

Studies on the Buprestidae (Coleoptera) of Asia

9) Four New Species of the Genera *Lamprodila*, *Melobasis* and *Coraebus* from Taiwan

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Abstract *Lamprodila (Palmar) formosana*, *Lamprodila (Palmar) taiwania*, *Melobasis taiwanensis* and *Coraebus nigropurpureus* are described as new species from Taiwan.

Key words: Jewel beetles, Buprestidae, *Lamprodila*, *Melobasis*, *Coraebus*, new species, Taiwan.

Introduction

Twenty-nine genera from the family Buprestidae have previously been known from Taiwan. In this paper, the authors describe two new species in the genus *Lamprodila*, one new species in the genus *Coraebus* and one new species in the genus *Melobasis* from Taiwan. This is the first record of a species from the genus *Melobasis* from Taiwan. Five species in the genus *Lamprodila*, have been known hitherto. One unknown species bearing scattered blackish-blue spots on the elytra was collected at high altitude in the central mountains of Taiwan about 40 years ago. Specimens of this species have not been collected since, though in recent years, several other specimens have been collected in the region. We had an opportunity to examine these specimens and after careful examination, are describing them under the name *Lamprodila (Palmar) formosana* sp. nov. In the last few years, another unknown species has fortunately been collected at lower altitude than the previously mentioned species in the central mountainous region. We are describing it under the name of *Lamprodila (Palmar) taiwania* sp. nov. While most species in the genus *Melobasis* are known from the Australian region, one unknown species was known from southern Taiwan and in recent years, several specimens have been collected from that region. After careful examination and comparison with allied species from Indonesia, it has become apparent that the specimens belong to a new species. We are describing it under the name of *Melobasis (Melobasis) taiwanensis* sp. nov. In the genus *Coraebus*, 27 species are known from Taiwan. *Coraebus torigaii* AKIYAMA et OHMOMO, 1993 which bears a bluish body and 18 mm body length in males is known from central Taiwan, and is the largest of all known species within the genus in Taiwan. In the last ten years, another new species with a body size comparable with *C. torigaii* and dark reddish purple on elytra has been found in the South of Taiwan. The new species is described in this paper under the name of *Coraebus nigropurpureus* sp. nov.

Material and Methods

The holotype and some of the paratypes are deposited in the National Museum of Nature and Science, Tukuba, Japan (NMNS), and the remaining paratypes are in the author's collections.

All specimens were examined under binoculars model SM-Z (Nikon, Japan) with magnification $\times 10 - 40$ and with 40×40 mesh glass plate just under the ocular lens for creating illustrations.

For digital photography, we use the following equipment: camera body, Canon 80D; lens, Canon MP-E 65 mm f/2.8 1–5 \times ; macro rail, Cognisys Stackshot automated macro rail; photo stacking soft-

ware, Helicon Focus 6.7.1; post editing software, Adobe photoshop CS6. For film camera photography, we use Olympus OM2 of camera body, extension tube with 38 mm macro lens, 80 mm macro lens and TTL storobe; film, Fujichrome Provia 100F.

Measurements were made by the following method: pronotal length – from the base of posterior median lobe to anterior median lobe; elytral length – from the base of scutellum to elytral apices; male genital apparatus length – from the anterior margin of the genital apparatus to the apex of aedeagus.

Taxonomy

Lamprodila (Palmar) formosana sp. nov.

(Figs. 1–4, 20, 21 & 48)

Poecilonota sp.: AKIYAMA et OHMOMO, 2000: 209, pl. 71, no. 863. [Japanese name: Taiwan-kinheri-tamamushi].

F e m a l e. Body 13.1 mm long by 5.0 mm wide, elongate ovate, mat, greenish with blackish-blue tinge; head greenish, punctures on vertex blackish-blue, vertex with a longitudinal blackish-blue tinge along median line; antennae with 1st and 2nd segments bluish-green, 3rd to 11th blackish with bluish-green tinge; pronotum greenish with a broad longitudinal blackish-blue tinge along median line; scutellum blackish-blue; elytra greenish with linear longitudinal blackish-blue markings on each of three or four interstices along suture, scattered randomly with small spots in anterior half, and four blackish-blue large spots ranged on each elytron as follows: one at anterior 1/3 obsolete, two horizontally ranged at posterior 2/5 and one at posterior 1/4 in the middle between the two spots at posterior 2/5; legs greenish.

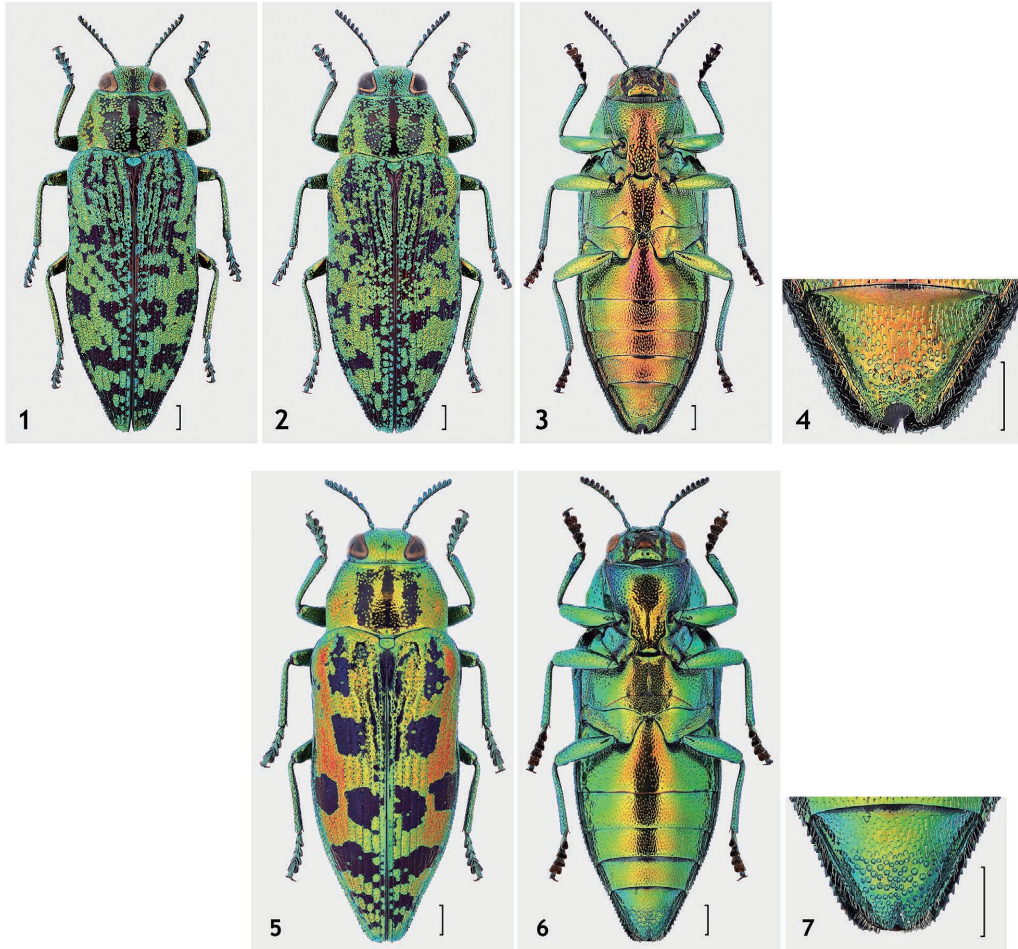
Head transverse and declivous anteriorly, coarsely punctate; vertex with median groove narrow; frons feebly convex with inverted V-shape carina above triangular depression along median line; clypeus transverse, clypeal suture absent; eyes convergent above.

Antennae short, compact, reaching to anterior 1/3 of pronotum; 1st segment short, geniculate and obconical; 2nd globular; 3rd obconical and 2.00 times as long as 2nd; 4th to 10th triangular; 11th elliptical; sensory pores concentrated in a distinct socket on each apico-inner surface of eight apical segments.

Pronotum transverse, widest just behind basal 1/3, about 1.70 times as wide as long; lateral margins obliquely dilated from base to the widest part where they are arcuate, then obliquely convergent to anterior angles; anterior angles rounded and produced anteriorly in lateral view; marginal carinae well-defined in basal 1/2; anterior margin slightly bisinuate, 0.70 times as wide as posterior margin; posterior margin bisinuate, with median lobe arcuately produced, obtusely emarginate on each side; posterior angles acute; disc convex, shallowly and obliquely impressed on each side before base; longitudinal broad costa on median line entire and longitudinal broad costa obsolete at lateral 1/3 from ante-scutellar part on each side; surface irregularly punctate except these longitudinal broad costae, the punctures coarse and reticulate; ante-scutellar part provided with a transverse foveola.

Scutellum cordiform with median depression.

Elytra 4.20 times as long as pronotum, 1.47 times as wide as pronotum, widest just behind middle and 1.70 times as long as wide at the widest part which is wider than pronotum; each basal lobe obtusely angulate at basal emargination of pronotum; humeri obtusely angulate; sides feebly sinuate from behind humeri to the widest part where they are arcuate, then arcuately convergent to apices,



Figs. 1–7. Habitus and last visible abdominal sternites. — 1–4, *Lamprodila (Palmar) formosana* sp. nov.; 5–7, *L. (P.) taiwania* sp. nov. — 1, 2 & 5, Dorsal view; 3 & 6, ventral view; 4 & 7, last visible abdominal sternite. — 1–7, Females. Scale bars: 1.00 mm.

which are rounded though obsolete truncate at tips; lateral margins finely serrate from middle, the serration becoming denser toward apices; disc with three or four conspicuous interstices along suture on each elytron, and interstices on the other part obsolete except blackish-blue large spots; surface rugoso-punctate except blackish-blue spots.

Ventral surface shallowly punctate, clothed with whitish recumbent hairs. Prosternum convex; anterior margin arcuately emarginate; prosternal process broad, moderately convex, with sides subparallel to just behind anterior coxal cavities or, in some specimens, feebly and arcuately constricted by anterior coxal cavities, then narrowed and parallel-sided toward arcuate apex. Mesosternum entirely penetrated by prosternal process. Metasternum with entire median groove. Abdomen convex; last visible sternite trapezoidally emarginate at the middle of apical margin, the emargination arcuately emarginate in each side.

Legs rather long and slender; all tarsal segments short, relatively slender; 1st metatarsal segment 1.30 times as long as 2nd.

M a l e. Unknown.

Type series. Holotype: ♀, Xiulin Township (2,150 m in alt.), Hualien County, Taiwan, 1.VIII.2015, Uika ONG leg. Paratypes: 1 ♀, Bilu (2,000 m in alt.), Hualien County, 10.VII.1983, Haruo TAKIZAWA leg.; 3 ♀♀, same locality as the holotype, 13.VII.2015, Uitsiann ONG leg.; 4 ♀♀, same locality as the holotype, 24.VII.2017, Uitsiann ONG leg.

Bionomics. All specimens were collected on the bark of weak individuals of *Picea morrisonicola* (Taiwan spruce) (Fig. 48). These specimens flew to the vertical trunks and oviposited in the seams of the bark.

Distribution. Taiwan.

Etymology. The specific name is given for this unique new species representing Taiwan because it bears scattered blackish-blue spots on elytra, which is unique within the genus *Lamprodila* (*Palmar*).

Remarks. This new species has the following diagnostic features in comparison with female of *Lamprodila* (*Palmar*) *pseudovirgata* (OHMOMO, 2005) (Figs. 22, 23 & 44): 1) each elytron with three or four conspicuous interstices along suture, and interstices on the other part obsolete, while in *L. (P.) pseudovirgata* all interstices conspicuous (Fig. 44); 2) prosternal process with sides subparallel to just behind anterior coxal cavities, while in *L. (P.) pseudovirgata* arcuately constricted between anterior coxal cavities (Fig. 22); 3) last visible abdominal sternite trapezoidally emarginate at apex, while in *L. (P.) pseudovirgata* arcuately emarginate and small in size (Fig. 23).

The new species no doubt belongs to the nominotypical subgenus, but has the following intermediate features between the subgenera *Lamprodila* s. str. and *Palmar*: 1) Each elytron is ornamented with four large blackish-blue markings, though in some specimens the markings are absent and bear small spots which are scattered on the elytron in a reticulated pattern or the four markings are obsolete. 2) The large markings are not stable between individual specimens. In the subgenus *Palmar*, the specimens bear large markings across two or more interstices on the elytron (KUROSAWA, 1970). In the subgenus *Lamprodila*, all of the markings are scattered on each interstice of elytron. In *L. formosana* sp. nov., almost all markings of the specimens are scattered on each interstice as in the subgenus *Lamprodila*, though there are some differences depending on the specimen. 3) Each tarsal segment is short, relatively slender, and metatarsal 1st segment is 1.30 times as long as 2nd. In the subgenus *Palmar*, each tarsal segment is short and robust, and 1st tarsal segment of metatarsus is shorter than or equal to 1.50 times of 2nd (KUROSAWA, 1970). In the subgenus *Lamprodila*, each tarsal segment is long and slender, and 1st tarsal segment of metatarsus is longer than 1.50 times the 2nd. Therefore, this new species is in the subgenus *Palmar*. From the above mentioned features, this new species should belong to the subgenus *Palmar*, though it also has intermediate characters between the subgenera *Lamprodila* and *Palmar*.

Data of comparative species examined. *Lamprodila* (*Palmar*) *pseudovirgata* (OHMOMO, 2005): 1 ♀, Sishanxi, Taichung City, Taiwan, 14.VII.1992, Chinchu LUO leg.

***Lamprodila* (*Palmar*) *taiwania* sp. nov.**

(Figs. 5–7, 24–27, 42, 43 & 49)

M a l e. Body 13.4 mm long by 4.9 mm wide, elongate ovate, lustrous, greenish with aeneous tinge; head greenish; antennae with 1st and 2nd segments bluish-green, 3rd to 11th blackish with greenish tinge; pronotum greenish with aeneous tinge in both sides; elytra greenish, and aeneo-cupreous tinge in both sides, though lateral margins greenish, each with five blackish-blue large spots as follows: 1st spot obsolete just behind base, 2nd at anterior 1/3, 3rd and 4th ranged horizontally at mid-

dle and the last spot at posterior 1/4 between 3rd and 4th spots; legs greenish.

Head transverse and declivous anteriorly; vertex with median groove narrow; frons feebly convex, hemispherically depressed at middle and ridged around the depression; clypeus transverse, clypeal suture absent; surface coarsely punctate; eyes convergent above.

Antennae short, compact, reaching anterior 1/3 of pronotum; 1st segment short, geniculate and obconical; 2nd globular; 3rd obconical and 1.30 times as long as 2nd; 4th to 10th triangular; 11th isosceles triangular; sensory pores concentrated in a distinct socket on each apico-inner surface of eight apical segments.

Pronotum transverse, widest just behind basal 1/3, about 1.60 times as wide as long; lateral margins subparallel-sided though feebly dilated from base to the widest part where they are obtusely angulate, then obliquely convergent to anterior angles; anterior angles rounded and produced anteriorly in lateral view; marginal carinae well-defined in basal 4/5; anterior margin 0.70 times as wide as posterior margin, slightly bisinuate; posterior margin bisinuate with median lobe arcuately produced, obtusely emarginate on each side; posterior angles acute; disc convex, shallowly and obliquely impressed on each side before base; longitudinal broad costa on median line entire and longitudinal broad costa at lateral 1/3 from ante-scutellar part short on the each side; surface irregularly coarsely punctate except on the longitudinal broad costae; ante-scutellar part transversely with a foveola.

Scutellum transverse, inverted pentagonal, and depressed at middle; surface with several punctures.

Elytra 4.00 times as long as pronotum, 1.20 times as wide as pronotum, widest just behind humeral prominences and 2.00 times as long as wide at the widest part which is wider than pronotum; each basal lobe arcuate and contact with the bottom of basal emargination of pronotum; humeri arcuate; sides arcuate from humeri to just behind humeral prominences, then sinuate to middle, and arcuately convergent to apices which are rounded; lateral margins finely serrate from middle, the serration becoming denser toward apices; disc with interstices overall; surface rugoso-punctate except bluish-blue spots.

Ventral surface shallowly, densely punctate, clothed with whitish recumbent hairs. Prosternum convex; anterior margin bisinuate with lateral lobes; prosternal process broad, feebly convex in middle, with sides feebly elevated in both margins, and arcuately constricted by anterior coxal cavities and produced just behind them, then parallel-sided toward apex which is feebly and arcuately emarginate. Mesosternum entirely penetrated by prosternal process. Metasternum with entire median groove. Abdomen convex; last visible sternite arcuately emarginate at the middle of apical margin, the size of emargination narrow.

Legs rather long and slender though stouter than *L. (P.) formosana* sp. nov.; all tarsal segments short, robust; 1st metatarsal segment 1.20 times as long as 2nd.

Male genital apparatus slender, depressed in apical half; parameres with lateral margins feebly sinuate from base to apical 1/3 of the widest part, then arcuately convergent to truncate apices; aedeagus sinuously convergent to apex.

F e m a l e. Body 13.3 mm long by 4.9 mm wide, more aeneo-cupreous in both sides than in male. Last visible abdominal sternite with apex arcuately emarginate and the size of emargination narrow.

Type series. Holotype: ♂, Zhushan (1,000 m in alt.), Nantou County, Taiwan, 9.VII.2017, Jifafong CHEN leg. Paratypes: 1 ♀ (allotype), 3 ♀♀, same data as the holotype; 3 ♀♀, same locality as the holotype, 4.VII.2017, Uitsiann ONG leg.; 4 ♀♀, same locality as the holotype, 5.VII.2017, Sinyan SHIH leg.; 3 ♀♀, same data as the holotype; 2 ♀♀, same locality as the holotype, 5.VII.2017, Uitsiann ONG leg.; 2 ♀♀, same locality as the holotype, 12.VII.2017, Uitsiann ONG leg.

Bionomics. All specimens were collected on the bark of weak individuals of *Taiwania cryptomerioides* (Fig. 49). These specimens flew to the vertical trunks and oviposited in the seams of the bark.

Distribution. Taiwan.

Etymology. The specific name is derived from the genus name of *Taiwania cryptomerioides* associated with this new buprestid beetle.

Remarks. This new species has the following diagnostic features in comparison with females of *Lamprodila (Palmar) refulgens* (OBENBERGER, 1924) (Figs. 28, 29 & 45): 1) pronotum with lateral margins subparallel on sides though feebly dilated from base to the widest part, while in *L. (P.) refulgens* obliquely convergent from base to the widest part where the margins obtusely angulate (Fig. 45); 2) prosternal process with sides behind anterior coxal cavities parallel-sided toward apex, while in *L. (P.) refulgens* converging toward apex (Fig. 28); 3) last visible abdominal sternite arcuately emarginate at the middle of apical margin, the size of emargination narrow in female, while in *L. (P.) refulgens* bi-sinuously emarginate at apex, the size of emargination wide (Fig. 29) (OBENBERGER, 1924).

This new species also has the following diagnostic features in comparison with female of *Lamprodila (Palmar) sp.1* (= *Ovalisia sp.1* in AKIYAMA & OHMOMO, 2000, p. 200, pl. 71, no. 865): 1) body lustrous, while in *Lamprodila (Palmar) sp.1* matt with no shimmer in dorsal view; 2) lateral margins subparallel-sided though feebly dilated from base to the widest part, while in *Lamprodila (Palmar) sp.1* obliquely dilated from base to the widest part; 3) elytral apices rounded, while in *Lamprodila (Palmar) sp.1* sub-truncate.

Data of comparative species examined. *Lamprodila (Palmar) refulgens* (OBENBERGER, 1924): 4 ♀♀, Mt. Dayao, Jinxiu County, Guangxi Zhuang Autonomous Region, China, 10–20.VII.2009. *Lamprodila (Palmar) sp.1* (AKIYAMA & OHMOMO, 2000): 1 ♀, Nanshanxi 600 m, Nantou County, Taiwan, 21.V.1971, K. SAKAI leg.

Melobasis (Melobasis) taiwanensis sp. nov.

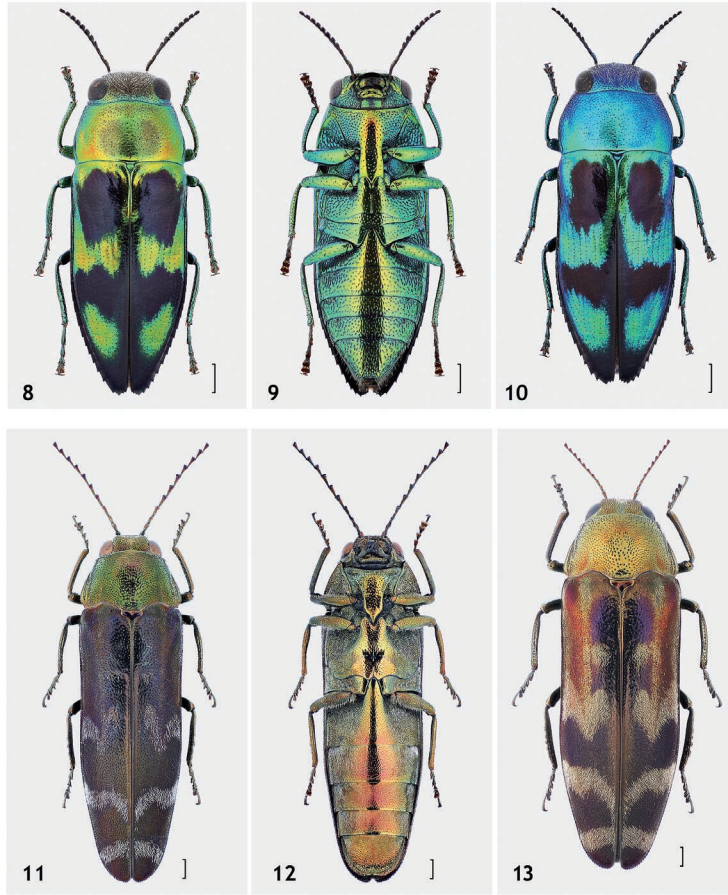
(Figs. 8–10, 14–16 & 30–32)

M a l e. Body 10.9 mm long by 7.3 mm wide, elongate ovate, greenish with aeneous tinge; head dull-greenish with cupreous tinge on upper half of frons; antennae blackish with aeneous tinge; pronotum and elytra greenish with aeneous tinge; each elytron with two blackish-blue large markings as follows: anterior transverse marking just behind base, posterior transverse marking in posterior half; the marking surrounding greenish spot at posterior 1/4; legs greenish.

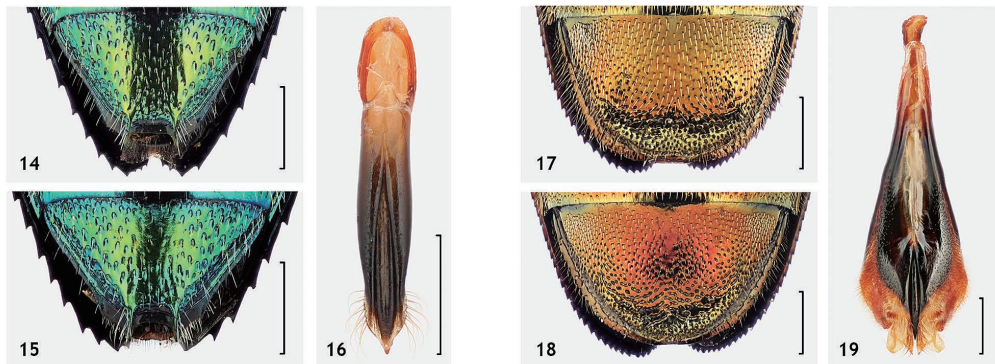
Head transverse and declivous anteriorly, narrower than the base of pronotum; frons deplanate to the anterior margin of clypeus; clypeus with anterior margin produced anteriorly; eyes convergent above.

Antennae moderate in length, reaching to the middle of pronotum; 1st segment long and obconical; 2nd short, globular; 3rd obconical and 1.40 times as long as 2nd; 4th triangular; 5th to 10th rectangular; 11th parallelogram; each of 4th to 11th segments truncate on ventral side; sensory pores concentrated on the individual truncate surface of eight apical segments.

Pronotum transverse, widest at basal 1/4, about 1.90 times as wide as long; lateral margins arcuately swollen from base to the widest part where they are arcuate, then feebly arcuate to anterior angles; anterior angles rounded and produced anteriorly in lateral view; marginal carinae entire; anterior margin 0.80 times as wide as posterior margin, bisinuate with median lobe; posterior margin feebly bisinuate; posterior angles perpendicular; disc smoothly convex; surface sparsely scattered with fine punctures; ante-scutellar part with a small foveola.



Figs. 8–13. Habitus and last visible abdominal sternites. — 8–10, *Melobasis (Melobasis) taiwanensis* sp. nov.; 11–13, *Coraebus nigropurpureus* sp. nov. — 8, 10, 11 & 13, Dorsal view; 9 & 12, ventral view. — 8, 9, 11 & 12, Males; 10 & 13, females. Scale bars: 1.00 mm.



Figs. 14–19. Last visible abdominal sternites and male genital apparatus. — 14 & 16, *Melobasis (Melobasis) taiwanensis* sp. nov. ♂; 15, ditto, ♀; 17, *Coraebus nigropurpureus* sp. nov. ♂; 18, ditto, ♀. — 14, 15, 17 & 18, Last visible abdominal sternite; 16 & 19, male genital apparatus. Scale bars: 1.00 mm.

Scutellum small, longitudinal, triangle with swollen sides, and depressed on median line, shagreened on surface.

Elytra 4.10 times as long as pronotum, 1.10 times as wide as pronotum, widest just behind humeral prominences and 2.00 times as long as wide at the widest part which is wider than pronotum; each basal lobe feebly arcuate; humeri obtusely angulate; sides feebly sinuate from humeral prominences to middle, then almost obliquely convergent to rounded apices; lateral margins acutely serrate from middle, the serration becoming acuter toward apices; each apex with three or four acute serrations; disc provided with longitudinal striae on which fine punctures are sparsely aligned; surface smooth and lustrous.

Ventral surface sparsely and shallowly punctate, clothed with whitish short recumbent hairs. Prosternum produced ventrally; anterior margin arcuately emarginate; prosternal process convex on median line with sides subparallel-sided to apex which is tridentate. Mesosternum entirely penetrated by prosternal process. Metasternum produced ventrally, with entire median groove. Abdomen convex; last visible sternite rectangularly emarginate at the middle of apical margin, arcuately produced at bottom and provided with an acute spine at each side of the emargination.

Legs rather long and slender; tarsal segments long; 1st metatarsal segment 1.30 times as long as 2nd.

Male genital apparatus slender; parameres with lateral margins sinuate from base to apical 1/10 where they are feebly swollen, then sinuously pointed to apices; aedeagus pointed to apex.

F e m a l e. Body 11.1 mm long by 4.2 mm wide, with more bluish tinge than male. Abdomen convex as same as male; last visible sternite rectangularly emarginate at the middle of apical margin, arcuately emarginate at bottom and provided with an acute spine at each side of the emargination.

Type series. Holotype: ♂, Baolai, Kaohsiung City, Taiwan, 26.IV.2017, Uika ONG leg. Paratypes: 1 ♀ (Allotype), same locality as the holotype, 19.IV.2017, Uitsiann ONG leg.; 1 ♂, same locality as the holotype, 17.IV.2017, Uitsiann ONG leg.; 1 ♀, same locality as the holotype, 17.IV.2017, Uitsiann ONG leg.; 3 ♂♂, 2 ♀♀, same locality as the holotype, 26.IV.2017, Uitsiann ONG leg.; 1 ♀, same locality as the holotype, 29.III.2018, Uitsiann ONG leg.; 1 ♂, same locality as the holotype, 10.IV.2018, Uitsiann ONG leg.; 1 ♂, same locality as the holotype, 13.IV.2018, Uitsiann ONG leg.; 1 ♂, same locality as the holotype, 19.IV.2018, Uitsiann ONG leg.

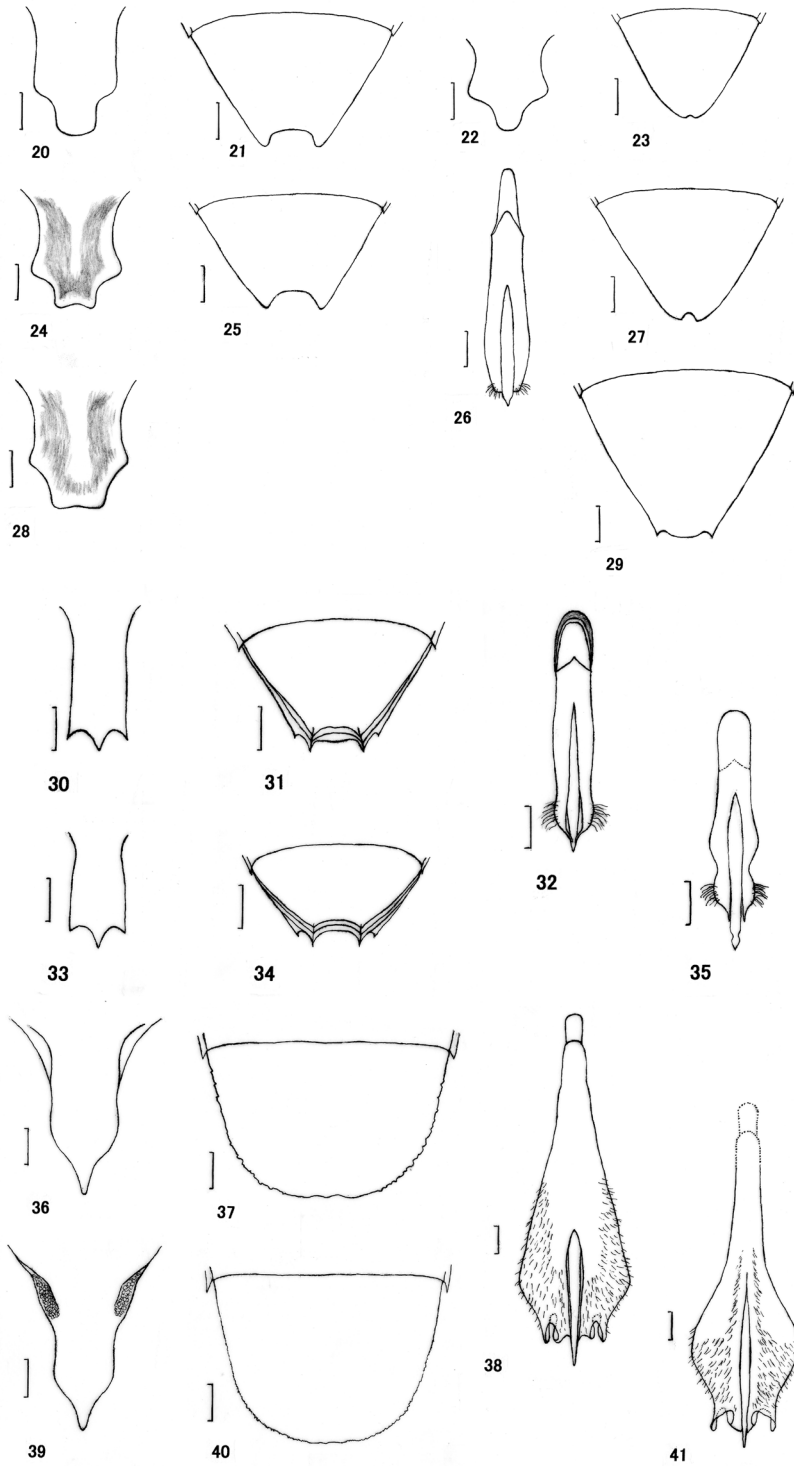
Bionomics. All specimens of the type series were taken by sweeping the leaves of *Lagerstroemia subcostata* trees.

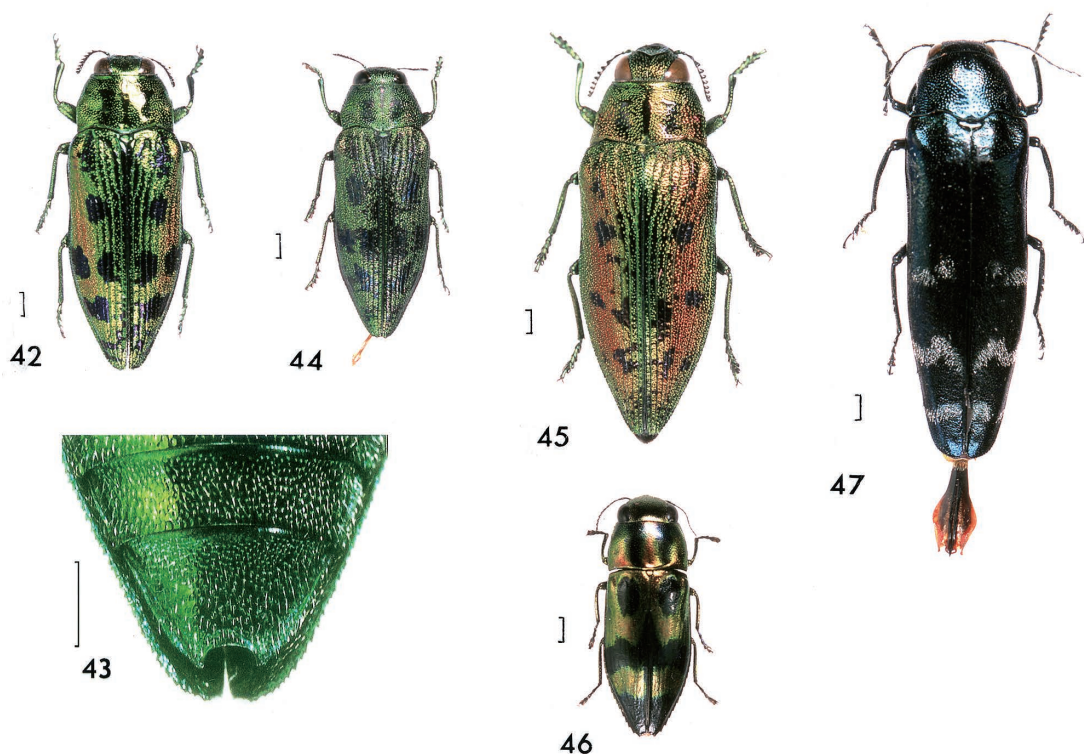
Distribution. Taiwan.

Etymology. The specific name is given for the first representative of the genus *Melobasis* from Taiwan.

Remarks. This new species has the following diagnostic features in comparison with females of *Melobasis (Melobasis) viridifrons* KERREMANS, 1896 (Figs. 33–35 & 46): 1) each elytron with blackish-blue posterior marking surrounding greenish spot at posterior 1/4, while in *M. (M.) viridifrons* each elytron with the greenish spot extended to lateral margin (Fig. 46); 2) prosternal process subpar-

Figs. 20–41. Prosternal processes, last visible abdominal sternites and male genital apparatus. — 20 & 21, *Lamprodila (Palmar) fromosana* sp. nov., ♀; 22 & 23, *L. (P.) pseudovirgata*, ♀; 24–26, *L. (P.) taiwania* sp. nov., ♂; 27, ditto, ♀; 28 & 29, *L. (P.) refulgens*, ♀; 30–32, *Melobasis (Melobasis) taiwanensis* sp. nov., ♂; 33–35, *M. (M.) viridifrons*, ♂; 36–38, *Coraebus nigropurpureus* sp. nov., ♂; 39–41, *C. torigaii*, ♂. — 20, 22, 24, 28, 30, 33, 36 & 39, Prosternal process; 21, 23, 25, 27, 29, 31, 34, 37 & 40, last visible abdominal sternite; 26, 32, 35, 38 & 41, male genital apparatus. Dotted lines denote estimated lines in Figs. 35 & 41. Hatching denotes shadowed parts. Scale bars: 0.50 mm.





Figs. 42–47. Habitus and last visible abdominal sternites. — 42 & 43, *Lamprodila (Palmar) taiwania* sp. nov., ♂; 44, *L. (P.) pseudovirgata*, ♀; 45, *L. (P.) refulgens*, ♀; 46, *Melobasis (Melobasis) viridifrons*, ♀; 47, *Coraebus torigaii*, ♂. — 42 & 44–47, Dorsal view; 43, last visible abdominal sternite. Scale bars: 0.50 mm.

allel-sided to apex, while in *M. (M.) viridifrons* feebly divergent to apex (Fig. 33); 3) parameres of male genital apparatus with lateral margins sinuate from base to apical 1/10 where they are swollen, while in *M. (M.) viridifrons* parameres strongly narrowed toward apical part just before the swollen parts (Fig. 35).

Data of comparative species examined. *Melobasis (Melobasis) viridifrons* KERREMANS, 1896: 1 ♂, Kutakane, Aceh, Province, Sumatra, Indonesia, III.1995; 1 ♀, Watu Ulo, Jawa Timur, Java Is., Indonesia, XII.2007.

Coraebus nigropurpureus sp. nov.

(Figs 11–13, 17–19 & 36–38)

M a l e. Body 17.9 mm long by 5.3 mm wide, large, elongate and deplanate above; head reddish purple, with blackish clypeus; antennae greenish with reddish purple at the apical part of each segment; pronotum greenish with aeneous tinge; elytra dark and reddish purple with shimmer, and ornamented with four undulate transverse markings of whitish semirecumbent setae ranged in each as follows: single spot at basal 1/4, strongly zigzag band at just before middle, wavy band at apical 1/3, posteriorly oblique band at just before apex; legs greenish with aeneous tinge.

Head transverse and declivous anteriorly; vertex with a median groove extending to the middle of frons; frons in upper half feebly convex and shallowly depressed along median line, and depressed



Figs. 48–49. Habitat. — 48, *Lamprodila (Palmar) formosana* sp. nov. on the trunk of *Picea morrisonicola* in nature; 49, emergence holes of probable *Lamprodila (Palmar) taiwania* sp. nov. on the trunk of *Taiwania cryptomerioides* in nature.

transversely in lower half; clypeus constricted by antennal cavities, obtusely emarginate at the middle of anterior margin, with clypeal suture bisinuously carinate; surface coarsely punctate with blackish setae; eyes oval, subparallel in frontal view.

Antennae slender, long and reaching just before pronotal base; each segment with brownish long semirecumbent setae on ventral side; 1st segment stout, geniculate and obconical; 2nd stout and obconical; 3rd subtriangular and 0.70 times as long as 2nd; 4th to 11th long and triangular; sensory pores concentrated in a distinct socket on each apico-inner surface of apical nine segments.

Pronotum transverse, widest just before base, about 1.60 times as wide as long; lateral margins sinuously divergent to the widest part where they are arcuate, then feebly arcuate to anterior angles; prehumeral carinae long and arcuate from posterior angles to middle; anterior angles obtusely angulate in lateral view; marginal carina entire, the crenulation becoming sparser toward anterior angles; anterior margin 0.70 times as wide as posterior margin with produced median lobe; posterior margin strongly bisinuate with median lobe broadly, arcuately produced and subtruncate before scutellum; posterior angles acute; disc convex, shallowly depressed along median line; surface uniformly punctate, clothed with brownish setae.

Scutellum transverse, subtriangular, extended and arcuately converging to apex; surface lustrous without puncture.

Elytra 4.40 times as long as pronotum, and as wide as pronotum, widest just behind humeral prominences and 2.60 times as long as wide at the widest part; each basal lobe strongly sinuate; humeri obtusely angulate; sides arcuately expanded to the widest part, then feebly sinuate to just behind

middle, and obliquely convergent to apices which are arcuate; lateral margins crenulate behind middle, and apical portions finely serrate; disc broadly, longitudinally planate, with basal depression at the inner side of each humeral prominence; surface transversely rugoso-punctate, and clothed with brownish short setae except for bearing whitish setae on the ornamented markings.

Ventral surface rugoso-punctate, clothed with whitish semirecumbent hairs. Prosternum convex along median line; anterior margin arcuately emarginate; prosternal process deplanate, arcuately depressed along each basal 1/2 of lateral margins, with sides arcuately convergent to just behind anterior coxal cavities, then sinuously convergent to pointed apex. Mesosternum entirely penetrated by prosternal process. Metasternum with entire median groove. Abdomen convex; last visible sternite feebly and arcuately emarginate at the middle of apical margin.

Legs long, sparsely clothed with brownish semirecumbent setae; mesotibiae with inner margins arcuately excavated in apical half; all tarsal segments moderately long, slender and nearly equal in length to each other.

Male genital apparatus swollen posteriorly; parameres with lateral margins obliquely extended to apical 1/4, where they are arcuately swollen, then sinuously convergent to apical parts, densely clothed with brownish long setae on apical 1/4; each apical part fold with thin film between inner and outer sides before apex, the inner side emarginate at middle; aedeagus slender, straightly converging to acute apex.

F e m a l e. Body 19.5 mm long by 5.9 mm wide; head and pronotum aeneous, elytra reddish purple with shimmer in coloration; antennae shorter than male. Abdomen convex such as in male, last visible sternite rounded at apex; legs with mesotibiae sinuate on each inner side.

Type series. Holotype: ♂, Baolai, Kaohsiung City, Taiwan, 6.VI.2017, Uitsiann ONG leg. Paratypes: 1 ♀ (allotype), Jiaxian, Kaohsiung City, 23.VII.2011, Uitsiann ONG leg.; 1 ♂, Douna (710 m in alt.), Kaohsiung City, 24.VII.2008, Uitsiann ONG leg.; 1 ♂, same locality as the holotype, 10.VI.2017, Jiafong CHEN leg.; 1 ♀, same locality as the holotype 10.VI.2017, Chiamu CHEN leg.

Bionomics. All specimens of the type series were taken by sweeping the leaves of *Quercus glauca* trees.

Distribution. Taiwan.

Etymology. The new specific name is derived from the characteristic coloration on elytra.

Remarks. This new species has the following diagnostic features in comparison with *Coraebus torigaii* AKIYAMA et OHMOMO, 1993 (Figs. 39–41 & 47): 1) coloration of elytra reddish purple, while in *C. torigaii* bluish (Fig. 47) (AKIYAMA & OHMOMO, 1993); 2) prosternal process with each side arcuately depressed along the inner side of lateral margin in basal 1/2, while in *C. torigaii* with each side sulcate along the inner side of lateral margin (Fig. 39); 3) each paramere with the inner side at the apex emarginate at the middle, while in *C. torigaii* with the inner side at apex not emarginate at the middle (Fig. 41).

Data of comparative species examined. *Coraebus torigaii* AKIYAMA et OHMOMO, 1993: 1 ♂, Songgang, Nantou County, Taiwan, 14.VII.1982 Chinchu LUO leg.

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要 約

服部宇春・王 惟正：アジアのタマムシの研究 (鞘翅目タマムシ科). 9) 台湾から発見されたクロホシタマムシ属, ヒメツヤタマムシ属, ナカボソタマムシ属の4新種. ————最近台湾から発見された新種 *Lamprodila (Palmar) formosana* sp. nov. (台湾名: 蓬萊黒星吉丁蟲, 和名: タイワクロホシタマムシ) は, 鞘翅で藍黒色の斑点が全体に散布されるが, 台湾から既に記載されている *Lamprodila (Palmar) pseudovirgata* は斑点の散布はなく, 単純に大きな斑紋を持つことから容易に区別できる. *Lamprodila (Palmar) taiwania* sp. nov. (台湾名: 大紅縁黒星吉丁蟲, 和名: タイワンスギクロホシタマムシ) は, 前胸背板側縁が基部で平行であるが, 中国大陸から既に知られている *Lamprodila (Palmar) refulgens* は基部から前方に向けて斜めに単純に収斂することから容易に区別できる. *Melobasis (Melobasis) taiwnensis* sp. nov. (台湾名: 台湾姫黴吉丁蟲, 和名: タイワンヒメツヤタマムシ) は, 鞘翅後半で藍黒色の斑紋が緑色の斑紋を囲むが, インドネシアから既に知られている *Melobasis (Melobasis) viridifrons* は緑色の斑紋が側縁まで達することから容易に区別できる. *Coraebus nigropurpureus* sp. nov. (台湾名: 大紫黴細長吉丁蟲, 和名: オオクロムラサキナカボソタマムシ) は, 鞘翅全体の色が紫黒色であるが, 台湾から既に知られている *Coraebus torigaii* は青藍色であることから容易に区別できる.

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Errata

Two preceding papers by Takaharu HATTORI contains some errors. In here, we are going to correct them.

HATTORI, T., 2007. Studies on the Buprestidae (Coleoptera) of Asia. 7) A new species of the genus *Akiyamaia* from Myanmar. *Elytra, Tokyo*, **35**: 325–334.

p. 333, l. 1 from the bottom	(DESCARPENTRIES, 1965)	(DESCARPENTRIES, 1956)
p. 334, l. 4	(FABRICIUS, 1774)	(FABRICIUS, 1775)
p. 334, l. 16	DESCAPEINTRIS, A., 1956.	DESCARPENTRIES, A., 1956.

HATTORI, T., 2014. New species of the genus *Toxoscelus* (Insecta, Coleoptera, Buprestidae) from Taiwan and the Ryukyu Islands. *Bulletin of the National Museum of Nature and Science, Tokyo*, Ser. A (Zoology), Supplement **8**: 1–35.

p. 4, Table 1, No. 3 row, the rightmost column	like sector,	like spatula,
p. 6, l. 10 in right column	Jitsuro UHA leg.	Saneaki TSUHA leg.

p. 6, l. 17 in right column	J. TUHA	S. TSUHA
p. 8, l. 21 in left column	7.9 mm, 3.0 mm	3.9 mm, 1.6 mm
p. 11, l. 37 in left column	Taichung Hsien,	Nantou Hsien,
p. 14, l. 19 in right column	6.5 mm	6.0 mm
p. 19, l. 2 in right column	3 females, same data as holotype; 8 males,	5 males,

This paper (HATTORI, 2014) is identically positioned as the 8th in the series of the papers with the following title authored by Takaharu HATTORI: Studies on the Buprestidae (Coleoptera) of Asia.

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