

A Revision of the Genus *Nepiodes*
(Coleoptera, Cerambycidae, Prioninae)
(Revisonal Studies of the Genus *Megopis*
sensu LAMEERE, 1909–10)

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Abstract *Nepiodes* PASCOE, 1867 is confirmed as a full genus independent of the genus *Megopis*. *Megopis cognata*, *M. cinnamonea* and *M. ritsemai* which were placed by LAMEERE, 1919 in the genus *Megopis* subgenus *Nepiodes*, and *M. bowringi*, *M. terminalis*, *M. sulcipennis* and *M. costipennis* which were included in the subgenus *Megopis* in the same paper are placed in the genus *Nepiodes*. *Megopis ritsemai* is regarded as a subspecies of *N. cinnamoneum*. *Aerogrammus hefferni* KOMIYA is transferred to this genus. *Megopis (Nepiodes) multicarinata* FUCHS is transferred to this genus and regarded as a subspecies of *costipennis*. Two new subspecies of *N. cinnamoneum*, *miyakei* and *birmanus* subsp. nov., are described.

The genus *Nepiodes* PASCOE, 1867 was originally erected to receive *Nepiodes cognatus*. LAMEERE (1909) regarded it as a subgenus of the genus *Megopis*, placed *cinnamoneum* and *cognatus* in it and added *ritsemai* later (1912). At the same time, he (1909) placed *Megopis bowringi* GAHAN, *M. terminalis* GAHAN, *M. sulcipennis* WHITE and *M. costipennis* WHITE, in the first group of the subgenus *Megopis*.

When LAMEERE (1909, 1919) distinguished the subgenus *Nepiodes* from subgenus *Megopis*, he placed importance on the difference in “rebord latéral” of prothorax which is “distinct in full length, simply angled, not separated from episternal suture and not accompanied with callosity” in the former, while “not distinct in apical half, elevated upward and separated from episternal suture by a callosity anterior to coxal cavity” in the latter. However, these characters are rather rich in variations especially in the males and LAMEERE’s classification is not always agreeable. LAMEERE (1909) seemed to be

aware of this fact and wrote that this character appeared “at least in the female” but in *sulcipennis* and *costipennis multicarinatus*, examples which have no callosity and simply angled lateral margins are found also in the females. Then, these Asian *Megopis* sensu LAMEERE (1909) cannot well defined from *Nepiodes* by the characters mentioned by him while they are well distinguished from African *Megopis* by widely separated under eye-lobes. This fact was the main reason why KOMIYA & DRUMONT (2009) proposed to transfer them from *Megopis* to *Nepiodes*. We believe this observation that these Asian species in subgenus *Megopis* sensu LAMEERE, 1909 is closer to *Nepiodes* than to African *Megopis*, was supported by FUCHS (1966) and HÜDEPOHL (1994) because these authors placed the members of this group not in the subgenus *Megopis* but in the subgenus *Nepiodes* when they described each new species *multicarinata* or *lineata*.

In this paper, we will reconfirm *Nepiodes* as a full genus, give the generic characters and place *N. cognatus*, *N. cinnamoneum*, *N. bowringi*, *N. sulcipennis*, *N. costipennis*, and *N. terminalis* in it. We regard *Megopis (Nepiodes) multicarinata* FUCHS (1966) as subspecies of *costipennis* and transfer *Aerogrammus hefferni* KOMIYA (2004) to this genus. We will treat *M. (N.) ritsemai* LAMEERE as a subspecies of *N. cinnamoneum* and describe two new subspecies *N. cinnamoneum miyakei* subsp. nov. and *N. cinnamoneum birmanus* subsp. nov.

The abbreviations used in this paper are as follows: ADC – Alain DRUMONT collection, Bruxelles, Belgium; AWC – Andreas WEIGEL collection, Wernburg, Germany; BMNH – The Natural History Museum, UK; CHC – Carolus HOLZSCHUH collection, Villach, Austria; EVC – Eduard VIVES collection, Barcelona, Spain; FDC – Frédéric LEDUC collection, Herstal, Belgium; HSC – Herbert SCHMID collection, Vienna Austria; IRSNB – Institut Royal des Sciences Naturelles, Bruxelles; MNHN – Muséum national d’Histoire naturelle de Paris, France; NHRS – Swedish Museum of Natural History, Sweden; NSMT – National Museum of Nature and Science, Tokyo, Japan; RMNH – Nationaal Natuurhistorisch Museum, Leiden, The Netherlands. SMTD – Staatliches Museum für Tierkunde, Dresden, Germany. USNM – Smithsonian Institution, National Museum of Natural History, Washington D.C., USA. ZKC – Ziro KOMIYA collection, Japan; ZMAN – Zoölogisch Museum Amsterdam, The Netherlands. ZSMC – Zoologische Staatssammlung, München, Germany (Coll. K. E., Hüdelpohl).

The special abbreviations of body parts used in this paper are the same as those previously used in this series 5–9 (see KOMIYA & DRUMONT, 2007, 2009).

Genus *Nepiodes* PASCOE 1867

- Nepiodes* PASCOE, 1867, Anns. Mag. nat. Hist., (3), 19: 410. — LANSBERGE, 1884, Not. Leyd. Mus. 6: 160.
 — LACORDAIRE, 1868, Gen. Col., 8: 156. — HEFFERN, 2005, Cat. Bib. Long. From Borneo, 10.
 — KOMIYA & DRUMONT, 2009, Elytra, 37: 314. — DRUMONT & KOMIYA, 2010, Catalogue of Palaearctic Coleoptera, 6, list of species: 87.
Megopis LANSBERGE, 1884, Not. Leyd. Mus. 6: 158 (pro parte).
Megopis (Megopis) LAMEERE, 1909, (premier groupe), Anns. Soc. ent. Belg. 53: 14 (pro parte). —

LAMEERE, 1913, Coleopt. Cat. Junk, (52): 41 (pro parte); 1919, Gen. Ins. Wytsman, (172): 75 (pro parte). — HAYASHI, 1971, Ent. Rev. Japan, **23**: 82.
Megopis (*Nepiodes*) LAMEERE, 1909, Anns. Soc. ent. Belg., **53**: 143; 1913, Coleopt. Cat. Junk, (52): 41; 1919, Gen. Ins. Wytsman, (172): 74. — FUCHS, 1966, Koleopt. Rdsch., **43/44** [for 1965/1966]: 19. — HÜDEPOHL, 1994, Entomofauna, **15**(15): 186.

Type species: *Nepiodes cognatus* PASCOE, 1867, Ann. Mag. nat. Hist., (3), **19**: 410.

This genus is close to the genus *Megopis* SERVILLE, 1832 in general features and size but conspicuously different in having eyes widely separated underside and elytron furnished with a distinct sutural spine.

M a l e. BL 20–38 mm, usually between 24–35 mm, slender. Eyes bulging, interspace between eyes about as long as or longer than length of each eyelobe both in dorsal and ventral views. Mandible less than a third of head length, bent inwards just before apex and furnished with a small tooth. Antennae about as long as or slightly shorter than body, segment 3 more or less depressed, A13 0.9–1.2 times as long as A14+5. Pronotum 0.6–0.8 times as long as wide, usually widest at base but sometimes constricted just anterior to base and widened again, then narrowed apicad; apical margin often minutely projected in dorsal view; lateral margin furnished with a small tubercle in some species (viz *bowringi*, *terminalis*, *sulcipennis* and a part of *costipennis*), which are usually placed at about basal fourth. EL/EW 2.8–3.5, each elytron furnished with 2–4 strong costae and a distinct spine on sutural end except *hefferni*. Legs slender and long, protibiae depressed obliquely, metatibiae strongly depressed laterally and more or less expanded apically.

Median lobe of male genitalia about as long as segment 4 of antennae, acutely pointed at apex and usually projected in bill-form, basal slit about two-thirds of whole length; lateral lobe 0.6–0.7 times of median lobe; paramere changing for two types, slender type and spoon-formed one.

F e m a l e. Similar to male in general feature but body usually larger, ratio of head and pronotum to body a little smaller, antennae shorter, (AL/BL 0.9–1.1 in male and 0.6–0.9 in female), apical half of elytra wider, legs shorter.

Notes. This genus is close to the genus *Megopis* in having segment 3 of antennae depressed dorso-ventrally, apical angle of pronotum not projected and much narrower than basal angle, but it is easily distinguished from the latter by remotely placed under eyelobes in ventral view. *Nepiodes cinnamoneum* species-group is somehow close to some species of the genus *Aegosoma* but different from the latter in having 3rd segment of antenna depressed and not thickened nor having an internal groove.

1. *Nepiodes cognatus* species-group

Nepiodes cognatus species-group is characterized in having head and eyes relatively large, basal angle of pronotum without clear projection and elytra not granulate but deeply punctuate. *Nepiodes cognatus* and *N. hefferni* comb. nov. belong to this group.

Nepiodes cognatus PASCOE, 1867

(Figs. 1, 24)

Nepiodes cognatus PASCOE, 1867, Ann. Mag. nat. Hist. (3), **19**: 410. — LANSBERGE, 1884, Not. Leyd. Mus. **6**: 160. — LACORDAIRE, 1868, Gen. Col., **8**: 157. — GEMMINGER & HAROLD, 1872, Catalogus Coleopterorum, 2777. — HEFFERN, 2005, Cat. Bib. Long. from Borneo, **10**.

Megopis cognata: LANSBERGE, 1884, Not. Leyd. Mus., **6**: 159, 160. (pro parte).

Megopis (Nepiodes) cognata: LAMEERE, 1909, Annl. Soc. ent. Belg., **53**: 145.

Male. Body chestnut-brown, inside of mandibles, eyes, elytral suture and joint parts on legs and antennae darker. Head, basal part of mandibles, pronotum and scutellum covered with sparse yellow pubescence, other parts of dorsal side very sparsely pubescent, ventral side thinly pubescent except each side of 1–4 abdominal sternites which are covered with sub-long hairs.

Head larger than prothorax, HL/HW about 1; eyes large and strongly bulging; interspace between eyes 0.4 times in dorsal side, 0.6 in ventral side which is shallowly longitudinally grooved. Antennae almost as long as body; segment 3 slightly shorter than segments 4+5 united; segment 3 depressed, flat or concave on ventral side and weakly convex dorsal side; segments 3–6 scattered by sparse granules, segments 4–11 depressed and carina running both internal and external side; segment 11 as long as segment 5.

Pronotum about 0.6 times as long as wide; disc ruggedly convex and shallowly concave at middle; lateral margin minutely triangularly projected at base, once shortly narrowed, then widened again at basal third and irregularly narrowed to apex; without lateral tubercle though widened part sometimes looking triangularly pointed. Scutellum covered with yellow pubescence.

Elytra haired at each side of scutellum and other parts sub-glabrous; lateral lines widest just after humeri and gradually narrowed to apices; each elytron furnished with distinct three costae (C3 absent), acutely pointed apicad and furnished with an acute apical spine but spine itself not so long.

Legs slender; tibiae shorter as compared with other species in the genus.

Penis very slender and elongated at apical part, parameres about 0.6 times as long as penis.

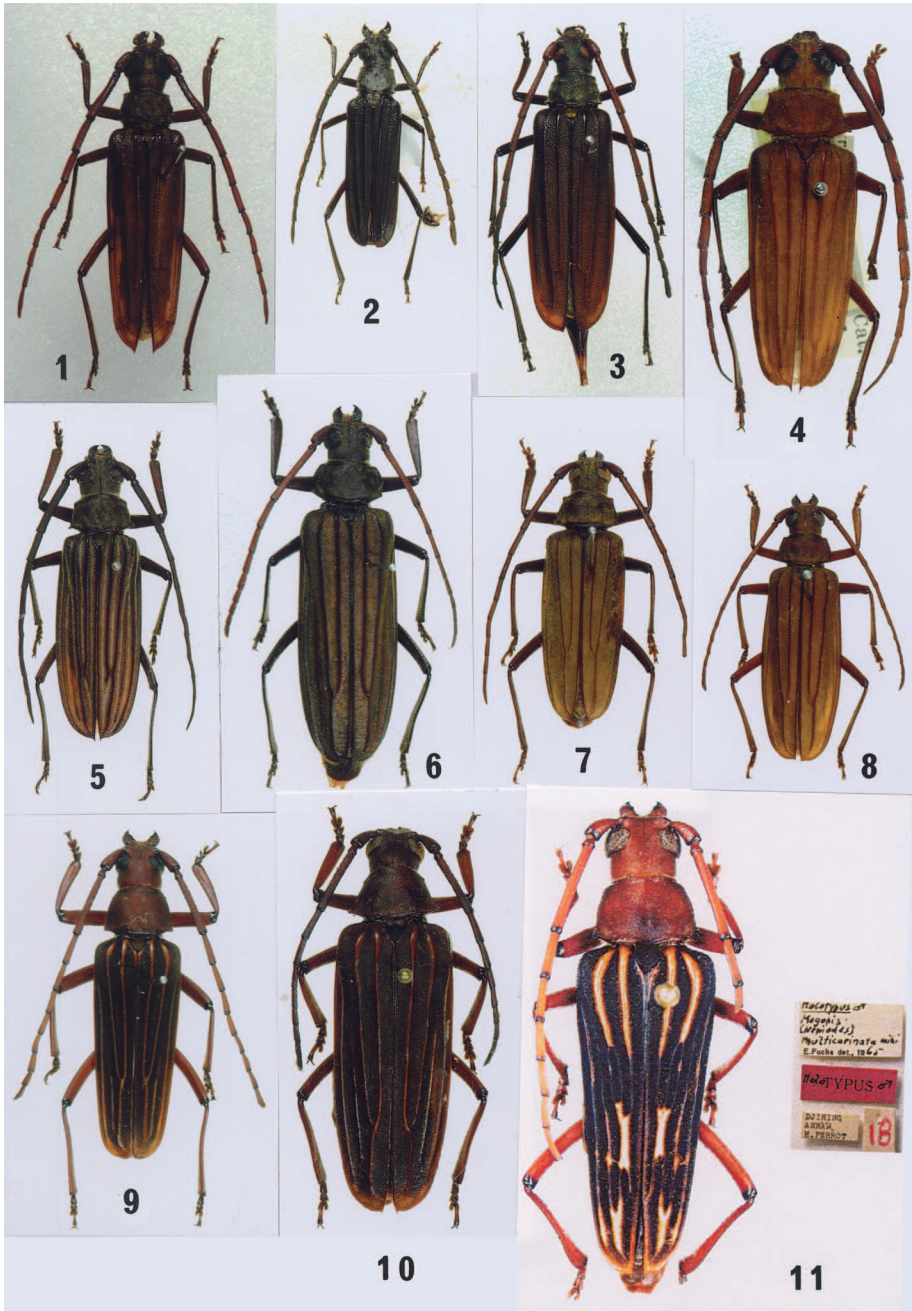
Female. Unknown.

BL. ♂, 17–27 mm.

Distribution. Northern Borneo (East Malaysia: Sabah, Sarawak).

Specimens examined. *Type material*: Holotype, ♂, with labels “Holo-type” (round, rounded with red), “Borneo”, “*Nepiodes cognatus* Pascoe, 1867”, BMNH.

Figs. 1–11. Habitus of *Nepiodes* spp. — 1. *N. cognatus* PASCOE, 1867, male. — 2, 3. *N. hefferni* (KOMIYA, 2004); 2, male, 3, female. — 5, 6. *N. sulcipennis* (WHITE, 1853); 5, male, 6, female. — 7, 8. *N. bowringi* (GAHAN, 1894); 7, male, 8, female. — 4. *N. terminalis* (GAHAN, 1906), male. — 9, 10. *N. costipennis costipennis* (WHITE, 1853); 9, male, 10, female. — 11. *N. costipennis multicarinatus* (FUCHS, 1966); 11, male (holotype) and labels.



Other materials: 3 ♂♂, Keningau, V-1992, ZKC; 1 ♂, same locality, ZKC; 2 ♂♂, Mt. Trus Madi, Sabah, IV-1996, ZKC; 1 ♂, same locality, 1-V-1996, ZKC; 1 ♂, Crocker Range, 5-VII-1995, ZKC; 1 ♂, same locality, 5-X-1999; 1 ♂, Maninegara, 20 km S of Miri, Sarawak, 10-V-1988, S. SHOE leg.; 1 ♂, Sarawak, VIII-1977, (ex. coll. Ph. MORETTO), ADC; 1 ♂, Ranau, Sabah, 25-IV-1997, ADC; 1 ♂, idem, 15-V-2005, ADC; 1 ♂, Crocker Range, Sabah, 20-III-2000, ADC; 1 ♂, Tawau, Sabah, 1-IV-2005, ADC; 1 ♂, Trus Madi, Sabah, E. Malaysia, 19-III-2005, ex ADC in IRSNB.

Nepiodes hefferni (KOMIYA, 2004), comb. nov.

(Figs. 2, 3, 24)

Aerogrammus hefferni KOMIYA, 2004, Elytra, Tokyo, 32: 190.

This species was described from Sumatra based on three females. Recently, males of this species were found and after the study of the males, the generic position of this species given by KOMIYA (2004) was confirmed to be an error. This species is a member of the genus *Nepiodes* and it is rather close to *N. cognatus*.

M a l e. Body black throughout, sometimes accompanied with feeble blue metallic tint; head, pronotum and scutellum covered with yellowish gray pubescence which is clear yellow only on scutellum, antennae and elytra glabrous, underside sparsely covered with gray pubescence for the most part. Head slightly larger than pronotum; interspace between eyes slightly shorter than each lobe in dorsal side and longer in ventral side. Antennae close to those of *cognatus* but the surface is coarser and the scattered granules extending from segment 3 to segment 8, segments 3-11 furnished with longitudinal depression running underside along external margin.

Pronotum 0.83-0.86 times as long as wide, basal margin hardly projected and widest a little posterior to the middle where a small tubercle is recognized. Scutellum sub-pentagonal, slightly longer than wide.

Elytra 3 times as long as wide, deeply punctured throughout; each side almost parallel in basal two-thirds and then slightly narrowed and rounded at apices; each elytron furnished with three distinct costae as in *cognatus*, sutural end angled but without spine.

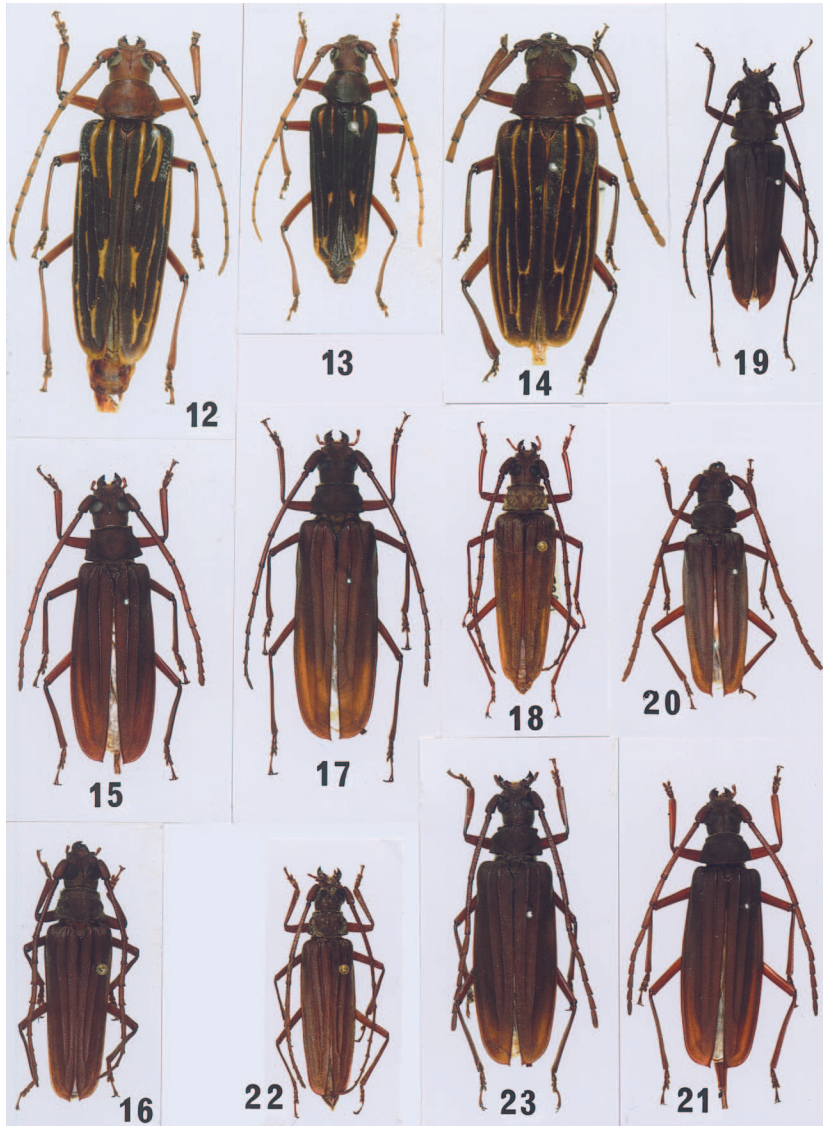
Male genital organs similarly formed to those of *cognatus* but shorter and smaller.

F e m a l e. Body chestnut brown, head, pronotum and femora dark brown; pubescence on body similar to that of the male. Head smaller than prothorax, antennae about 0.9 times as long as body, similarly formed to those of the male; pronotum trapezoidal, widest at base and straightly narrowed apicad. Elytra 2.6-2.7 times as long as wide, very deeply punctured for the most parts and punctures often black shiny in the bottom.

BL. ♂, 15-16 mm, ♀, 26-30 mm.

Distribution. Sumatra (West Sumatra, known only from Harau environments).

Specimens examined. Type materials: Holotype, ♀, with labels "Harau Valley, West



Figs. 12–23. Habitus of *Nepiodes* spp. — 12–14. *N. costipennis multicarinatus* (FUCHS, 1966); 12, female from type locality, 13, Male variation in Thailand, 14, Female variation at Tam dao. — 15, 16. *N. cinnamoneum cinnamoneum* (LANSBERGE, 1884); 15, female, 16, male. — 17–19. *N. cinnamoneum ritsemai* (LAMEERE, 1912), 17, 18, typical form of North Sumatra; 17, female, 18, male, 19, male variation of Is. Siberut. — 20–21. *N. cinnamoneum miyakei* subsp. nov.; 20, male, 21, female, both paratype. — 22, 23. *N. cinnamoneum birmanus* subsp. nov.; 22, male (Holotype), 23, female (paratype).

Sumatra, IV-1996", "Holotype, *Aerogrammus hefferni* Komiya, 2004", NSMT. Paratype: 1 ♀, same locality, V-1994, ZKC.

Other materials: 1 ♀, same locality, IX-1996, ex. coll. M. HUET, ADC; 1 ♂, same locality, IX-1998, ex. coll. HUET, ADC; 1 ♂, Harau Valley, 20 km N. of Payakumbuh, 600–800 m. alt., IX-2007, St. Jakl leg., ZKC.

Notes. This species is quite distinct from any other species but in general, close to *N. cognatus* and easily distinguished from the latter in quite different body color and very small sutural spines of elytra.

2. *Nepiodes sulcipennis* species-group

Nepiodes sulcipennis, *N. bowringi*, and *N. terminalis* form *sulcipennis* species group which has strongly depressed antennae as in *N. cognatus* but the pronotum and elytra are broader, not punctured, but granulate; having lateral spine at the basal third of pronotum; apex of paramere widened in spoon-form.

Nepiodes sulcipennis (WHITE, 1853)

(Figs. 5, 6, 25)

Aegosoma sulcipenne WHITE, 1853, Cat. Coleopt. B. M., Longic., 1: 31. — GEMMINGER & HAROLD, 1872, Cat. Coleopt., 2776. — GAHAN, 1906, Fauna of British India, 1: 48.

Megopis sulcipennis: LAMEERE, 1909, Anns. Soc. ent Belg., 53: 146; 1919, Gen. Ins., (172): 75. — KANO, 1930, Ins. Matsum., 5: 41. — YOSHIDA, 1931, Trans. nat. Hist. Soc. Formosa, 21: 271. — HUA, 2002, List of Chinese Insects, 2: 214. — WEIGEL, 2006, Checklist Bib. Long. Beetles Nepal, 497 & 509.

Megopis (Megopis) sulcipennis: HAYASHI *et al.*, 1988, Chin. J. Ent., 8: 167. — CHOU, 2004, Icon. Taiwan. Cer., 59.

Nepiodes sulcipennis: DRUMONT, SAMA & KOMIYA, 2010, Cat. Palaeart. Coleopt., 6, New Acts and Comments: 40. — DRUMONT & KOMIYA, 2010, ditto, list of species: 87.

Megopis lineata HÜDEPOHL, 1994, Entomofauna, 15(15): 186. (synonymy proposed by DRUMONT, SAMA & KOMIYA, 2010).

Megopis procer Ek-AMNUAY, 2002, Beetles of Thailand, pp. 99 (fig. 245-1) & 318 (misidentification).

Male. Body dark brown, elytra except costae and suture reddish brown. Head, pronotum, scutellum and elytra except costae covered with yellowish gray pubescence, legs and underside sparsely covered with white hairs which are especially long on gula, and pro- and metasterna.

Head small, interspace between eyes narrower than each lobe on dorsal side and as wide as on ventral side. Mandible 0.2 times as long as head; external side smoothly arched; internal line acutely hooked at apex and furnished with a small tooth at middle. Antennae usually as long as or slightly longer than body; segments 3–11 depressed and a distinct carina running along external side; internal side of segments 5–11 with less distinct carina; underside flat and sometimes shallowly concave; segment 3 about as long as segments 4+5.

Pronotum 0.6–0.7 times as long as wide, widest at base and straightly narrowed to

apex; with a small tubercle at basal third. Scutellum linguiform, margined by carina.

Elytra 2.5–2.8 times as long as wide; each elytron furnished with four strong costae, C1 and C2 distinct, running from humerus and meeting each other at about apical third, then becoming one line and ending just before apex, C3 weak, not meeting other costae, starting about basal third and disappearing at apical sixths, C4 distinct and running full length of elytron; intervals filled with longitudinal stripes conformed with whitish pubescent area at middle and granulate and less pubescent areas at each side; with a short but acute sutural spine at apex.

Legs relatively thicker than other congeners, depressed laterally especially on tibiae, tarsi wide and short, claw shorter than segments 2+3.

Underside finely punctured for the most parts.

Median lobe of male genitalia 5 times as long as wide, basal slit reaching two-thirds, lateral lobe slightly shorter than median lobe.

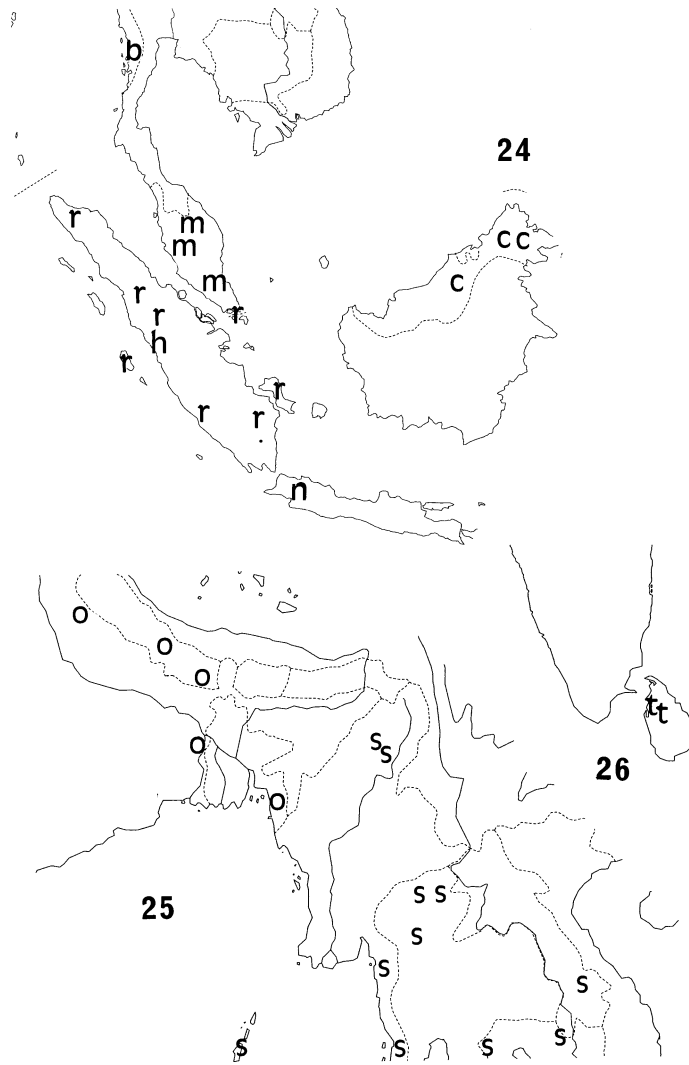
F e m a l e. Similar to the male in general feature, body larger, antennae 0.6 times as long as body, head and prothorax relatively smaller than male.

BL. ♂, 17–25 mm, ♀, 21–31 mm.

Distribution. Myanmar, Northern Thailand, Is Andaman, Cambodia (New record), Laos (New record). We suppose records from Nepal, China (Fujian, Taiwan) are errors in high possibility (see DRUMONT *et al.*, 2010).

Specimens examined. *Type materials:* Types designation. 3 ♂♂ syntypes are preserved in BMNH. We designate a male with the length 24 mm as the Lectotype which is attached with the labels: “SYNTYPE”, “Type”, “Tenasserim 44.24, handwritten”, “E. INDIES, Tenasserim, E. Packman Acquired by the B.M. 1844”, “Aegosoma sulcipenne White Type”, “Nepiodes sulcipennis (White, 1853), LECTOTYPE ♂, des. Komiya Z. & Drumont A., 2010” (rectangular, red, printed with black, attached by us). We designate the other two males as Paralectotypes: 1 ♂, 18 mm and 1 ♂, 22 mm both attached with five labels same with the Lectotype and we add a label “Aegosoma sulcipennis (White, 1853), PARALECTOTYPE ♂, des. Komiya Z. & Drumont A. 2010” (rectangular, red, printed with black).

Other materials: (Myanmar): 1 ♂, with labels “Teinzo, Birmanie, Fea Maggio 1886”, “Megopsis sulcipennis White, det. A. Lameere, 1913”, “Coll. R.I. Sc.N.B., Birmanie”, IRSNB; 1 ♂, “Birmanie, 1911”, IRSNB; 1 ♂, “Coll. I.R.Sc.N.B., sans localité, ex coll. Candèze”, “Megopsis sulcipennis white, det. A. Lameere, 1913”, “sec. Lameere, Col. Cat. Junk, xxii, 52, 1913, p. 41, Megopsis (Megopsis) sulcipennis White”, IRSNB; 1 ♂, Burmah, 1761, BMNH; 2 ♂♂, with labels “Tharrawaddy, Burmah”, “Aegosoma sulcipenne White”, BMNH; 1 ♂, N. Chin Hills, Burma. 95–28., BMNH; 1 ♂, with labels “India?”, “Ex Mus Parry”, “Fry Coll. 1905.100.”, “Aegosoma sulcipenne Wh, Rangoon”, BMNH; 1 ♂, with labels “Burmah”, “Pascoe coll. 93–60.”, “Aegosoma sulcipenne White”, BMNH; 1 ♂, with labels “Birma”, “Bowring. 63.47”, BMNH; 1 ♂, with labels “Burmah”, “Pascoe Coll. 93–60.”, “Aegosoma sulcipenne Wh, Rangoon”, BMNH; 1 ♂, with labels “Birmah”, “30604”, “Fry Coll. 1905.100.”, BMNH; 1 ♂, without locality, 5860, BMNH; 2 ♂♂, 1 ♀, Shatapra Myitkyina, Kachin



Figs. 24–26. Distribution map (24, Sunda area) of *N. cognatus* species-group and *N. cinnamomeum* species-group. — c, *N. cognatus*; h, *N. hefferni*; n, *N. cinnamomeum cinnamomeum*; r, *N. cinnamomeum ritsemai*; m, *N. cinnamomeum miyakei*; b, *N. cinnamomeum birmanus*. Distribution map (25, Indo-Indochina, 26, Sri Lanka) of *N. sulcipennis* species-group. — s, *N. sulcipennis*; o, *N. bowringi*; t, *N. terminalis*.

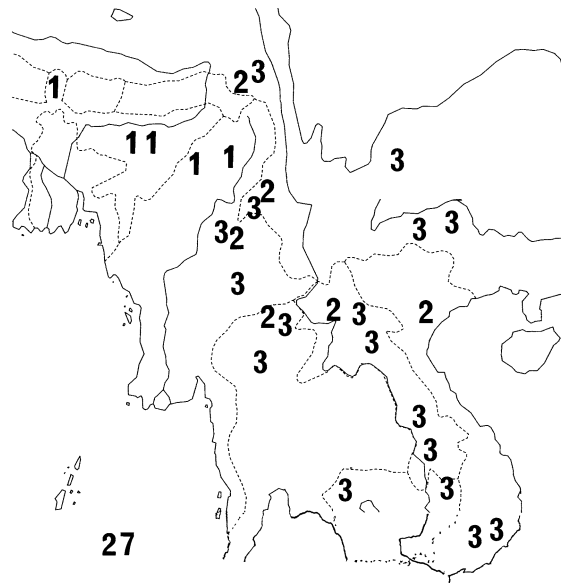


Fig. 27. Distribution map (27, Indochina) of *N. costipennis* species-group; 1, *N. costipennis costipennis*; 2 & 3, *N. costipennis multicarinatus* (3 indicates locality with typical specimens only and 2 indicates locality where transit form or peculiar variations are mixed with typical ones).

30-V-1998. 1 ♂, Near Tavoy, Tenasserim, IV~V-1995, ZKC.

(Thailand): 1 ♂, Wang Nusa, Lampang, 8-V-1989, ZKC; 1 ♂, Wiang Papao, Chiang Rai, 21-V-1990, ZKC; 1 ♂, same locality, 7-V-1999, ADC; 1 ♂, Fang, Chiang Mai, 24-V-1992, ZKC; 1 ♂, Lampang Khutran, 26-V-1996, Hikaru KAN leg., ZKC; 1 ♂, Hang Dong, Chiang Mai, VI-1989, ex coll. N. Mal, ADC; 1 ♂, Mae Hong Son vic., CW Mae Hong Son, 5-V-2004, R. GRIMM, Megopis (*Nepiodes*) *lineate* Hüdelpohl det. Adlbauer, ex. coll. K. Adlbauer, ADC.

(Laos): 1 ♂, Phu Sai Dao, 16-V-1997, ex. coll. LEHMANN, ADC; 2 ♂♂, Pakxe, 5 km W. Ban Nongmek, 520 m. 5-V-2003, leg LÖFFLER, AWC.

(Cambodia): 1 ♀, with labels "Coll. I.R.Sc.N.B., Cambodia", "Pursat pr., Phnom Samkos Wildlife Sanctuary, Pramaoy, 16-XI-2005, forest edge, light trapping, leg. K. SMETS & I. VAN", IRSNB.

(Is. Andaman); 2 ♂♂, Baratari, Andaman Is., 16-IV-2006, T. HASEGAWA leg., ZKC.

Nepiodes bowringi (GAHAN, 1894)

(Figs. 7, 8, 25)

Aegosoma Bowringi GAHAN, 1894, Anns. Mag. nat. Hist. 6(14): 226, — GAHAN, 1906, Fauna Brit. India, Coleopt., 1: 48.

Megopis (Megopis) bowringi: LAMEERE, 1909, Anns. Soc. ent. Belg., **53**: 146; 1919, Gen. Ins., (172): 75.

Megopis (Megopis) sulcipennis HAYASHI, 1971 (nec. WHITE), Ent. Rev. Japan, **23**: 82 & 97.

Nepiodes bowringi: DRUMONT, SAMA & KOMIYA, 2010, Cat. Palaearct. Coleopt., **6**, New Acts and comments: 40. — DRUMONT & KOMIYA, 2010, ditto, List of Species: 87.

This species is close to *sulcipennis* but distinguished by the following points:

1. Hairs on dorsal side yellow or yellowish gray.
2. Eyes smaller, interspace between eyes narrower, about as wide as each lobe in dorsal side and 1.3 times in ventral side.
3. Segment 3 of antennae less depressed and looking slenderer in dorsal view.
4. Costae on elytra thinner, C1, C2 distinct and C4 well observed but C3 hardly visible, intervals finely granulate and uniformly pubescent.

BL. ♂, 19–29 mm, ♀, 23–26 mm.

Distribution. Northeastern India (Assam, Arunachal Pradesh, Sikkim, Uttar Pradesh, West Bengal), Nepal and Bangladesh.

Specimens examined. Type materials: Types designation. Five syntypes ♂♂ and a syntype ♀ are preserved in BMNH. We designate a male with the length 23 mm as the Lectotype which is attached with labels: “SYNTYPE”, “Sylhet”, “Bowring. 63.47*” (rectangular, printed), “*Nepiodes bowringi* (Gahan, 1894), Lectotype ♂, des. Komiya Z. & Drumont A.” (attached by us). The other 4 ♂♂, 1 ♀ are designated as Paralectotypes: 1 ♂, 21 mm with labels same with the lectotype and we attached the label “*Nepiodes bowringi* (Gahan, 1894), Paralectotype, des. Komiya Z. & Drumont A.” (attached by us); 1 ♂, 22 mm, idem; 1 ♀, 26 mm, idem; 1 ♂, 29 mm with labels “SYNTYPE”, “N. India” (rectangular, printed), “Bowring. 63.47*” (rectangular, printed), “same Paralectotype label attached by us”.

Other materials: India (Assam): 1 ♀, “Assam, Patkai Mts”, “Fry Coll. 1905.100”, BMNH; 1 ♀, Assam, Patkai Mts., “Doherty”, “*Aegosoma Bowringi* ♀ Gahan, Compared with type. C. J. G.”, BMNH; 1 ♀, “Upper Assam, Dibrugarh (Plains) Rangagora, 1901–3, H. Stevens”, “*Aegosoma Bowringi* Gah”, “Brit. Mus. 1961–465”, BMNH.

India (Arunachal Pradesh): 3 ♂♂, 1 ♀, Bhalukpog, south Arunachal Pradesh, 11~14-V-1999, leg. E. KUCERA, ADC.

India (Sikkim): 1 ♂, “Sikkim, Rungbong Vall., Gopaldhara, 24-V-1911, H. Stevens”, BMNH; 1 ♂, “Coll. R.I.Sc.N.B., Sikkim”, “*Megopis bowringi*, det. A. Lameere, 1913”, 1 ♂, “Coll. R.I.Sc.N.B., Sikkim, ex. coll. Desbrocher”, 1 ♂, “Coll. R.I.Sc.N.B., Inde, India, ex. coll. de Moffarts”, “*Megopis bowringi*, det. Gilmour”, all in IRSNB; 1 ♀, “Sikkim, India”, “Bowringi Gahan”, “Bowringi Gah. Birma”, “Museum Leiden Verz. G. van Roon”, “Museum Leiden, Ex coll. G. van Roon”, RMNH.

India (Uttar Pradesh): 1 ♂, “Upper Assam, Silonbari, North Lakhimpur [Base of Hills], 1916–218, H. Stevens”, BMNH; 1 ♂, “Upper Assam, Dejo, North Lakhimpur [Base of Hills], 14-V-1910, H. Stevens”, “Andrewes Bequest. B. M. 1922–221”, *Aegosoma Bowringi* Gahan, BMNH.

India (West Bengal): 1 ♂, 1 ♀, “Gopaldhara, Bw., Darjeeling., 4, 720 ft.-14, H.

Stevens", "Brit. Mus. 1961-465", BMNH; 1 ♀, "India, Bengal", "Simson", "Fry Coll. 1905.100", BMNH.

(Nepal): 2 ♂♂, Nepal S., Ganesh village, near Khari Gaon, 700 m., Ankhu Khola, 24~25-V-1996, leg. AHRENS *et al.*, SMTD; 1 ♂, Taprejung, VII-2000, ZKC.

(Bangladesh): 4 ♂♂, 1 ♀, Mt. Arakan Yoma, nr. Chittagong, V-1997. H. LEHMANN leg., ZKC; 1 ♂, same locality and date, ADC.

(False Patria): 1 ♂, "Java", "42940", "Ex Mus Parry", "Fry Coll. 1905.100.", BMNH.

Nepiodes terminalis (GAHAN, 1906)

(Figs. 4, 26)

Aegosoma terminale GAHAN, 1906, Fauna Brit. India, 1: 49.

Megopis terminalis: LAMEERE, 1909, Anns. Soc. ent. Belg., 53: 146; 1919, Gen. Ins., (172): 75. — DRUMONT, 2003, Cah. Magellanes, 24: 5.

Nepiodes terminalis: DRUMONT, SAMA & KOMIYA, 2010, Cat. of Palaearct. Coleopt., 6, New Acts and Comments: 40.

M a l e. Body uniformly reddish brown, sparsely covered with yellow pubescence except antennae which are glabrous; pronotum, scutellum, gula, pro- and metasterna furnished with long hairs. Vertex, pronotum, elytra, gula and abdomen finely granulate, segments 1 & 2 of antennae punctured and segments 3 & 4 provided with sparse granules on underside.

Head relatively large, slightly longer than wide, eyes bulging, interspace between eyes 0.5 times as long as each lobe in dorsal side and 0.6 times in ventral side; mandibles short. Antennae 1.05 times as long as body, carina running on external side of segments 3-11 and internal side of segments 5-11, segment 3 depressed on underside and convex on dorsal side, segments 4-11 gradually strongly depressed to apex; apico-external angles of segments 3-8 and internal angles of segments 5-8 segments acutely pointed; segments 3 about as long as segments 4+5, segment 11 as long as segment 4.

Pronotum large, PL/PW 0.6, lateral line widest at basal angle which is triangularly projected and sub-straightly narrowed apicad; furnished with a tubercle at basal third and apical angle prominent; disc well convex at middle and small longitudinal depression at middle. Scutellum elongated linguiform, long and pointed at apex.

Lateral lines of elytra sub-parallel at basal two-thirds, slightly gradually narrowed at apical third and smoothly connected to subtruncate apices, then sinuate and connected to long and acute stutural spine (Fig. 4); each elytron furnished with four costae.

F e m a l e unknown.

BL. ♂, 25-31 mm.

Specimens examined. *Type materials*: Holotype, ♂, with labels "Ceylon", "Fry Coll. 1908.100.", "28740", "Aegosoma terminale Gahan, Type", BMNH.

Other materials: 1 ♂, in BMNH with labels "Kandy, Ceylan", "Megopis terminalis Gah.", "on loan from BM.", "Data unreliable See Brit. Mus. 1949-314.", "20", "68-

1960", "photographed", "43"; 1 ♂, in IRSNB with labels "Kandy Ceylon, H. Rolle, Berlin, SW11", "Baralipton gahani Lmr. Det. A. Lameere 191", "Coll R.I.Sc.N.B. Ceylon", "A. Lameere, Col. Cat. Junk, xxii, 52, 1913, p. 42, Megopis (Baralipton) Gahani Lmr."; 1 ♂, in USNM with labels "Sri lanka, Mate. Distr., blacklight trap, 12-IX-1975", "collected by D. M. Davies, S. Karunaratne, D. W. Balasooriya", "Megopis terminalis Gah., E. Fuchs det., 1964", "Loan from USNMNH 2026380"; 1 ♂, in ZSMC with labels "Sri lanka, Longi. XI-[19]85, Lestrade leg.", "Megopis terminalis Gah., Hüdepohl det. 1986", "Zool. Staatsslg. München", "Sammlung K. E. Hüdepohl"; 1 ♂ in ZSMC with labels "Sri lanka, Belihul Oya, VIII-19[82]", "Megopis (s.str.) terminalis Gah., Hüdepohl det. 1989", "Zool. Staatsslg. München", "Sammlung K. E. Hüdepohl"; 3 ♂♂, Wilpattu, nw. Sri Lanka, 8~10-VII-1982, N. NUIT leg. ZKC.

Note. This species is close to *N. bowringi* but usually larger, more reddish, basal angle of pronotum distinct, costae of elytra stronger and sutural spine longer. The specimen in IRSNB determined as *Megopis (Baralipton) gahani* by LAMEERE is obviously this species.

3. *Nepiodes cinnamoneum* species-group

Nepiodes cinnamoneum and its three subspecies, *ritsemai* stat nov., *miyakei* subsp. nov. and *birmanus* subsp. nov. belong to this species-group. This group is characterized by elongated and not strongly depressed segment 3 of antennae and less developed costae on elytra. LAMEERE (1919) regarded *cinnamoneum* and *ritsemai* as different species but *ritsemai* involves several local variations, some are close to, and the others are fairly different from *cinnamoneum*. So, we described two new subspecies and regard all of them as the subspecies of *cinnamoneum*.

Nepiodes cinnamoneum (LANSBERGE, 1884), comb. nov.

(Figs. 15, 16, 24)

Megopis cinnamoneum LANSBERGE, 1884, Not. Leyden. Mus., 6: 159. — LAMEERE, 1909, Mém. Soc. ent. Belg., 21: 167; (in part); 1912, Mém. Soc. ent. Belg., 21: 167; 1919, Gen. Ins., (172): 75.

Body almost uniformly reddish brown, eyes and inside of mandibles black; head, prothorax, scutellum, gena, gula, pro- and metasterna covered with sparse pubescence; vertex, pronotum and elytra granulate, segments 1-2 of antennae, tibiae and abdomen finely punctured; segments 3-11 of antennae sparsely but roughly and irregularly granulate, underside of segments 3 and 4 especially so.

Male. Head small, about as long as wide; mandibles 0.25 times as long as head, hooked at apices but not so sharply, internal tooth very small. Antennae about as long as body; segment 3 long and slender, narrowest at base and gradually widened apicad, feebly depressed underside; segments 4-11 depressed; lateral carina recognized on both sides of segments 6 or 7-11; segment 3 distinctly longer than segments 4+5; segment 11

as long as segment 6 and having vestigial trace of segment 12 at apical fourth.

Pronotum 0.8 times as long as wide, widest at base and sub-straightly convergent apicad, not having any spine or tubercle on lateral margin; basal and apical corners obtusely angled. Disc irregularly convex. Scutellum linguiform, much longer than wide; not pointed and narrowly rounded at apex.

Elytra 3.2–3.3 times as long as wide, widest just after humeri, then straightly narrowed to apical eighth and shortly rounded; each furnished with an acute but small spine at apex; costae on elytron less distinct than in other congeners, C1 and C2 shiny at about basal third and remainings covered with granules similar to intervals, C1 disappearing at about apical fifth, C2 running close to apex, C3 and C4 short, not well raised and not shiny; suture more or less dehiscent near apex.

F e m a l e. Close to male in color and structure but body larger; antennae 0.7 times as long as body, segment 11 as long as segment 7, trace of segment 12 more distinct; disc of pronotum irregularly convex and slightly concave at middle; elytra wider, about 2.5 times as long as wide.

BL. ♂, 16–30 mm, ♀, 36 mm.

Distribution. Java (West Java).

Specimens examined. *Type material*: The holotype ♂ reported from Mt. Gedeh by LANSBERGE (1884) has not been located in RMNH nor in several other possible institutions. However, we were examine 1 ♂ in ZMAN which agrees well with the description by LANSBERGE with the label “Java, G. Gedeh, Drescher, X–1915”. This specimen was wrongly identified as *Megopis costipennis* WHITE by F. F. TIPPMAN, in 1940.

Other materials: 1 ♂, “Java, Preanger, Dinewatie, VII–1915, J. B. Corporaal leg.”, “*Nepiodes cinnamonea* Lansb. Det. Dr. H. J. Veth”, ZMAN; 1 ♂, Nerderlands Indie, W. Java, W. Preanger, Soekaboemi, 19–XI–1936, 2000 ft., J. M. A. v. Groenendael, ZMAN; 1 ♂, “West Java, IV–1983”, “Sammlung KE. Hüdepohl”, “*Megopis* (*Nepiodes*) *cinnamonea* Lans. Hüdepohl det. 1988”, ZMSC; 1 ♂, Mt. Patuha, West Java, 30–IX–1995; 1 ♀, Gununghalimun, Java Barat, X–1999, ZKC.

Note. LANSBERGE (1884) described this species under the genus *Megopis* and noted that this species could be placed at the middle of *Megopis*, *Nepiodes* and *Aegosoma*. We agree with his view but we consider it better to place it in this genus because the male genital organs are similar to those of *N. cognatus*.

Nepiodes cinnamoneum ritsemai LAMEERE, 1912, stat. nov.

(Figs. 17–19, 24)

Megopis Ritsemai LAMEERE, 1912, Mém. Soc. ent. Belg., 21: 167. (pro parte).

Megopis cinnamonea: LAMEERE, 1909, Mém. Soc. ent. Belg. 21: 167.

Megopis (*Baralioptis*) *ritsemai*: ROBINSON & BODEN KLOSS, 1931, J. fed. Malay Stat. Mus., 8: 210.

This subspecies is close to *N. cinnamoneum cinnamoneum* but different in yellowish

color of elytra which are thickly pubescent and finely granulate; antennae longer and slenderer especially on segment 3, with segment 11 pointed apically.

Specimens from Is. Bangka are dark-colored and having long apical spines of elytra and may represent an independent subspecies, but we were able to examine only two examples and that was not satisfactory for us to define a new taxon.

BL. ♂, 18–37 mm, ♀, 21–37 mm.

Distribution. Indonesia (Sumatra, Is. Bangka (new record), Is. Siberut (new record)), Singapore.

Specimens examined. Type materials: Type designation. Two syntypes ♂♂ are preserved in RMNH. We designate a male with length 31 mm as the Lectotype which is attached with labels “Sumatra, Solok, P. O. Stolz” (rectangular, white, printed, with a black border), “Megopis Ritsemai Type Lam.” (rectangular, white, handwritten, “Ritsemai n. sp. Lam.” (rectangular, handwritten), “Photo N. mal 2009” (rectangular, orange, printed), “typ” (rectangular, red, printed), “*Nepiodes cinnamoneum* ssp. *ritsemai* (Lameere, 1912), LECTOTYPE ♂, des. Komiya Z. & Drumont A., 2010” (rectangular, red, handwritten and printed with black, attached by us). The other 27 mm ♂ is designated as Paralectotype which is attached with labels “Sumatra, H; E. Keil” (rounded, white, handwritten), “Taraentaeng” (rectangular, white, handwritten), “type” (rectangular, red, printed), “*Nepiodes cinnamoneun* ssp. *ritsemai* (Lameere, 1912), PARALECTOTYPE ♂, des. Komiya Z. & Drumont A., 2010” (rectangular, red, handwritten and printed with black, attached by us).

Other materials : Indonesia (Sumatra): 1 ♂, Nanggroe Aceh Darussalam province, Kabupaten Aceh Tengah, street Uning/Beutong, 37.8 km of Takengon, 1392 m., 04° 31' 43.0N-096° 39' 53.8E, 24~25-II-2009, at mv/uv light, primary lower montane rainforest, mountain slope with a large cleared woodland, much dead timber in clear area, agriculture (coffee, maize, spices), leg. U. & L. H. PAUKTSTADT, ex. coll. U. PAUKSTADT, ADC; 2 ♂♂, 1 ♀, same, street Takengon-Isaq, 17.3 km of Takengon, 1796 m., 04° 31' 18.4N-096° 50' 51.0E, 26~27-V-2008, disturbed primary lower montane rainforest, at arid slopes with *Pinus* sp., cleared woodlands with old dead timber (coffee, cocoa, fruit trees, spices), leg. U. PAUKTSTADT, ex. coll. U. PAUKSTADT, ADC; 7 ♂♂, same, street Takengon-Isaq, 21.9 km of Takengon, 1766 m., 04° 31' 18.4N-096° 51' 27.4E, 23~24-IV-2009, at mv/uv light, primary lower montane rainforest, mist forest in higher altitudes, eastern slope of mountain ridge, leg. U. & L. H. PAUKTSTADT, ADC; 4 ♂♂, same province, Kabupaten Nagan Raya, street Beutong/Meulaloh, Singah Mata Gayo, 17.6 km of Beutong, 1978 m., 04° 14' 3N-096° 31' 04.9E, 25~26-II-2009, at mv/uv light, primary lower montane rainforest, mountain pass with mist forest in higher altitudes, several pitcher plants (*Nepenthis*), some natural dead trees, leg. U. & L. H. PAUKTSTADT, ex. coll. U. PAUKSTADT, ADC; 1 ♂, same province, Kabupaten Gayo Lues, street Ise Ise/Blangkejeren, Pusat Gayo Mountains, 1427 m., 04° 14' 41.5N-09.7° 11' 09.8E, 8~9-IV-2008, primary lower montane rainforest, leg. U. PAUKTSTADT, ex. coll. U. PAUKTSTADT, ADC; 3 ♂♂, Lampong, South Sumatra, 5~20-XI-1999, ADC; 1 ♂, same locality, III-2002, leg. SUYADI, IRSNB; 2 ♂♂, Côte Ouest de

Sumatra, coll. WEYERS, ex. coll. Musée de Zoologie de l'Université Libre de Bruxelles, deposited in IRSNB; 1 ♂, same, 1300 m., VIII-1921, leg. F. J. PRATT, ZMAN; 1 ♂, Mt. Twang, West Sumatra, 3-IV-2005, ADC; 1 ♂, Benkoelen, Tambang Sawah, 1929, leg. E. DOUGLAS, coll. Dr. D. MAC GILLAVRY, ZMAN; 1 ♂, same, 16-XI-1930, ZMAN; 1 ♂, Bandar Baroe, 850 m., 10-II-1921, J. B. CORPORAAL leg., ZMAN.

Indonesia (Is. Bangka): 1 ♂, Is. Bangka, Indonesia, VI-2002, local collector. ZKC (new record).

Indonesia (Is. Siberut): 2 ♂♂, Bojakan env., northern Siberut, 150 m alt. XI-2007, St. JAKL leg., ZKC (new record).

Nepiodes cinnamoneum miyakei subsp. nov.

(Figs. 20, 21, 24)

This new subspecies is close to *N. cinnamoneum cinnamoneum* in body color but it has pubescent elytra as in *ristemai*.

Body color is reddish brown as in *cinnamoneum* but usually, antennae and legs more yellowish. Antennae thick as in *cinnamoneum*. Pronotum strongly convex at about apical two-thirds and more ruggedly convex on disc. Elytra pubescent as in *ristemai* but the pubescence is often thinner. The pubescence on head and pronotum also shorter and sparser than *ristemai*.

Specimens examined. Type series. Holotype, ♂, Maxwell's Hill, West Malaysia, 29-III-1979, Y. MIYAKE leg. in NSMT. Paratypes, 4 ♂♂, 1 ♀, Cameron High Land, IV-1993, ZKC; 3 ♂♂, same locality, FDC; 3 ♂♂, 1 ♀, same locality, ex. coll. F. LEDUC, ADC; 1 ♂, same locality, ex. ADC, deposited in IRSNB; 1 ♂, same locality, IV-1997, local collectors, ADC; 1 ♂, Malaysia, Pahang, Fraser's Hill, 1200 m., 8~9-IV-1992, light, B. GUSTAFSSON, H., H. HIPPA & G. SELLERHOLM leg., NHRS; 1 ♂, Malaysia, Pahang, Taman Negara National Park, Kuala Juram, E. of Merapoh, 04°39' N-102°08'E, 12-III-1999, edge primary rainforest (near dormitory) at light, J. P. & M. J. DUFFELS, M. ZAIDI & M. Y. RUSLAN leg., ZMAN. Malaysia (Johor): 1 ♂, Malaysia, Johor, Endau Ropin national Park, Junction logging road/access road, 02°31'35.3N-103°23'58E, 22-III-2001, forest edge, transect edge 5, M. A. SCHOUTEN leg. (wrongly determined as *Megopis sinica sinica* Det. WITHAAR), ZMAN; 1 ♂, Malaysia, Johor, Endau Rompin national Park, NERC, 02°31'45.4N-103°23'52.5E, 24-III-2001, secondary forest, transect secondary 6, M. A. SCHOUTEN leg. (wrongly determined as *Megopis sinica sinica* Det. WITHAAR), ZMAN.

BL. ♂, 22-36 mm, ♀ 32-33 mm.

Variation. Examples from Johor area mostly have dark body color with gray pubescence and distinguishable from the other area. However, the body structure is closer to that of the typical specimens, so that we included them in this subspecies.

Distribution. West Malaysia (Perak, Kelantan, Pahang, Johor).

Etymology. The subspecific name is dedicated to the late Mr. Yoshiichi MIYAKE for the memory of his works on Asian insects. He collected the holotype.

Nepiodes cinnamoneum birmanus subsp. nov.

(Figs. 22, 23, 24)

In the male, this new subspecies is close to *ritsemai* in slender and yellowish body, thickly pubescent pronotum and slender and long antennae but the shape of pronotum is strongly convex as in *miyakei* subsp. nov. Costae of elytra more developed as compared with the other subspecies. In the female, antennae long ($AL/BL=0.9$), elytra very thinly pubescent and more densely granulate.

Specimens examined. Type series. Holotype, 1 ♂, III–1995, Myanmar, Tenasserim, local collector, ex ADC, will be deposited in IRSNB. Paratypes, 4 ♂♂, same data as holotype, ADC; 1 ♂, Tenasserim, Burma, without collecting date, ZMSC; 3 ♂♂, same locality, 15–IV–1995, ZKC; 1 ♀, same locality, 17–V–1997, ZKC.

BL. ♂, 20–30 mm, ♀, 34 mm

Distribution. Myanmar (Tenasserim).

Etymology. The species name was taken from the old name of its distributing locality.

4. *Nepiodes costipennis* species-group

Nepiodes costipennis species-group is rather close to the *N. sulcipennis* species-group in body structure but is conspicuous not only in having peculiar elytra which are entirely glabrous and furnished with peculiar costae but also showing different sexual frequency which is much more abundant in female than in male. *Nepiodes costipennis* WHITE, 1853 and a distinct subspecies *multicarinatus* FUCHS, 1966 are included in this group.

Nepiodes costipennis (WHITE, 1853)

(Figs. 9, 10, 27)

Megopis costipennis WHITE, 1853, Cat. Coleopt. Brit. Mus. 7: 28. — GEMMINGER & HAROLD, 1872, Cat. Coleopterorum, 2776. — LAMEERE, 1909, Anns. Soc. ent. Belg., 53: 146.

Aegosoma costipenne: GAHAN, 1906, Fauna Brit. India, Ceylon and Burma, Coleopt., 1: 49.

Aegosoma lacertosa PASCOE, 1867, Ann. Mag. nat. Hist., 190 (3), 413.

Nepiodes costipennis costipennis: DRUMONT, SAMA & KOMIYA, 2010, Cat. of Palaearct. Coleopt., 6, New Acts and Comments, 40. — DRUMONT & KOMIYA, 2010, ditto, List of Species, 87.

Body reddish brown, elytra matt and black or dark reddish brown except costae which are reddish brown and shiny, eyes and apices of mandibles black, antennae and legs reddish brown and infuscate on each joint; dorsal side almost glabrous and very thinly pubescent on limited parts of head, pronotum, scutellum and elytra. Head and pronotum finely granulate. Underside mostly covered with short and sparse pubescence and provided with longer one on gula and triangular part of metasternum; abdomen punctate and the other parts of underside mostly finely granulate.

M a l e. Head about as long as wide, inter space between eyes as long as or slightly

longer than each eye-lobe on dorsal side and eyes much more separated on ventral side. Antennae as long as body, AL/BL 0.94–1.05; punctured on segment 1 and granulate on segments 2–4 or 6, remaining segments rather smooth on surface; segment 3 about as long as segments 4 + 5, slightly depressed on ventral side, lateral margin parallel in basal half and slightly widened apicad; carina running segments 3–11 of external side and segments 4 or 5–11 of internal side, ventral side of segments 4–11 flat or slightly concave.

Pronotum 0.6–0.7 times as long as wide, widest at base and straightly convergent apicad, lateral margin always strongly edged posterior to procoxal cavity but in anterior part varying from completely edged to almost rounded and sometimes replaced by a callosity developing from pro-episternum; basal angle usually triangularly projected in dorsal view but without distinct process; sometimes provided with a small tubercle at about basal fourth. Scutellum small, linguiform.

Elytra about three times as long as wide, widest just after humeri and sub-straightly narrowed to apical eighth and shortly rounded at apices; sutural end armed with short spine; each with distinct four costae which are similarly patterned to those of *N. sulcipennis*.

Legs long, distinctly thicker than antennae; pro-tibiae almost vertically depressed (slightly oblique); tarsi shorter than a half of tibiae, claws as long as segments 2 + 3 of tarsi.

Male genital organ similar to those of *N. sulcipennis*.

F e m a l e. Similar to male but body usually larger, antennae shorter, about 0.7 times as long as body, elytra 2.5–3.0 times as long as wide; a callosity on each side of prothorax which was rarely found in the male usually observed.

BL. ♂, 21–31 mm, ♀, 23–34 mm.

Distribution. India (Assam, Sikkim), Myanmar (Kachin, Sagain).

Specimens examined. *Type materials:* The holotypes of *Megopis costipennis* WHITE, 1853 and *Aegosoma lacertosum* PASCOE, 1867 are both preserved in BMNH and recently examined when the synonymy of these two taxa was confirmed in DRUMONT, SAMA & KOMIYA, 2010 (p. 38).

Other materials: India (Assam, Sikkim); 1 ♀, Coll. R.I.Sc.N.B. “Inde Silhet, ex. coll. Lacordaire”, “*Megopis costipennis* White cat. Brit. Mus., vii 28, Silhet Lacordaire”, “*Megopis costipennis* White det. A. Lameere 1913”, “sec. A. Lameere, Col. Cat. Junk. xxii, 52 1913, p. 41, *Megopis* (*Megopis*) *costipennis* White”, IRSNB; 1 ♀, “Coll. R.I.Sc. N.B., Coll. Nonfried, Hymalaya”, “*Megopis costipennis* P. Boppe vid.”, “Assam Sikkim, *costipennis* White, ex. coll. Desbrocher”, IRSNB; 4 ♂♂, 3 ♀♀, Bhalukpong, nord Assam, 1~10-V-1999, leg. E. KUCERA, ADC.

Myanmar (Kachin, Sagain): 2 ♂♂, 1 ♀, Birmanie du nord, Printemps – été 2004, PENG leg., ADC; 1 ♂, 1 ♀, Mt. Nwezin, nr. Putao, 16~20-VI-1998, S. NAGAI leg., ZKC; 1 ♂, S. Kumon Range, Zan-Phut, alt. 1,200 m, 3-VI-2000, Y. YAMAOKA, S. NAGAI & H. MIYAMA leg., ZKC; 1 ♀, same place and collectors, 29-V-2000, ZKC; 2 ♀♀, S. Kumon, Mt. Shwe-Taung, alt. 1,200, S. KOIWAYA & H. WAKAHARA leg., ZKC.

Nepiodes costipennis multicaarinatus (FUCHS, 1966)

(Figs. 11–14, 27)

Megopis (*Nepiodes*) *multicaarinata* FUCHS, 1966, Koleopt. Rdsch., **43/44** [for 1965/66]: 19.*Megopis* (*Megopis*) *costipennis*: GRESSITT & RONDON, 1970, Pacif. Ins. Mon., **24**: 17.*Nepiodes costipennis multicaarinatus*: DRUMONT, SAMA & KOMIYA, 2010, Cat. Palaearct. Coleopt., **6**, New Acts and Comments: 40. — DRUMONT & KOMIYA, 2010, ditto, List of Species: 87.

In typical examples from southern Vietnam and Thailand, this subspecies differs from *costipennis* in having elytra black or charcoal-colored on intervals and antennae and legs slenderer. In *costipennis*, costae of elytra reddish brown, almost same-colored throughout elytra and similarly formed to those of other species in the genus but in *multicaarinatus*, costae partly thickened, forming callosities here and there especially around meeting points of two costae and costae are blackish for the most part but on these callosities they become pale yellow; the distribution of pale yellow parts on costae of elytron is very variable but always appearing at the point placed at about apical third where C1 and C2 meet; yellow parts often appearing also on basal parts of C1 and C2, and just before apex where C2 and C3 meet; the other parts of costae almost black but sometimes pale yellow portions sporadically appear here and there.

BL. ♂, 17–24 mm. ♀, 19–33 mm.

Distribution. Vietnam, Cambodia, Laos, China (Yunnan, Guangxi, eastern Tibet), Thailand, Myanmar (Shan, Kachin, Mandalay).

Specimens examined. Type materials: The holotype male is preserved in Herbert SCHMID collection (HSC) with the following labels, “Djiring, Annam, H. Perrot”, “HoloTYPUS♂”, “Holotypus ♂, Megopis (*Nepiodes*) *multicaarinata* mihi, E. Fuchs det., 1965”. The single paratype ♂ designated by Fuchs was found in the MNHN which was attached labels, “Djiring, Annam, H. Perrot”, “ParaTYPUS ♂”, “Muséum Paris, Donde, P. Dauquet”, “Paratypes ♂, Megopis (*Nepiodes*) *multicaarinata* mihi, E. Fuchs det., 1966”, “*Nepiodes costipennis* ssp. *multicaarinatus* Fuchs ♂, Det. A. Drumont, 2010”.

Other materials: (Vietnam): 1 ♂, 2 ♀♀, Baoloc, Southern Vietnam, V-2003, ZKC; 2 ♂♂, 4 ♀♀, Dalat env. 18~25-V-1998, ZKC; 5 ♀♀, Tamdao, Vinh Phu Prov., 2-VII-1995, ZKC; 2 ♀♀, Son La, Son La Prov., 1~12-VII-2008, ADC.

(Cambodia): 2 ♀♀, Ban San Keo, northeastern Kampuchea, VI-2002, ZKC.

(Laos): 2 ♀♀, Ban Saluei, Hua Phan Prov., 6~18-V-2004, F & L. KANTNR leg. ADC; 2 ♂♂, 1 ♀, Mt. Phonsali, Phonsali prov., 16~18-1996, ADC; 1 ♀, Mt. Phu Phan, IV-2008, S. COLLARD leg., ADC; and other 4 ♂♂, 10 ♀♀, from northern Laos, ZKC, ADC.

(China, Yunnan): 1 ♂, 2 ♀♀, Mt. Ai Lao Shan, Xinping county, 1~11-V-2006, ADC; 2 ♂♂, 2 ♀♀, Mt. Yingpanshan, Qiubei county, 1~16-V-2008, ADC; 1 ♂, 1 ♀, Hengduan Shan, 2500 m, VII-1999, ADC; 6 ♂♂, 3 ♀♀, Mt. Gaoligong shan, Gongshan county, VI-2007 & 20~30-V-2008, ZKC; and other 2 ♂♂, 7 ♀♀ from Yunnan, ZKC, ADC.

(China, Tibet): 1 ♂, Xiachayu, Chayu county, 22~28-VI-2006, ZKC.

(China, Guangxi): 5 ♂♂, 11 ♀♀, Mt. Qingwanglaoshan, Tianlin county, Baise city, 1~24-VI-2008, leg. local collectors, ADC.

(Thailand): 1 ♂, 3 ♀♀, Wiangpapao, Chiangrai, 22-V-1990, ZKC; 2 ♂♂, same locality, 15-VI-1992, ADC; 1 ♀, idem, 7-V-1999, ADC; 1 ♀, Fang, Chiangrai, 15-VI-1995, ADC; 5 ♀♀, Doipui, Chiangmai, V-1984, 3 ♀♀, Maetaeng, Chiangmai, VI-1995, ZKC; 1 ♂, 4 ♀♀, Chiangmai, IX-1997, ADC; and other 17 ♀♀, from Thailand.

(Myanmar, Kachin): 17 ♂♂, 23 ♀♀, Sikaw, 5~28-V-2009, leg. LI Jingke, ADC & ZKC.

Notes on the affinity of the two subspecies and geographical variations in subsp. multicarinatus.

The nominotypical subspecies is found from northeastern India and northern Myanmar, and subsp. *multicarinatus* is widely known from Vietnam, Cambodia, Laos, Thailand, southwestern China and northern Myanmar. In the type locality (southern Vietnam), most specimens are like Figs. 11 & 12 but example like Fig. 14 is more often found in wider area throughout Thailand, Myanmar, Laos, China (Yunnan, Tibet) and these two forms are smoothly transit to each other. However, the two subspecies are not simply allopatric. In the northern range of the distribution of *multicarinatus* throughout northern Myanmar (Kachin), northern Thailand (Chiangmai), northern Laos (Phonsali), northern Vietnam (Tamdao) and western China (eastern Tibet, western Yunnan), specimens somehow similar to subsp. *costipennis* are mixed in typical *multicarinatus* and also in these areas, the variations range seem to be wider than other area (not only *costipennis*-like examples but also some peculiar forms are observed especially in females). The Fig. 13. (from Tamdao, northern Vietnam) is an example of such peculiar forms. We believe these forms do not represent several independent taxa and such phenomenon suggests that some introgression between two subspecies is taking place.

Key to the Species of the Genus *Nepiodes*

1. Segment 3 of antennae about as long as segments 4+52.
- Segment 3 of antennae obviously longer than segments 4+5
(Java, Sumatra, Is. Banka, Is. Siberut, Singapor, Malaysian Peninsula, Myanmar)
.....*N. cinnamoneum*. (subspecies key is given bellow)
2. Elytra punctured3.
- Elytra not punctured4.
3. Male body brown, sutural spine of elytra acute and long
(East Malaysia (Borneo))*N. cognatus*.
- Male body black, with blue tint on elytra, sutural spine of elytra short and small
(West Sumatra)*N. hefferni* comb. nov.
4. Elytra pubescent and granulate5.

- Elytra glabrous and matt7.
- 5. C3 of elytron clearly recognized
(Myanmar (Kachin), Thailand (Chiangmai), Andaman, Laos, Cambodia)
.....*N. sulcipennis*.
- C3 of elytron hardly recognized6.
- 6. Apex of elytron subtruncated and armed with longer spines
(Sri Lanka)*N. terminalis*.
- Apex of elytron rounded and with short and small spine
(India (Bengal, Assam), Nepal, Bangladesh)*N. bowringi*.
- 7. Costa of elytra almost uniformly reddish, legs thicker
(India (Assam, Sikkim), Myanmar (Kachin, Sagain))*N. costipennis costipennis*.
- Costa of elytra furnished with yellowish callosities on meeting points of two costae
and the other parts black or dark brown, legs slenderer
(Vietnam, Thailand (Chiangmai), Myanmar (Kachin), Laos, China (Yunnan,
Guangxi, Tibet), Cambodia)*N. costipennis multicarinatus*.

Key to the Subspecies of *N. cinnamoneum*

- 1. Antennae about as long as body, elytra widest just after humerimale...2.
- Antennae much shorter than body (0.7–0.9), elytra widest at about middle
.....female...5.
- 2. Elytra glabrous or almost so
(W. Java)*N. c. cinnamoneum*.
- Elytra usually thickly pubescent3.
- 3. Pronotum suddenly roundly widened just after apical constriction, costae of elytra
usually more distinct4.
- Pronotum sub-straightly widened just after apical constriction, costae of elytra
usually weaker
(Sumatra, Is. Banka, Is. Siberut, Singapor)*N. c. ritsemai* stat nov.
- 4. Elytra reddish brown, body usually wider ($EL/EW < 2.5$), antennae thicker
(Malaysian peninsula)*N. c. miyakei* subsp. nov.
- Elytra yellowish brown, body slender ($EL/EW > 2.7$), antennae slenderer
(Myanmar Tennaserim)*N. c. birmanus* subsp. nov.
- 5. Elytra glabrous, antennae shorter ($AL/BL = 0.7$)*N. c. cinnamoneum*.
- Elytra more or less pubescent, antennae longer ($AL/BL > 0.7$)6.
- 6. Elytra more thickly granulate, antennae long ($AL/BL > 0.9$)
.....*N. c. birmanus* subsp. nov.
- Elytra less granulate, antennae shorter ($AL/BL = 0.75-0.85$)7.
- 7. Elytra more reddish, wider ($EL/EW > 2.6$), with pubescence shorter and sparser
.....*N. c. miyakei* subsp. nov.
- Elytra more yellowish, slenderer ($EL/EW < 2.4$), with pubescence longer and
thicker*N. c. ritsemai* stat nov.

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要 約

小宮次郎・Alain DRUMONT: *Nepiodes* 属 (コウチュウ目カミキリムシ科) の再検討。—— *Nepiodes* を独立の属と認め、以下の4種群7種3亜種に整理する。1. *cognatus* 種群, *N. cognatus*, *N. hefferni* comb. nov. (分布, スンダ地域)。2. *sulcipennis* 種群, *N. sulcipennis*, *N. bowringi*, *N. terminalis* (分布, インド～スリランカ～インドシナ)。3. *cinnamoneum* 種群, *N. cinnamoneum*, *N. c. ritsemai* stat. nov., *N. c. miyakei* subsp. nov. *N. c. birmanus* subsp. nov. (分布, スンダ地域)。4. *costipennis* 種群, *N. costipennis costipennis*, *N. c. multicarinatus*, (分布, ネパール～インドシナ)。

Nepiodes 属はPASCOE (1867) によりボルネオの *N. cognatus* を基準種として記載された。LAMEERE (1909, 1919) はそれを *Megopis* 属の亜属として, *cognata*, *cinnamonea*, *ritsemai* の3種をこの亜属に含め、さらに *sulcipennis*, *bowringi*, *terminalis*, *costipennis* の4種を、これと別の *Megopis* 亜属とした。KOMIYA & DRUMONT (2009) は後者の4種は、複眼の距離がはなれ、翅端に明瞭な棘を持つ点で *Nepiodes* 属と近縁と考えられ、インド洋西部に分布する *Megopis* 属とは異なるため、*Nepiodes* 属に移すべきだと主張した。この論文はその主張に基づき、同属の詳細を再整理したものである。

References

- CHOU, W. I., 2004. The Iconography of Taiwanese Cerambycidae. Owl Press, Taipei.
- DRUMONT, A., 2003. Contribution à l'étude du genre *Megopis* SERVILLE, 1832 du Sri Lanka avec la description d'une nouvelle espèce *Megopis morettoii* n. sp. (Coleoptera, Cerambycidae, Prioninae). *Les Cahiers Magellanes*, (24), 13 pp.
- G., SAMA & Z. KOMIYA, 2010. Cerambycidae: Prioninae. New nomenclatural and taxonomic acts and comments (pp. 38–42). In LÖBL, I., & A. SMETANA, (eds.), *Catalogue of Palaearctic Coleoptera*, vol. 6. *Chrysomeloidae*. 924 pp. Apollo Books, Stenstrup, Denmark.
- & Z. KOMIYA, Cerambycidae: Prioninae. *Catalogue of species* (pp. 86–95). *Ibid.*
- EK-AMNUAY, P., 2002. A handbook to interesting beetles of Thailand (fascinating insects V 1). 408 pp., 362 figs. Bangkok, Baan Lae Suan.
- FUCHS, E., 1966. Neue Cerambyciden aus Indochina (Coleopt.). *Koleopt. Rdsch.*, **43/44** [for 1965/1966]: 16–23.

- GAHAN, C. J., 1906. Coleoptera, Cerambycidae, Vol. 1. *Fauna of British India, including Ceylon and Burma*. XIII+329 pp. Taylor & Francis, London.
- GEMMINGER, M., & von E. HAROLD, 1872. Catalogus Coleopterorum hucusque descriptorum synonymicus et systematicus, 9. Scolytidae, Brentidae, Anthotribidae, Cerambycidae; 66, *Cerambycidae, Monachii*: 2751–2988.
- GRESSITT, J. L., & J. A. RONDON, 1970. Cerambycid-beetles of Laos (Disteniidae, Prioninae, Philinae, Lepturinae, Cerambycinae). In GRESSITT, J. L., *et al.*, Cerambycid-beetles of Laos (Longicornes du Laos). *Pacif. Ins. Mon.*, **24**: 1–314.
- HAYASHI, M., 1971. Some longicorn beetles of Nepal (Col. Cerambycidae) as the Results of the Lepidopterological Research Expedition to Nepal Himalaya in 1963, Part I. *Ent. Rev. Japan*, **23**: 81–97.
- S. NAKAMURA, H. MAKIHARA, A. SAITO, & Y.-I. CHU, 1988. A list of cerambycid-beetles from Taiwan, (I) Subfamilies Disteniinae, Parandrinae, Prioninae, Philinae, Spondylinae & Lepturinae. *Chin. J. Ent.* **8**: 165–184.
- HEFFERN, D., 2005. Catalog and bibliography of longhorned beetles from Borneo (Coleoptera: Cerambycidae). Electronic version, 2005.1, 102 pp.
- HUA L.-Z., 2002. Cerambycidae [pp. 189–237]. *List of Chinese Insects*, vol. II, 612 pp. Zhongshan (Sun Yat-sen) University Press, Guangzhou, Chine.
- HÜDEPOHL, K.-E., 1994. Über südasiatische Cerambyciden XII (Coleoptera, Cerambycidae). *Entomofauna*, **15/15**: 185–195.
- KANO, T. F., 1930. New and unrecorded longicorn-beetles from the Japan Empire. *Ins. Matsum., Sapporo*, **5**: 41–48.
- KOMIYA, Z., 2004. Notes on the genus *Aerogrammus* GAHAN, with description of a new species (Coleoptera, Cerambycidae, Prioninae), (Revisional Studies of the genus *Megopis* sensu LAMEERE, 1909–4). *Elytra*, Tokyo, **32**: 187–193.
- & A. DRUMONT, 2007. A synopsis of the prionine genus *Spinimegopis* stat. nov. (Coleoptera, Cerambycidae, Prioninae), (Revisional Studies of the genus *Megopis* sensu LAMEERE, 1909–8). *Ibid.*, **35**: 345–384.
- & ——— 2009. Study on prionine cerambycid *Megopis* (Coleoptera, Cerambycidae), (Revisional Studies of the genus *Megopis* sensu LAMEERE, 1909–9). *Ibid.*, **37**: 313–342.
- LACORDAIRE, J. T., 1868. Histoire Naturelle des Insectes. Genera des Coléoptères, ou exposé méthodique et critique de tous les genres proposés jusqu'ici dans cet ordre d'insectes. Paris. Librairie Encyclopédique de Roret, **8**: 1–552.
- LAMEERE, A., 1909. Révision des Prionides (Douzième mémoire. *Megopis*). *Annls Soc. ent. Belg.*, **53**: 135–170.
- 1912. Révision des prionides (ringt-et-unième mémoire Aacolines). *Mem. Soc. ent. Belg.*, **21**: 1–188.
- 1913. Coleopterorum Catalogus, pars 52, Cerambycidae: Prioninae. Berlin, W. Junk, 108 pp.
- 1919. Coleoptera Longicornia Fam. Cerambycidae subfam. Prioninae. In WYTSMAN, P. (ed.) 9, *Genera Insectorum*, (172): i+1–189, pls. 1–8.
- LANSBERGE, J. W., 1884. Catalogue des Prionines de l'Archipel Indo-Néerlandais, avec descriptions des espèces nouvelles. *Notes Leyden Mus.*, **6**: 135–160.
- PASCOE, F. P., 1867. Diagnostic characters of some new genera and species of Prionidae. *Ann. Mag. nat. Hist.* (3), **19**: 410–413.
- 1869. Longicornia Malayana. *Trans. ent. Soc. London*, **3**: 1–712, 24 pls.
- ROBINSON, H. C., & C. BODEN KLOSS, 1931. XVI. Coleoptera; Longicornia. Collected in Korinchi, West Sumatra, determined by C. J. GAHAN and K. G. BLAIR. *J. the Fed. Malay Sta. Mus.*, **8**: 210–211.
- WEIGEL, A., 2006. Checklist and bibliography of longhorn beetles from Nepal (Insecta: Coleoptera: Cerambycidae) [pp. 492–510]. In HARTMANN, M., & J. WEIPERT (eds.), *Biodiversität und Naturkundemuseums Erfurt e. v.*, Erfurt. 524 pp. 12 pls.
- WHITE, A., 1853. Catalogue of the coleopterous insects in the collection of the British Museum, Longicornia 1. London, **7**: 1–174, pls. 1–4.
- YOSHIDA, T., 1931. Classification of Formosan Prioninae (Col. Cerambycidae). *Trans. nat. Hist. Soc. Formosa*, **21**: 266–279.