

Notes on Buprestid Beetles (Coleoptera, Buprestidae) from Thailand, VII.

Four New Species and One New Subspecies of the Tribe Coraebini

BEDEL, 1921, and Records of Two Species in Thailand

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Abstract Four new species and one new subspecies of buprestid beetles are described: *Coraebus yajimai* sp. nov., *Coraebus nakajimai* sp. nov., *Toxoscelus huahinensis* sp. nov., *Toxoscelus velutiviolaceus* sp. nov. and *Meliacanthus cupreomarginatus isanensis* subsp. nov. Further, two species of the genera *Coraebus* and *Mundaria* are newly recorded from Thailand.

Following my previous paper on the buprestid beetles from Thailand (OHMOMO, 2004), I will describe four new species and one new subspecies, and record two species as new to Thailand.

The abbreviations used for this study are as follows: NSMT (National Museum of Nature and Science, Tokyo) and COTJ (Collection of S. OHMOMO, Tsukuba, Japan). The body size is indicated as the minimum-maximum length and the minimum-maximum width. The proportional rate between maximal length (L) and maximal width (W) is indicated as the abbreviation L/W. The holotypes are deposited in the collection of NSMT.

Coraebus yajimai sp. nov.

(Figs. 1-a, 2-a-1, 2-b-1)

Type locality. Mt. Phu Rua (alt. 1,300 m), Phu Rua, Loei Prov., NE-Thailand.

Type specimens. Holotype, ♂, Mt. Phu Rua (alt. 1,300 m), Phu Rua, Loei Prov., NE-Thailand, 24–IV to 1–V–2006, S. OHMOMO leg. (NSMT). Paratypes, 1 ♂, 5 ♀♀, same data as holotype (COTJ); 1 ♀, Khao Kho (alt. 850 m), Petchabun Prov., N. Thailand, 24 to 27–V–2009, S. OHMOMO leg. (COTJ).

Description. Length, 6.8–7.9 mm in male (holotype 6.8 mm), 7.2–8.6 mm in female. Width, 2.9–3.2 mm in male (holotype 2.9 mm) and 3.2–3.6 mm in female. Medium-sized, rather stout (Fig. 1-a); dorsal surface uniformly brilliant purple, sometimes bluish tinge; pronotum decorated with each four silver whitish hairy spots along anterior margin and posterior margin; antennae shining blackish brown; ventral surface black; legs black.

Head with a deep median groove running from vertex to the middle of frons and forming V-shape in dorsal aspect; frons moderate and global from the frontal aspect, densely and finely punctate, covered with long silver whitish hairs, separated with a deep transverse groove from clypeus; eyes large, inner margin parallel; clypeus transverse, connecting a longitudinal ridge formed between antennal cavities; antennae serrate from 4th segment, 1st and 2nd segment stout and 1.8 times as long as 3rd one, 4th segment about 0.7 times as long as 3rd one.

Pronotum transverse, widest at the middle (L/W=0.68); anterior margin bisinuate with a distinct median lobe; sides evenly arcuate, densely and uniformly covered with long white hairs,

posterior margin bisinuate, with a median lobe broadly produced and moderately excavated just before scutellum; disc distinctly convex in the middle; surface imbricate-punctate, with two shallow depression at latero-basal margin, covered with inconspicuous brown hairs. Prosternal process lingiform (Fig. 2-b-1) and moderately convex, distinctly rimmed, clothed sparsely with long silver-whitish setae.

Elytra widest at humeri and apical one-third ($L/W=1.88$), base feebly wider than posterior margin of pronotum, with a small gibbosity at each humeri and a small shallow depression at the inside of gibbosity; anterior margin bisinuate; lateral margin obliquely expanded at humeri, feebly sinuate in apical one-third, then obliquely narrow to apices, crenulate from humeri to apical one-fourth, dentate finely from apical one-third to apices, apices jointly rounded; surface shallowly and sparsely punctate, clothed with short inconspicuous pale-yellow hairs, decorated with four silver whitish hairy pair-spots along suture and lateral side, and obliquely silver whitish hairy band at apical one-eighth. Scutellum triangular. Abdomen imbricate-punctate, clothed sparsely with short silver-white hair, both side of 2nd to 5th abdominal sternites with long silver-white hairs.

Legs short, outer margin of pro-tibiae produced at apical two-thirds, outer margin of meta-tibiae enlarged at middle and arranged line with brown setae.

Aedeagus (Fig. 2-a-1) long, slender; medial lobe pointed apically.

F e m a l e. Differs from male by somewhat robuster body.

Etymology. This species is dedicated to Dr. Mizuo YAJIMA, Tokyo, for his continuous support of my study activity.

Notes. This new species looks like a species of the genus *Cisseis*, however, the pronotum with no prelateral carinae and the antennae serrate from 4th segment. This species is easily separable from other *Coraebus* species by the body coloration and the ornamentation on the pronotum and elytra being decorated by silver-white pubescence.

Coraebus nakajimai sp. nov.

(Figs. 1-b, 2-a-2, 2-b-2)

Type locality. Mt. Phu Rua (alt. 1,300 m), Phu Rua, Loei Prov., NE-Thailand.

Type specimens. Holotype, ♂, Mt. Phu Rua (alt. 1,300 m), Phu Rua, Loei Prov., NE-Thailand, 24-IV to 1-V-2006, S. OHMOMO leg. (NSMT). Paratype, 1 ♀, same data as holotype (COTJ).

Description. Length, 7.5 mm in male (holotype), 9.3 mm in female. Width, 2.4 mm in male (holotype) and 4.1 mm in female. Medium-sized, elongated (Fig. 1-b); dorsal surface uniformly dark brown with purplish tinge; pronotum clothed with golden hairs widely along lateral margins and narrowly median part; scutellum gold; antennae blackish brown; ventral surface black clothed with golden long hairs; legs black sparsely clothed with short pale yellow hairs.

Head with a deep median groove running from vertex to the middle of frons and forming V-shape in dorsal aspect; frons rather global-shaped from the frontal aspect, coarsely and strongly imbricate-punctate, densely clothed with long pale yellow hairs, separated with a deep transverse groove from clypeus; eyes elliptical, rather large, inner margin parallel; clypeus transverse, connecting a longitudinal ridge formed between antennal cavities; antennae serrate from 4th segment, 1st segment stout and 2.0 times as long as 3rd one, 2nd segment stout and 1.5 times as long as 3rd one, 4th segment triangular and 1.5 times as long as 3rd one.



Fig. 1. Habitus. — a, *Coraebus yajimai* sp. nov.; b, *Coraebus nakajimai* sp. nov.; c, *Toxoscelus huahinensis* sp. nov.; d, *Toxoscelus velutiviolaceus* sp. nov.; e, *Meliacanthus cupreomarginatus isanensis* subsp. nov.

Pronotum transverse, widest at the middle ($L/W=0.72$); anterior margin feebly bisinuate with a distinct and large median lobe; sides finely crenate, arcuate at anterior half then straight to posterior angle; posterior angles obtuse, posterior margin steps-shape punctate and bisinuate, with a median lobe broadly produced; disc distinctly convex in the middle; surface imbricate-punctate, with two shallow depressions at latero-basal margin. Prosternal process lingiform (Fig. 2-b-2), moderately convex, clothed sparsely with long ivory hairs.

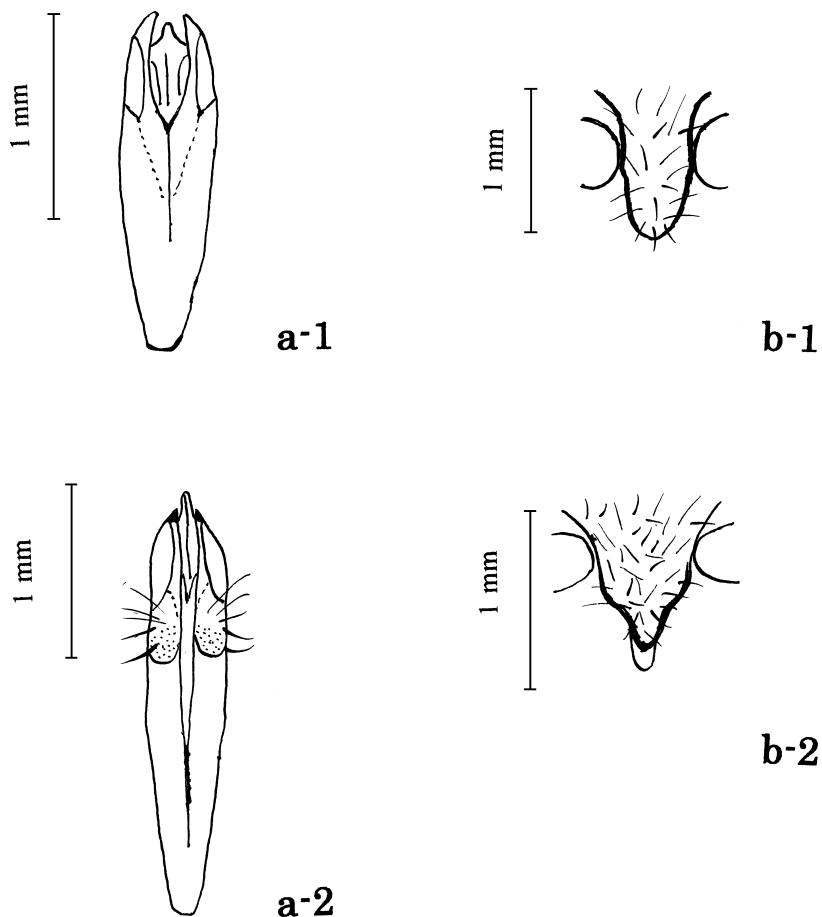


Fig. 2. Male genitalia (a) and prosternal process (b). — 1, *Coraebus yajimai* sp. nov.; 2, *Coraebus nakajimai* sp. nov.

Elytra widest at humeri and apical one-third ($L/W=2.28$), base feebly wider than posterior margin of pronotum, with a small longitudinal ridge at each humeri and a small shallow depression at the inside of ridge; anterior margin bisinuate; lateral margin obliquely expanded at humeri, feebly sinuate in apical one-third, then obliquely narrowed to apices, apices truncate and finely denticulate, crenulate from humeri to apical one-fourth, dentate finely from apical one-third to apices; surface shallowly imbricate-punctate, clothed sparsely with inconspicuous pale yellow hairs, decorated with two golden long hair zigzag bands at apical one-fourth and one-seventh, irregular small golden hairy spots at basal one-third, irregular short transverse golden hairy band at the middle and longitudinal golden hairy band along suture. Scutellum pentagonal, finely imbricate-punctate.

Legs short, pro- and meso-tibiae feebly curved, meta-tibiae straight with outer margin arranged line of brown setae.

Aedeagus (Fig. 2-a-2) long, slender; medial lobe pointed apically.

F e m a l e. Differs from male by somewhat robust body.

Etymology. This species is dedicated to Mr. Tomoyasu NAKAJIMA, Ichikawa, Chiba, for his

continuous support of my study activity.

Notes. This species is similar to *C. sausiai* KUBÁN, 1997 from NE-India, however easily separable from the latter by the shape of rather narrower pronotum, hairy spots formed by silver white pubescence on pronotum and elytra, and the shape of male genitalia.

Coraebus cavifrons DESCARPENTRIES et VILLIERS, 1967

Coraebus cavifrons DESCARPENTRIES et VILLIERS, 1967, 482, type locality: Tam Dao, Vietnam.

Specimen examined. 1 ex., Mt. Phu Rua, Phu Rua, Loei Prov., NE-Thailand, 26-IV to 1-V-2006, S. OHMOMO leg. (COTJ).

Distribution. China, Laos, Vietnam, Thailand. New record from Thailand.

Toxoscelus huahinensis sp. nov.

(Figs. 1-c, 3-a, 3-b, 3-c)

Type locality. Khao Hin Lek Phai, Hua Hin, Prachuap Khiri Khan Prov., Peninsulæ Thailand.

Type specimens. Holotype, ♂, Khao Hin Lek Phai, Hua Hin, Prachuap Khiri Khan Prov., C-Thailand (Peninsulæ area), 4-V-2006, S. OHMOMO leg. (NSMT). Paratypes, 1 ♀, same locality as holotype, 6-IX-2003, S. OHMOMO leg. (COTJ); 1 ♀, same data as holotype (COTJ); 1 ♀, same locality as holotype, 12-V-2007, S. OHMOMO leg. (COTJ); 1 ♀, same locality as holotype, 18-V-2010, S. OHMOMO leg. (COTJ).

Description. Length, 6.6 mm in male (holotype), 6.9–7.7 mm in female. Width, 2.5 mm (holotype) and 2.6–2.8 mm in female. Medium-sized, slender (Fig. 1-c); uniformly dark brown with purplish tinge, elytral suture and apices gold; pronotum clothed with both of short golden and silver-white hairs; scutellum gold; antennae blackish brown; ventral surface blackish brown clothed with silver-white short hairs, apices of pygidium arrange light brown long setae; legs reddish brown, sparsely clothed with short pale yellow hairs.

Head with a deep median groove running from vertex to the middle of frons and forming V-shape in dorsal aspect; frons rather globe-shaped from the frontal aspect, coarsely and strongly imbricate-punctate, sparsely clothed with silver-white setae, with a dark brown gibbosity near vertex and a small golden gibbosity near antennal coax on the both-sided of median groove, respectively; eyes moderate, inner margin feebly convergent below; clypeus transverse, connecting

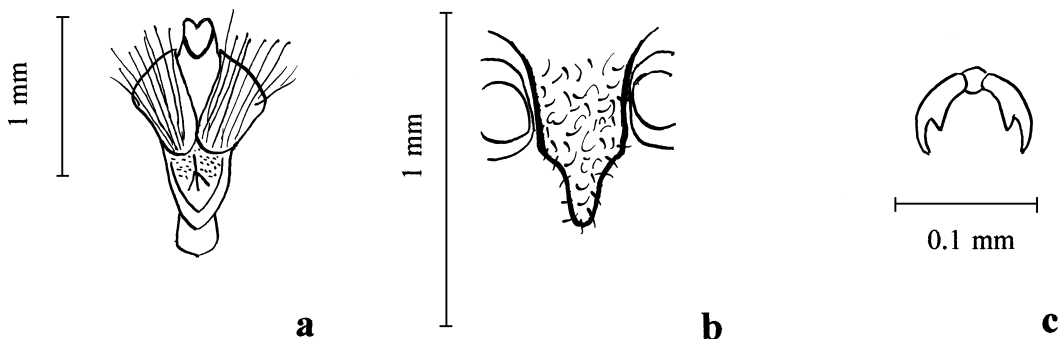


Fig. 3. *Toxoscelus huahinensis* sp. nov. — a, male genitalia; b, prosternal process; c, claw.

a longitudinal ridge formed between antennal cavities; antennae compact, serrate from 5th segment, 1st segment stout and 3.0 times as long as 4th one, 2nd segment stout and 1.5 times as long as 4th one, 4th segment globe-shaped.

Pronotum transverse, widest at basal one-fourth ($L/W=0.67$); anterior margin feebly bisinuate; sides arcuate and excavate just before posterior angle with short arcuated ridge at anterior one-third; posterior angles obtuse; posterior margin bisinuate, with a large and truncated median process just before scutellum; disc distinctly convex at anterior middle; surface imbricate-punctate, with four shallow depressions on the center of basal two-fifths and two small golden hair spots on the center at anterior one-fourth. Prosternal process imbricate-punctate, nearly straight and rimmed between pro-coxa (Fig. 3-b), then forming triangular to the apices, densely clothed with long pale yellow hairs.

Elytra widest at humeri and apical half ($L/W=2.13$), base feebly wider than posterior margin of pronotum, with a small longitudinal gibbosity at each humeri and a small shallow depression at the inside of gibbosity, suture distinctly ridged; anterior margin strongly; lateral margin obliquely expanded at humeri, feebly sinuate in basal half, then obliquely narrowed to apices; apices truncate and finely denticulate; surface finely imbricate-punctate, decorated with a double circular golden hairy patch at basal one-third and an irregular double circular golden hairy spot at apical one-seventh. Scutellum triangular, finely imbricate-punctate.

Legs short meso-tibiae feebly curved, meta-tibiae moderately curved, pro-tibiae rather straight with outer margin arranged line of brown setae. Claws with a sharp projection at the base (Fig. 3-c).

Aedeagus (Fig. 3-a) typical wedge-shaped; medial lobe obtusely pointed apically; parameres densely decorated with long golden-yellow hairs.

F e m a l e. Differs from male by the shape of pygidium apices broadly rounded, with a small ten spines at the center area.

Etymology. This species name is derived from the type locality, Hua Hin City.

Notes. This new species is distinguished from the other *Toxoscelus* species by the unique body coloration and the peculiar male genitalia.

Toxoscelus velutiviolaceus sp. nov.

(Figs. 1-d, 4-a, 4-b, 4-c)

Type locality. Huai Muang (alt. 320 m), Suan Phung, Ratchaburi Prov., W-Thailand.

Type specimens. Holotype, ♀, Huai Muang (alt. 320 m), Suan Phueng, Ratchaburi Prov., W-Thailand, 15-V-2010, S. OHMOMO leg. (NSMT). Paratype, 1 ♀, same data as holotype (COTJ).

Description. Length, 9.0–9.4 mm (holotype 9.4 mm). Width, 3.2–3.4 mm (holotype 3.4 mm). Rather large, slender (Fig. 1-d); dorsal surface uniformly velutinous dark violet with golden rouge setae, sparsely; lateral sides decorated with a silver-white hairy band longitudinally running from the inside of eye in head continuing the lateral side of pronotum to elytra along the lateral sides at anterior one-third and posterior one-third including above part of abdominal second to fourth segments; antennae aeneous with rouge tinge; ventral surface and legs aeneous with violet tinge.

Head with a moderate median groove running from vertex to the middle of frons and forming V-shape in dorsal aspect; frons densely and strongly wrinkled, sparsely clothed with long

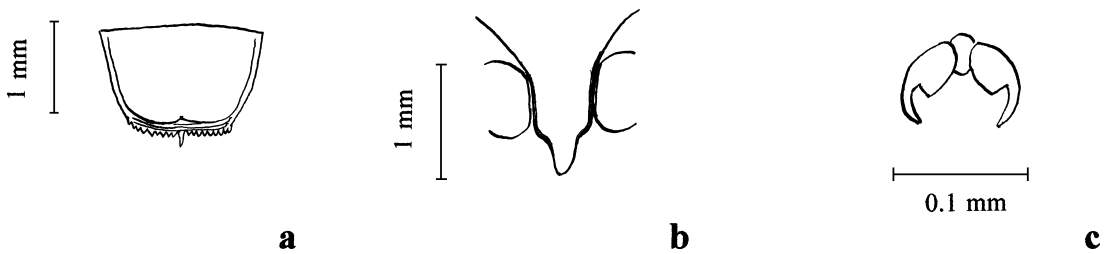


Fig. 4. *Toxoscelus velutiviolaceus* sp. nov. — a, last abdominal sternite; b, prosternal process; c, claw.

silver-white hairs, with a transverse deep groove between eyes, with a shallow gibbosity clothed with dark rouge setae near vertex on the both-sided of median groove, respectively; eyes rather small, inner margin forming distinct rim and feebly convergent below; clypeus longitudinal between antennal cavities; antennae compact, serrate from 5th segment, 1st segment stout and 2.0 times as long as 2nd one, 3rd and 4th segments spindle-shaped and 0.8 and 0.7 times as long as 2nd one, respectively.

Pronotum transverse, widest at basal one-third ($L/W=0.63$); anterior margin feebly bisinuate; sides arcuate and strongly excavate just before posterior angle, with a strongly bisinuate ridge from the anterior angle to the posterior one-fourth; posterior angle obtuse; posterior margin bisinuate, with a median lobe broadly produced just before scutellum; disc rather convex at anterior middle; surface strongly wrinkled, with a shallow rather large depression near both posterior angles. Prosternal process lingiform (Fig. 4-b), strongly imbricate-punctate.

Elytra widest at basal three-fifths ($L/W=2.10$), base feebly wider than pronotum, with a transverse shallow depression along the anterior margin; anterior margin bisinuate; lateral margin obliquely expanded at humeri, feebly sinuate in basal three-fifths, then obliquely narrowed to apices; apices truncate and finely denticulate; surface imbricate-punctate, decorated with two silver-white hairy zig-zag bands. Scutellum triangular, wrinkled. Ventral surface densely imbricate-punctate, each sternite with a double line of silver-white setae along the end-side, out-side of 2nd sternite with a marking of long silver-white hairs; apical margin of the last abdominal sternite with fine ten spines and a moderate central spine (Fig. 4-a).

Legs short, meso-tibiae feebly curved, meta-tibiae moderately curved and pro-tibiae straight, each tibiae with short but sharp curved spine at the top, outer margin of meta-tibiae arranged line of brown short setae. Claws with a sharp projection at the base (Fig. 4-c).

Male. Unknown.

Etymology. This species name is taken from the body coloration.

Notes. This new species is peculiar with the body coloration, and by this character this species is easily distinguished from the other *Toxoscelus* species.

Meliacanthus cupreomarginatus isanensis subsp. nov.

(Figs. 1-e)

Type locality. Phu Phan (alt. 600 m), Sakhon Nakhon Prov., NE-Thailand.

Type specimens. Holotype, ♂, Phu Phan (alt. 600 m), Sakhon Nakhon Prov., NE-Thailand, 16 to 19-V-2007, S. OHMOMO leg. (NSMT). Paratypes, 1 ♂, 2 ♀♀, same data as holotype (COTJ); 1 ♀, Khon Kaen University, Khon Kaen Prov., NE-Thailand, 22-VIII-1989, Native

coll. (COTJ).

Materials of nomino-typical subspecies examined for comparison. 1 ♀, Khok Ngan (alt. 820 m), Phu Rua, Loei Prov., N-Thailand, 21-V-2004, S. OHMOMO leg. (COTJ); 5 ♂♂, 1 ♀, Klong Wang Chao (alt. 200 m), Wang Chao, Kamphen Phet Prov., C-Thailand, 24 to 27-V-2005, S. OHMOMO leg. (COTJ); 3 ♂♂, 3 ♀♀, Mae Kradankla waterfall, Nong Ya Ploeng, Petchaburi Prov., C-Thailand, 29-V-2005, S. OHMOMO leg. (COTJ); 2 ♂♂, 1 ♀, Mae Kradankla waterfall, Nong Ya Ploeng, Petchaburi Prov., C-Thailand, 21-V-2007, S. OHMOMO leg. (COTJ).

Description. Length, 8.0–8.4 mm in male (holotype 8.0 mm) and 8.4–8.8 mm in female. Width, 2.2–2.4 mm (holotype 2.2 mm) in male and 2.4–2.8 mm in female. The elytral coloration of this new subspecies is uniformly dark blue green without cupreous red part (Fig. 1-e). These specimens from northeast Thailand is easily distinguished from the specimens of other regions as follows: 1) elytra dark blue green, while in nomino-typical subspecies, it light green, 2) elytra unicolor, while in nomino-typical subspecies, it is widely cupreous red in lateral. So, this variety is described as a new subspecies under the name of *isanensis*.

Female. Differs from male by somewhat robust body.

Distribution. NE-Thailand.

Etymology. This subspecies name is derived from the type locality where is called "isan" as a regional name of the northeast area in Thailand.

Notes. The nomino-typical subspecies of *Meliacanthus cupreomarginatus* (E. SAUNDERS, 1866) was described from Laos. In Thailand, this species is rather common, especially in mountain area of North and Central Thailand. Their elytral coloration is shining green and widely cupreous red along lateral sides.

Mundaria typical KERREMANS, 1894

Mundaria typical KERREMANS, 1894, 468, type locality: India (Sikkim).

Specimen examined. 1 ex., Kho Kho, Petchabun Prov., N-Thailand, 26-V-2009, S. OHMOMO leg. (COTJ).

Distribution. India, Laos, Nepal, Thailand. New record from Thailand.

要 約

大桃定洋：タイ国産タマムシ科甲虫（第7報）—ナカボソタマムシ族の4新種および1新亜種の記載と2種のタイ国からの新記録。——タイ国産タマムシ科ナカボソタマムシ族甲虫として、ナカボソタマムシ属 *Coraebus* の2新種 *C. yajimai* sp. nov. と *C. nakajimai* sp. nov., クリタマムシ属 *Toxoscelus* の2新種 *T. huahinensis* sp. nov. と *T. velutiviolaceus* sp. nov., *Meliacanthus* 属の1新亜種 *M. cupreomarginatus isanensis* subsp. nov. を記載した。また、ナカボソタマムシ属の1種と *Mundaria* 属の1種をタイ国から初めて記録した。

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