNH.



**Paratypes.** 5, each with label data: “W. THAILAND: 300 m., Thung Yai Wildlife Sanctuary, 15° 30' N 98° 48' E” / “Tak Province, Umphang District, Mae Chan/Mae Klong confluence, 27.iv.–6.v.1988” / “oak/bamboo forest, M.J.D. Brendell, B.M. 1988–183.” / “**PARATYPE:**, *Ceratus*, *antennatus*, Otto, det. R.L. Otto, 2014” (♂ handwritten behind species name on label) [yellow printed label]. Paratypes in BMNH and GERP.

**Distribution.** The species is known from a single locality in western Thailand.

**Biology.** All specimens were taken in a mixed forest consisting of oaks (*Quercus* spp.; Fagaceae) and bamboo (*Bambusa* spp; Poaceae). Developmental stages remain unknown.

**Etymology.** The specific epithet is derived from the presence of its elongate, asymmetrically serrate antennae.

**Remarks.** Fleutiaux (1926) provided a key to most species from the Philippines. Cobos (1986) described two new species from the Philippines, but did not provide an updated key for the group. The presence of a delicate median carina on the frons along with the interocular carina above the epistomal part of epicranium as well as the antennal structures will distinguish the new species from known *Ceratus* species in the region.

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