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Katsuraoclytus, a New Clytine Genus (Coleoptera, Cerambycidae) from Sumatra, Indonesia

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Abstract A new clytine genus *Katsuraoclytus* is proposed for *Demonax metallicus* from Sumatra, Indonesia. The new genus is distinguished from the genera *Demonax*, *Grammographus* and *Rhabdoclytus* by having long maxillary palpi with a semi-cylindrical palpomere IV, and a median rugose callosity on the pronotum.

Introduction

The genus *Demonax* Thomson, 1861 is the largest group in the tribe Clytini. The genus contains 429 known species, three subspecies (Tavakilian & Chevillotte, 2020), and numerous undescribed species that await discovery, primary in the tropic of Asia (cf. Holzschuh, 2019; Viktora, 2019 a, b, c). However, the enormous size of the group combined with the fact that it contains several polymorphic or heterogeneous species implies that it is not monophyletic.

Demonax metallicus Viktora, 2015 is a unique clytine beetle known only from a male holotype from West Sumatra. This species has a large elongate body with long legs and antennae, and metallic green elytra similar to several other species within the Callichromatini (Cerambycinae). Detail examination of additional specimens of this species revealed that it does not belong to *Demonax*, and should be placed in a new genus within the Clytini. Here, I propose that a new genus be established for *D. metallicus*, and briefly discuss the relationship of this new genus with existing genera in the Clytini.

I would like to dedicate this paper to the late Dr. Katsura Morimoto, who passed away in September, 2019. The new genus containing the elegant clytine beetle from tropical Asia proposed herein is named in his memory.

Material and Methods

Material used in this study were obtained from the private collection of Shusei and Akiko Saito. Observations were conducted as in Niisato and Lien (2019).

Taxonomy

Genus ***Katsuraoclytus*** nov.

Type species: *Demonax metallicus* Viktora, 2015.

Gender: Masculine.

Description. Body markedly elongate, more or less cylindrical, with very long legs and antennae. Integument shiny overall, with metallic lustre on elytra.

Head (Fig. 3) large relative to narrow apex of pronotum, almost vertically truncate anteriorly; frons longer than wide, hardly convergent apicad, emarginate on sides, with a fine median costa;

antennal cavities approximate each other; genae deep, almost as deep as lower eye-lobes in frontal view; mandibles (Figs. 4 & 5) relatively thick, arcuate, toothed in apical third, bluntly dentate near middle of each inner margin; maxillae (Fig. 6) with developed lacinia and galea, palpi long, palpomere IV semi-cylindrical, about twice length of III; labium (Fig. 7) with prementum transversely semicircular, palpomere III weakly dilated apicad. Antennae (Fig. 2) markedly long, provided with rows of hairs along inner-sides of mid antennomeres; apical spines (Figs. 22–24) in III–V short knife-shaped; III distinctly longer than IV and as long as V; VII–XI more or less flattened.

Pronotum (Figs. 8, 9 & 25) barrel-shaped though more contracted at apex than at base, widest behind middle; disc uneven, raised towards basal fourth where it is composed of an oblong rugose callosity in middle. Mesonotum with scutum (Fig. 10) inverted trapezoidal, produced laterad at basal angles, weakly tuberculate behind middle of sides; scutellum large triangular.

Elytra narrow and very long, slightly narrowed apicad, with apices obliquely truncate. Hind wings with AA_{3+4} and $Cu+AA_3$ approximately connected with short cross vein (AA_3) near middle.

Abdominal sternite VII (anal sternite) (Fig. 17) trapezoidal, subtruncate on apical margin.

Legs very long; hind femora (Fig. 27) slightly exceeding elytra apices, with stout apical spurs; mid and hind tibiae compressed, provided with rows of short hairs along inner-sides; hind tarsomere I long.

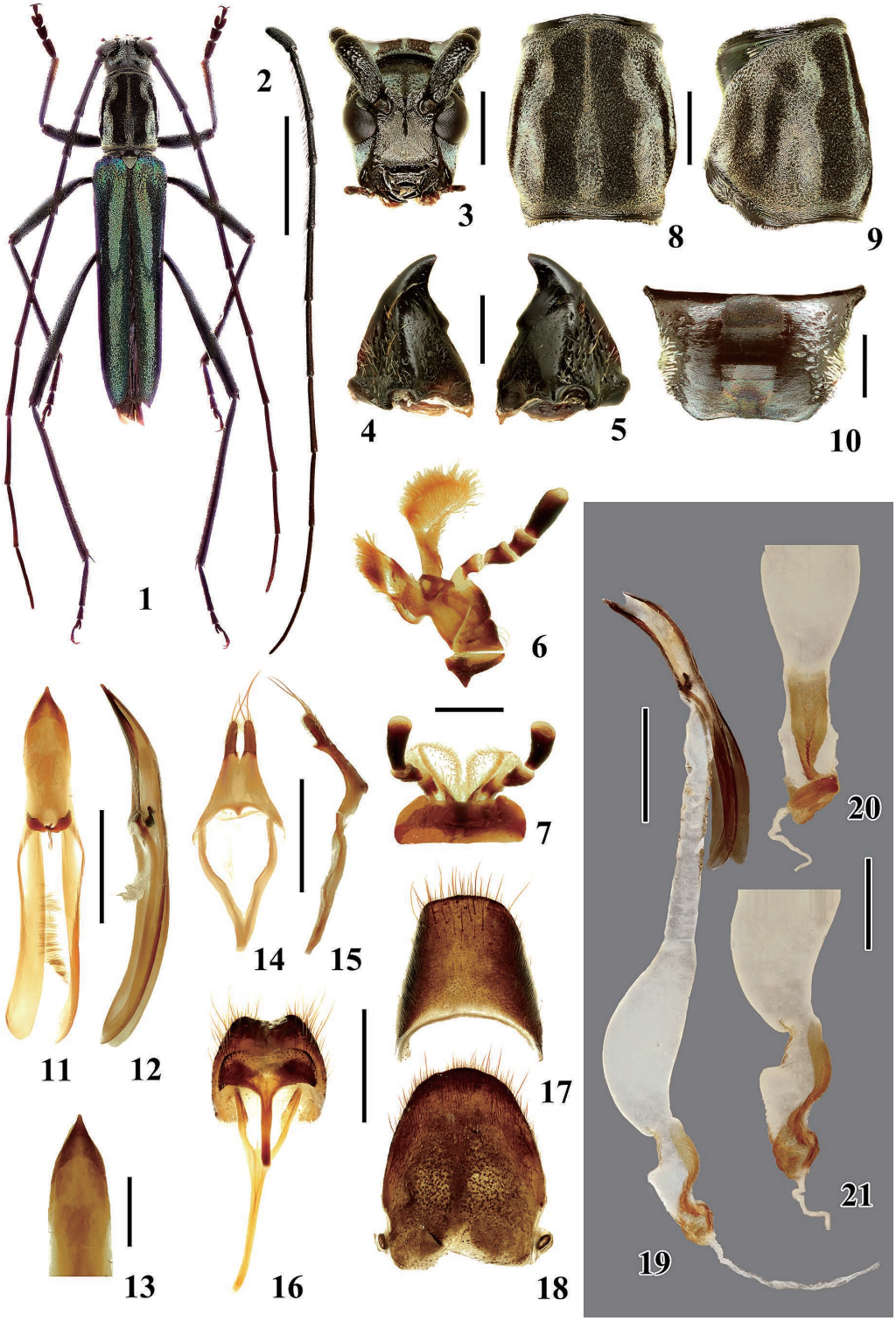
Male genitalia (Figs. 11–16) not unlike that typically observed in some species of *Demonax*, *Grammographus* and *Rhabdoclytus*, though apical phallomere of endophallus (Figs. 19–21) provided with a long sclerite along entire length of dorsal side.

Etymology. The genus name *Katsuraoclytus* is a combination of the first name of Katsura MORIMOTO and *Clytus*, the type genus name of the tribe Clytini.

Range. Sumatra, Indonesia.

Diagnosis. *Katsuraoclytus* can be easily distinguished from the genera *Demonax*, *Grammographus* CHEVROLAT, 1863 and *Rhabdoclytus* GANGLBAUER, 1889 by the long maxillary palpi with semi-cylindrical palpomere IV and the median rugose callosity on the pronotum. In addition to the above differences, *Katsuraoclytus* can easily be separated from the type species of the first genus, *D. nigrofasciatus* THOMSON, 1861 and similar species such as *D. diversofasciatus* HELLER, 1916, by having a markedly elongate body with very long legs and antennae, and by differences in the male genitalia, such as the long sclerites on the dorsal sides of the apical phallomere in the endophallus. In terms of the presence of the median callosity on the pronotum and/or the apical spines of the antennomeres III–IV or V, this new genus is similar to the genera *Clytocera* GAHAN, 1906 and *Laodemonax* GRESSITT et RONDON, 1970, but can be distinguished from them by the markedly elongate body, very long antennae, metallic lustre on the elytra, and unique features in the mouthparts and the endophallus mentioned above. Although externally quite different from each other, *Katsuraoclytus* is rather similar to the genera *Psilomerus* CHEVROLAT, 1863 and *Sclethrus* NEWMAN, 1842 in the structures of endophallus and the maxilla particularly with the long palpi and semi-cylindrical palpomere IV.

Figs. 1–21. Habitus and body parts of *Katsuraoclytus metallicus* (VIKTORA, 2015), comb. nov. —— 1, Male habitus; 2, right antenna; 3, head; 4, left mandible; 5, right mandible; 6, left maxilla; 7, labium; 8 & 9, pronotum; 10, mesonotum (scutum); 11 & 12, median lobe; 13, ditto, apical part; 14 & 15, tegmen; 16, abdominal segments VIII–IX; 17, abdominal sternite VII (anal ventrite); 18, abdominal tergite VII (anal tergite); 19, median lobe with inflated endophallus; 20 & 21, apical part of endophallus. —— 1, 4, 5, 8, 10, 11, 13, 14, 18 & 20, Dorsal view; 2, 9, 12, 15 & 19, lateral view; 21, dorso-lateral view; 6, 7, 16 & 17, ventral view; 3, frontal view. Scales: 5.00 mm for 2; 2.00 mm for 3, 8, 9 & 19; 1.00 mm for 11, 12 & 14–18; 0.50 mm for 4–7, 10, 13, 20 & 21; no scale for 1.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Notes. Since the higher categories of some genera of the tribe Clytini have not yet been satisfactorily defined, previous authors classified almost all clytine beetles having apical spines on the antennomeres and no median callosity on the pronotum as belonging to *Demonax* (cf. MITONO, 1941, 1942; GRESSITT & RONDON, 1970; NIISATO, 2007). Thus, *Katsuraoclytus* may be synonymous with *Demonax* in the apical spines on the antennomeres, according to the traditional classification in the original description (VIKTORA, 2015). However, there is no doubt that this new genus is an independent taxon, since it is markedly different in some basic features, at least from the type species, *D. nigrofasciatus* and its relatives.

Katsuraoclytus metallicus (VIKTORA, 2015), comb. nov.

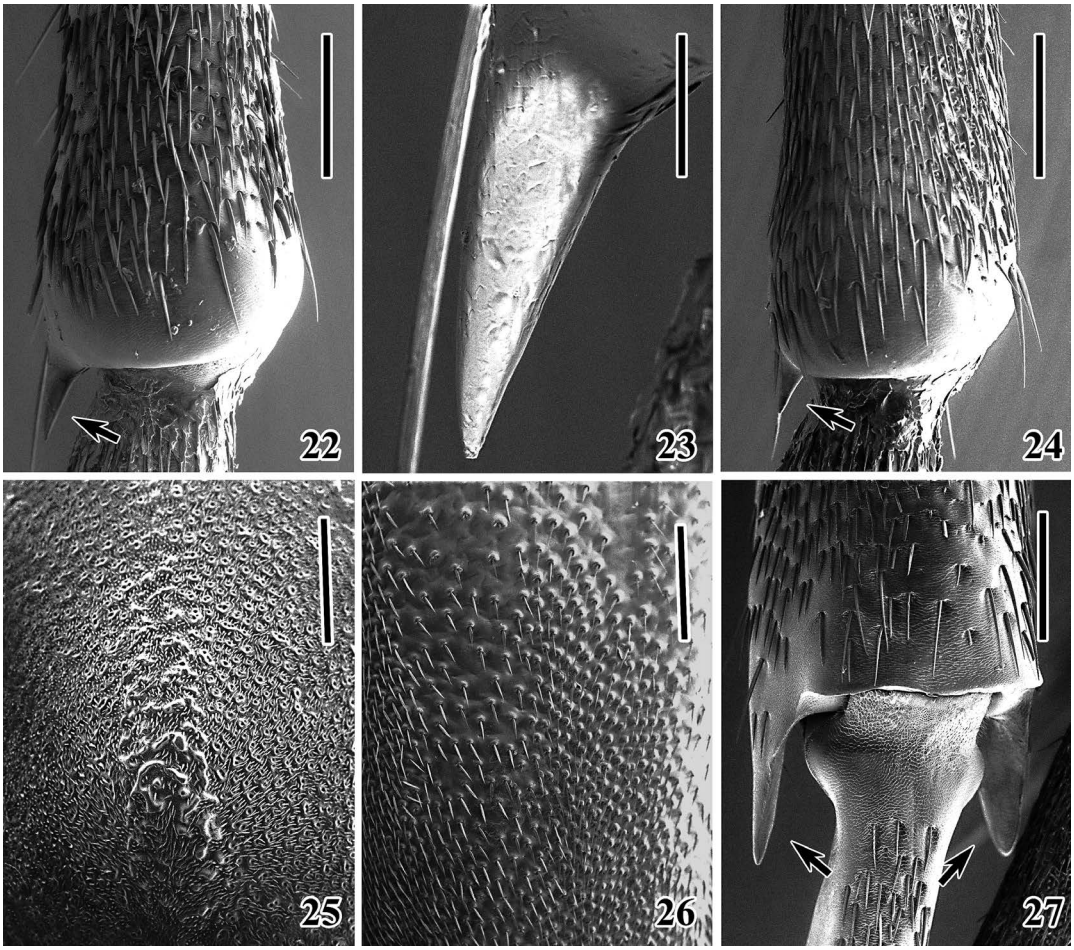
(Figs. 1–27)

Demonax metallicus VIKTORA, 2015: 99, fig. 3; type locality: Indonesia, W. Sumatra, Harau Valley.

Supplementary description. M a l e. Body length 17.2–18.3 mm; 21.8 mm in holotype (VIKTORA, 2015). Colour largely black; elytra metallic dark green, except for light green stripe on each longitudinal part extending from just behind scutellum to near apex near suture, though the stripe subdivided near middle. Body densely clothed with minute bluish grey pubescence on head, scutellum, ventral surface and legs; pronotum densely clothed with minute bluish grey scale-like pubescence, except for the following maculations of minute black pubescence: 1) long semi-oblique stripes on sides, and 2) a pair of median stripes extending almost entire length of pronotum; elytra largely clothed with fine black pubescence, and also densely with dull bluish grey scale-like pubescence on light green area near suture and on sides; antennomeres III–VI provided with sparse rows of semilong black hairs. Head almost as wide as maximum width of pronotum, smooth though provided with large shallow punctures on occiput, with antennal cavities separated by 3/10 width of head. Antennae approximately 1.5 times as long as body, surpassing elytral apices by apex of antennomere VIII. Pronotum slightly longer than wide, weakly constricted behind apex and before base; disc closely granulose-punctured, provided with a median longitudinal costa in almost entire length, which is fine in apical third, then gradually dilated to basal third, formed as an oblong callosity from basal third to just before base (Fig. 25). Elytra more than three times as long as humeral width, narrowed apicad in a straight line, closely punctured (Fig. 26), with apices briefly dentate at external angles and almost rounded at sutural angles. Ventral surface largely shagreened, sparsely mingled with shallow punctures. Hind tarsi with tarsomere I more than twice length of following two combined.

Male genitalia: Median lobe (Figs. 11–13) relatively narrow, slightly arcuate in lateral view; dorsal plate narrowly rounded at apex, exposing narrowly pointed apical part of ventral plate in dorsal view; median struts about 2/3 length of median lobe. Endophallus (Fig. 19) less than three times as long as median lobe; median phallomere provided with about ten pairs of weak sclerites in basal third; pre-apical bulb distinctly dilated on ventral side, strongly constricted at boundary with apical phallomere; apical phallomere (Figs. 20 & 21) narrowed in basal third and lightly sclerotised on ventral side, with dorsal sclerite narrowed and vertically raised in apical third, the sclerite bent left side at short distance from apex and looped towards distal end, largely sclerotised on sides of distal part. Tegmen (Figs. 14 & 15) 2/3 length of median lobe, with relatively wide ring part; parameres less than 1/5 length of tegmen, with each lobe narrow, arcuate, narrowly rounded at apex, clothed with dense short setae along apex and sides, and also with one very long and two long setae at apex. Tergite VIII (Fig. 16) elongate semicircular, shallowly emarginate on apical margin, densely clothed with semilong to long setae along about apical half of margin.

Specimens examined. 1 ♂, Jambi Province (without detail locality data), Central Sumatra,



Figs. 22–27. Body parts of *Katsuraoclytus metallicus* (Viktora, 2015), comb. nov. (SEM images). —— 22, Apical part of antennomere IV (arrow mark indicating apical spine); 23, apical spine of antennomere IV; 24, apical part of antennomere V (arrow mark indicating apical spine); 25, pronotum, showing discal feature near basal half; 26, elytron, showing discal feature near base; 27, apical spurs of hind femur (arrow marks). Scale: 0.50 mm for 25 & 26; 0.25 mm for 22, 24 & 27; 0.05 mm for 23.

Indonesia, XI.2012, local collector leg.; 1 ♂, almost the same data as preceding but XI.2014; 1 ♂, almost the same data as preceding but V.2016.

Distribution. Sumatra (West Sumatra and Jambi Provinces), Indonesia.

Notes. This Sumatran species is known from a total of four male specimens from the type locality, Harau Valley in West Sumatra Province, and an unknown locality in Jambi Province. It is noteworthy that such a prominent clytine beetle was discovered in Sumatra within the last decade or so.

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要　　約

新里達也：*Katsuraoclytus*，インドネシア・スマトラ産トラカミキリ族の 1 新属（鞘翅目カミキリムシ科）．――― スマトラから記載された *Demonax metallicus* VIKTORA は，ある種のアオカミキリ類のように，長い肢と触角および金緑色の上翅をもつ，きわめて特異なトラカミキリである．本種の追加標本を入手して詳細に検討したところ，長い小腮肢とその円筒形の第 4 節，前胸背板の中央隆起，内袋先端部の長骨片などの特異な形質をそなえ，その所属はトゲヒゲトラカミキリ属 *Demonax* THOMSON でないばかりか，トラカミキリ族のいかなる既知属にも該当しないことが明らかになった．そこで，これらの形態的特異性を重視し，*D. metallicus* をタイプ種とする新属 *Katsuraoclytus* nov. を創設した．なお，本新属名は，2019 年 9 月に逝去された故・森本　桂博士に因んだものである．

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