

Description of a New Genus Close to *Aegosoma* (Coleoptera, Cerambycidae, Prioninae) (Revisional Studies of the Genus *Megopis* sensu LAMEERE, 1909–11)

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Abstract A new genus *Metaeosoma* is proposed on the basis of *Aegosoma pici* (LAMEERE, 1915) and *Megopis annamensis* PIC, 1930. The relation between the genera *Metaeosoma* gen. nov. and *Aegosoma* is discussed.

Résumé Un nouveau genre, *Metaeosoma* gen. nov., est proposé pour contenir les espèces *Aegosoma pici* (LAMEERE, 1915) et *Megopis annamensis* PIC, 1930. Les relations entre ce nouveau genre et le genre *Aegosoma* sont discutées.

Introduction

The genera *Megopis* and *Aegosoma* were originally erected by AUDINET-SERVILLE, 1832, the former for *M. mutica* from Mauritius Island, and the latter for *Cerambyx scabricorne* SCOPOLI, 1763 from Europe. LAMEERE (1909) lumped seven subgenera and 37 species under the genus *Megopis*, and at the same time, the genus *Aegosoma* was included in the genus *Megopis* as a subgenus. Since then, the name *Megopis* has long been used very widely, and it has been regarded that this genus is distributed from Africa to islands of Oceania through Eurasia. This treatment had been followed by world entomologists including Japanese for a century (OHYASHI & NIISATO, 2007). KOMIYA and DRUMONT (2009, 2010) proved that the genus *Megopis* is better to be considered as a genus limited only in southern east Africa, Madagascar and Mauritius. Therefore, every subgenera and species of *Megopis* sensu LAMEERE (1909) which are distributed throughout Eurasia and Oceania should be excluded from the genus *Megopis*. Recently, DRUMONT and KOMIYA (2010) proposed to revive *Aegosoma* as an independent genus from a subgenus of *Megopis*.

The peculiar two species, *Aegosoma pici* (LAMEERE, 1915) and *Megopis annamensis* PIC, 1930 were described from Yunnan (China) and southern Vietnam, respectively. KOMIYA (2000) redescribed these two species under the genus *Megopis*. Recently, DRUMONT and KOMIYA (2010) listed *pici* under combination with the genus *Aegosoma*. The peculiarity of *A. pici* was already suggested by LAMEERE (1915) in his original description. He wrote “Cet insecte (= *M. pici*) est très intéressant, car s’il peut à la rigueur être rangé parmi les *Aegosoma* SERV., il diffère des espèces de ce sous-genre par des particularités qui se retrouvent dans les sous-genres *Nepiodes* PASCOE et *Megopis* s. str., sans toutefois transiter vers les espèces de ces dernières coupes pour l’ensemble de l’organisation”. *M. annamensis* resembles *A. pici* in general appearance, but has more distinct differences to the other members of *Aegosoma* than *A. pici*. Through our recent investigation of the genus *Aegosoma*, the difference of these species from the other members of the genus has appeared to be very clear. Therefore, we establish a small but distinct new genus based on these two species, *A. pici* and *M. annamensis*.

Materials and methods

Aegosoma pici and *Megopis annamensis* were described without any illustrations. We were not able to locate any type specimens of these two species notwithstanding long search over ten years throughout many expected museums including MNHN, BMNH and IRSNB. So, we determined them only by the descriptions.

Fortunately, the description of *A. pici* by LAMEERE was rather precise as compared with his other descriptions, and also we found five specimens of *A. pici*, which was attached with determination labels by LAMEERE himself in the collection of IRSNB. These specimens well agreed with the original description. In this study, we pick up a male from them, use it as typical example in this study and indicate the fact on the label added to the example.

Megopis annamensis was described on the basis of a female with rather poor diagnosis. Since this species indicates rather prominent sexual dimorphism, male determination might be queried if the male will be compared with the original description. Therefore first of all we select a female which was mainly used in this study from ZKC, and place it in IRSNB with indicating label. Then we select a male which has the same collecting data to up-mentioned female, use it in male description and deposit it at the same place (IRSNB) with the female. These two specimens have no positions in the sense of nomenclature but we hope they will be of some use for the workers who will investigate the concerning subject.

Specimens examined for this study are from following institutions and collections.

ADC	Alain DRUMONT collection, Brussels, Belgium.
BMNH	The Natural History Museum, London, UK.
IRSNB	Institut royal des Sciences naturelles de Belgique, Brussels, Belgium.
NSMT	National Museum of Nature and Science, Tsukuba, Japan.
ZKC	Ziro KOMIYA collection, Tokyo, Japan.

The abbreviations of body parts used in this paper are the same as those previously used in this series 8–10 (see KOMIYA & DRUMONT, 2007).

Genus *Metaegosoma* nov.

(Figs. 1–4)

Type species. *Megopis pici* LAMEERE, 1930

M a l e (Figs. 1, 3). Middle sized (26–34 mm). Head, pronotum and underside thickly haired. Head large, cylindrical, slightly longer than wide; antennal tubercles small and weakly elevated; mandibles 0.5–0.6 times as long as head. Antennae 0.8–1.2 times as long as body; scape robust and as it is not smoothly convergent to base, sub-cylindrical and attached to antennal tubercle at inner corner of cylinder, so that the external line in dorsal view distinctly expanded outer-forward; 3rd segment sub-cylindrical, partly slightly depressed dorso-ventrally, without prominent groove on inner side and with longitudinal depression underside; 4th+5th segments subequal in length to 3rd. Pronotum covered with long hairs, convex at middle; lateral margin edged in full length, widest at base, smoothly, straightly or roundly, narrowed forward, without any lateral teeth but basal and apical margins strongly raised, each corner looking projected in dorsal view. Elytra 2.5–2.8 times as long as wide, furnished with two distinct inner costae (C1 and C2) and feeble outer two costae (C3 and C4); sutural tooth small but distinct. Protibia more or less thickened and stout. Genital organs similar to those of the ge-

nus *Aegosoma* but median lobe shorter, roundly curved downward in apical half.

F e m a l e (Figs. 2, 4). Close to male but indicate moderate sexual dimorphism. Head and pronotum relatively smaller as compared with body length. Antennae shorter and slenderer than in male, 0.6–0.8 times as long as body. Pronotum narrower, with lateral margins very clearly edged.

Notes. This new genus is close to the genus *Aegosoma* in having the antenna not hair-fringed, pronotum rounded laterally and without lateral spines. But this is different from the latter by the 3rd segment of antenna depressed dorso-ventrally and without internal groove which is always found in *Aegosoma*. The members of this new genus are generally smaller in body size than in those of *Aegosoma*, and having the metasternum covered with long and dense tomentum.

Etymology. Meta (Greek) = next to, (i.e.) similar to but different from *Aegosoma*. Gender is feminine.

***Metaeosoma pici* (LAMEERE, 1915) comb. nov.**

(Figs. 1, 2)

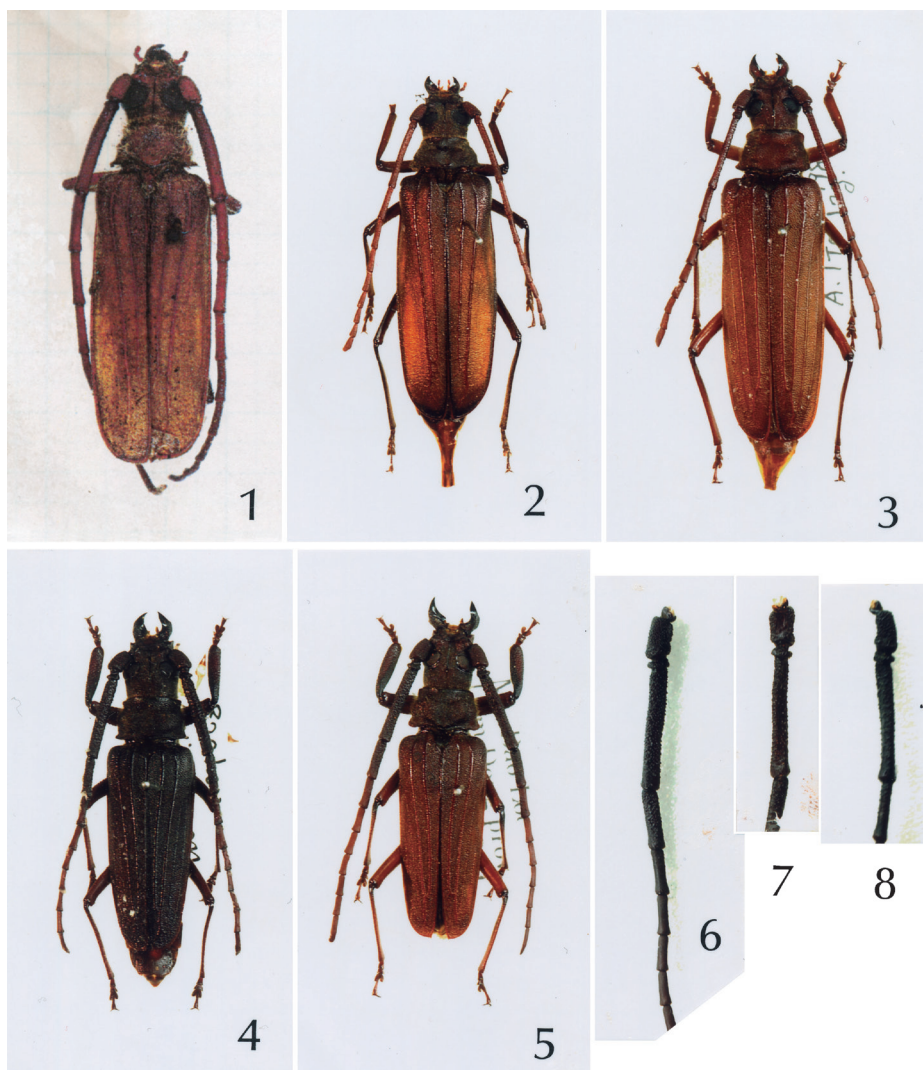
Megopis (Aegosoma) pici LAMEERE, 1915, Bull. Soc. ent. France, **1915**: 178. — GRESSITT, 1951, Longicornia, **2**: 16. — HUA, 1982, Check List of Longicorn Beetles of China, **3**. — KOMIYA, 2000, Elytra, **28**: 423.
Aegosoma pici: DRUMONT & KOMIYA, 2010, Palaeartic Coleoptera, **6**: 87.

As we was not able to locate the type specimen of this species, we refer to the important part of the original description as follows; “Le prothorax est semblable à celui des *Aegosoma* du groupe dont fait partie le *Megopis scabricornis* SCOP., mais le yeux sont renflés, leur lobe inférieur atteignant le niveau du milieu de la cavité d’insertion de l’antenne. La tête n’est pas plus allongée en arrière des yeux que chez les *M. tibialis* WHITE et *M. buckleyi* GAH. Les antennes glabres, n’offrent que des rugosités éparses sur les 3e à 5e articles; elles sont peu renflées chez le mâle; le 3e article, plus ou moins cylindrique, est moins long que les deux suivants réunis; le système porifère s’étend jusqu’à sa base chez le mâle, jusqu’à son sommet chez la femelle; il n’y a pas de contraste marqué entre le 5e article et les suivants quant à l’épaisseur et à la longueur; les articles sont carénés au côté interne, les derniers l’étant aussi au côté externe; chez le mâle les antennes dépassent l’extrémité du corps, tandis que chez la femelle elles atteignent le tiers postérieur des élytres. Ceux-ci ne montrent que les deux côtes internes, les deux côtes externes étant cependant distinctes chez la femelle, mais en arrière seulement; ils sont simplement anguleux à l’angle sutural. Les épimères métathoraciques sont relativement grands. Les tarses ont le dernier article pas plus long que les autres réunis et le premier pas plus long que les deux suivants pris ensemble. Le 5e arceau ventral de l’abdomen est fortement échancré en arrière; la tarière de la femelle est courte et déprimée.

Ce longicorne, auquel je donnerai le nom de *Megopis (Aegosoma) pici*, n. sp., est brun, légèrement teinté de ferrugineux en dessous, avec les élytres limbés d’obscur; le corps est recouvert, ainsi que les pattes, d’une pubescence grisâtre longue, surtout chez le mâle; la tête et le pronotum sont finement granuleux; les élytres sont densément couverts de granulations; ils sont glabres chez la femelle, pubescents chez le mâle; le dessous et les pattes offrent une ponctuation serrée qui devient âpre sur les pattes du mâle; la longueur du mâle est de 30 mm, celle de la femelle de 35 mm.

We add several lines to this original description.

M a l e. Interspace between eye-lobes in dorsal view about a half as wide as each lobe, and as wide as each lobe in ventral view. Antenna clearly longer than body, AL/BL 1.1–1.2; 1st–5th segments covered with granulations which are strong in 3rd segment; 3rd segment rather strongly depressed dorso-ventrally and not exactly cylindrical as written in the original description, without trace of an internal groove which always appears in the genus *Aegosoma*.



Figs. 1–2. Habitus of *Metaeosoma pici* (LAMEERE, 1915). — 1, Male, this example was used as a typical form in this study (IRSNB); 2, female.

Figs. 3–5. Habitus of *Metaeosoma annamensis* (PIC, 1930). — 3, Male and 4, female, these examples were used as typical examples in this study; 5, male, variation of color and tergites.

Figs. 6–8. Antennae of *Metaeosoma annamensis*, male. — 6, Basal eight segments, dorsal view; 7, basal four segments in outside, upper-lateral view; 8, basal four segments in inside, lateral view.

BL: 28–34 mm.

F e m a l e. AL/BL 0.7. Interspace between eye-lobes a little more separated than in male, both in ventral and dorsal side.

Specimens examined. 1 ♂, (Fig. 1) BL 26 mm, four labels attached: “Djo – Kou – La, alt. 1200 m, Nord Ouest Yunnan”, “Megopis Pici, A. Lameere vid.”, “*Metaeosoma pici* (Lameere, 1915), det. by KOMIYA & DRUMONT”, “IRSNB”. We regard this example as a standard specimen in this paper.

1 ♂, Yong Zié, Yunnan, 1914 / Pici Lam. Yunnan, ex coll. DESBROCHER / Megopis Pici A. LAMEERE vid. 1915, IRSNB; 1 ♀, Kouang Si Hien, alt. 2,100 m., Sud Est Yunnan, IRSNB; 18 ♂♂, 3 ♀♀, Tche – Ping – Tcheou, Sud Yunnan, IRSNB; 2 ♂♂, 1 ♀, Pe Yen Tsin, Yunnan / Megopis Pici A. LAMEERE vid., IRSNB; 2 ♀♀, idem, IRSNB; 1 ♂, 1 ♀, Daju, Yunnan, China, 24~28–VI–1992, ZKC; 2 ♂♂, same locality, VI–1994, ZKC; 1 ♀, same locality, 7~8–III–1995, E. KUČERA leg., ZKC; 1 ♂, Jinsha Mts., Daju, 2,500 m, Yunnan Province, China, 10–VII–1992, ADC; 1 ♀, idem, 8–VII–1990, ADC; 1 ♂, Ma-an, 1,711 m, Xianyuan City, Xishui County, Guizhou Province, Chine, 8–VII–2005, ADC.

BL: 29–34 mm.

Distribution. China (Yunnan, Guizhou).

***Metaegosoma annamensis* (PIC, 1930) comb. nov.**

(Figs. 3–6)

Megopis annamensis PIC, 1930, Mél. Exot.-ent., (55): 15. — KOMIYA, 2000, Elytra, 28: 423.

We could not locate the PIC's holotype and we identify this species based on the original description. Then we will give the full lines here.

Original description. “*Megopis annamensis* n. sp. ♀ Elongatus, nitidus, luteo pubescence, elytris glabris, rufo-testaceus, concolor; capite elongate, granuloso, medio glabro lineato; articulis 4 primis antennarum mediocre rugosis, 5 et sequentibus dense punctatis, fere opacis; thorace breve, antice attenuato, lateraliter sinuato et marginato, supra multi et diverse impresso; elytris fere glabris, distincte 4 costatis, cotis tribus internis postice junctis, 3th reducta, 4th paulo elevate et reducta. Long. 30 mill. Annam. — Ressemble à *M. pici* LAM., en diffère par le prothorax très inégal, les élytres 4-costés et à aspect glabre”.

Additional notes. This species indicates prominent sexual dimorphism and the female well agrees with PIC's (1930) description. Body including elytra sub-uniformly reddish brown in female, dark brown with blackish elytra in male. Elytra glabrous in female and thinly pubescent in male. First–4th segments of antennae thickened in male, slender in female. Protibia thickened in male, normal in female. Interspace between eyes in dorsal view wider in male or narrower in female than each lobe.

BL: ♂: 27–33 mm; ♀, 28–34 mm.

Variations. Antennae, (AL/BL) ♂: 0.9–1.1, ♀: 0.7–0.9. Color of elytra changes from charcoal black to brown in male, reddish brown to dark brown in female; color of legs change from dark brown to reddish brown.

Relation to Aegosoma katurai (KOMIYA, 2000). PIC's original description of *M. annamensis* almost agrees with the description of *A. katurai* (KOMIYA, 2000). So, we had to consider the possibility that *A. katurai* is PIC's *annamensis* and *annamensis* sensu KOMIYA (2000) was a new species. However, PIC (1930) wrote “articulis 4 primis antennarum mediocre rugosis, 5 et sequentibus dense punctatis, fere opacis”, but in the female of *A. katurai*, antenna uniformly shiny and sparsely punctuate throughout, not rugose in 1st–4th segments and without distinct difference to 5th–10th segments. In addition, PIC recorded this species from Annam (southern Vietnam) but *A. katurai* was recorded from northern Vietnam or northern Thailand and does not found from that area. These facts clearly prove that treatment in this paper is correct.

Specimens examined and their depository. 1 ♀, BL 29 mm, with two labels attached by us: “Mt. Bao Loc, Lam Dong Prov. Vietnam, 29–VI~1–V–1999.”, “*Metaegosoma annamensis* (PIC, 1930), ♀, det. by KOMIYA & DRUMONT, 2011”. We used this specimen as the standard of this species

in this paper and deposited this in IRSNB. We also deposited one male specimen (BL 29 mm) with the same data to the female in IRSNB.

One ♂, 1 ♀, Same locality with the up-mentioned ♂ and ♀, 29~30-VIII-1998, M. ITO leg., ZKC; 6 ♂♂, 2 ♀♀, same locality and date with the up-mentioned ♂ and ♀, ZKC; 5 ♂♂, 2 ♀♀, same locality, 29-VIII-1999, ZKC; 1 ♂, same locality, 29-IV~1-V-1999, ADC; 1 ♂, 1 ♀, same locality, 21~27-IV-2003, M. ITO leg., ADC; 1 ♀, Vietnam Lam Dong, Khanh Hoa border, 1,625 m, 19-IV-2010, leg., A. PROKOFIEV, ADC; 1 ♂, Dilinh, alt. 1,800, near Dalat, VI-2003, ADC.

Distribution. Vietnam (Lam Dong Prov.).

Key to the Species of *Metaegosoma*

1. External side of mandibles with obtuse tooth, united length of 4th–5th segments of antennae shorter than 3rd, 1st–4th segments of male antennae strongly thickened. Vietnam.
..... *M. annamensis* (PIC)
- External side of mandibles smoothly rounded, united length of 4th–5th segments of antennae as long as or longer than 3rd, 1st–4th segments of male moderately thickened. China.
..... *A. pici* (LAMEERE)

Acknowledgements

We are greatly indebted to the late Dr. Nicole BERTI (MNHM) for the efforts made to search the types of *Aegosoma pici* LAMEERE and *Megopis annamensis* PIC in the collection of PIC, and for the information concerning PIC's collection not only in MNHM but also in some other PIC-related institutes of the world.

要 約

小宮次郎・Alain DRUMONT: 新属 *Metaegosoma* (コウチュウ目カミキリムシ科) の記載。 — *Aegosoma pici* (LAMEERE) ならびに *Megopis annamensis* PIC は長期にわたり *Aegosoma* 亜属と関連性を持つと考えられてきた種である。近年 *Aegosoma* は独立属とされたが、同時に多くの新しい資料が得られ、属内の検討が進んだ。その結果、これら2種では触角第3節が平圧され、内側に溝が欠くなどいくつかの点で同属の他種すべてと異なっており、*Aegosoma* とは別の属に含めるべきことが判明した。そこで、この2種のために、新属 *Metaegosoma* を創設した。

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Manuscript received 26 March 2012;
revised and accepted 6 October 2012.