LEAF BEETLES OF THE SUBFAMILY EUMOLPINAE
(COLEOPTERA: CHRY SOMELIDAE)
FROM BALI, INDONESIA

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ABSTRACT
A total of 31 species of the subfamily Eumolpinae (Coleoptera: Chrysomelidae) are listed from Bali, Indonesia. Eight new species and 2 new subspecies for Callisina are described: Colaspoides purpurata, Leprotoides hitamtitik, Nodina bali ana, Platycorynus rufescens, Platycorynus hijau, Rhyparida micro dentata, Tricli ona oculata, Xanthonia insularis n. spp. from Bali. Two new subspecies for Callisina fasciata are also described: C. fasciata bali ana and C. fasciata javana n. ssp., from Bali and Java, respectively.

Key words: Eumolpinae, new species, Chrysomelidae, Bali, Java, Indonesia.
ABSTRAK


Kata kunci: Eumolpinae, spesies baru, Chrysomelidae, Bali, Jawa, Indonesia.

INTRODUCTION

As Mohamedsaid and Takizawa (2008) summarized shortly, the chrysomelid fauna of Bali, Indonesia is surprisingly un-explored. Roughly 17 species of Criocerinae, 70 species of Galerucinae, 2 species of Alticinae, 2 species of Hispinae, 9 species of Cassidinae and only 1 species of Eumolpinae, namely *Trichochrysea hirta* Fabricius (Medvedev, 2007) are recorded from this beautiful island. In this paper we will enumerate 31 species of the subfamily Eumolpinae from Bali Is., including 8 new species and one new subspecies. Also, we will describe one new subspecies of *Callisina fasciata* from Java on this occasion.

The holotypes will be deposited in the collection of Laboratory of Systematic Entomology, Hokkaido Univ., Sapporo, Japan (SEHU), except for that of *Callisina fasciata javana* in private collection of the first author. Paratypes are distributed to SEHU and private collections of authors (LM in Moscow, Russia and HT in Hasuda, Japan).
Descriptions of new taxa

Nodina baliiana sp. nov.


Description. Head and upperside aeneous to green aeneous, labrum and palpi fulvous, antennae black with fulvous basal segments, underside black, legs black with fulvous tarsi and apical half of tibiae.

Male. Body ovate, about 1.5 times as long as wide. Head finely and sparsely punctate, more densely on clypeus, which has anterior margin feebly arcuate, ocular grooves distinct. Antennae reaching humeral tubercle, segments 3 and 4 cylindrical and equal, following segments thickened, about 1.15 times as long as wide. Prothorax twice as wide as long, side margins rounded in anterior part, which is strongly deflexed, surface finely and remotely punctate. Elytra 1.2 times as long as wide, slightly widened towards middle, more strongly punctate than prothorax, with regular rows and broad flat interspaces, sides from middle to apex impunctate, with a trace of short ridge or convexity starting from humerus. Segment 1 of fore and mid tarsi widened. Aedeagus (Fig. 1) parallel-sided with rounded-triangular apex. Length of body 1.9-2.3 mm.

Female. Elytra with sharp oblique ridge from humerus to middle of side margin. Segment 1 of fore and mid tarsi not widened. Length of body 2.2-2.6 mm.
Diagnosis. This new species might be compared only with *N. fulvitarsis* Jacoby, 1896 from Sumatra, having practically same colour of legs, but females differs with distinct oblique ridge on sides of elytra, males have parallel-sided aedeagus with rounded triangular apex. Males of *N. fulvitarsis* have aedeagus rather strongly widened at apex, which is obliquely pointed, females without any ridge on elytra. This new species very possibly will be found also on Java. It is funny, that this genus is not recorded till now from Java.

Derivatio nominis. The specific name is derived from its type locality

*Callisina fasciata* Baly, 1860

This species was described from Malacca and Borneo. To the moment the first author had studied enough material from continent, Sumatra, Java and Bali and can divide them in 3 distinct subspecies. The status of specimen from Borneo is unclear, for it has sparsely punctate prothorax like the nominative subspecies, but very possibly may represent another subspecies.

*Callisina fasciata baliana* ssp. nov.

**Holotype:** Male, Indonesia, Bali Is, 6. II.1998, ex Detani coll. (SEHU). **Paratypes:** same locality and date, 1 female (HT); - Indonesia, C, Bali, Yeh Sumbul Negara, 5-8. XII. 1999, leg. H. Takizawa, 1 male (LM).

Description. Antennal segments 9 and 10 of male feebly elongate, 1.15-1.2 times as long as wide, of female as wide as long, black with 4 basal segments fulvous. Prothorax very densely punctate, with smooth central stripe, punctures mostly larger than interspaces; side margins not arcuate, parallel to each other. Aedeagus as in Fig. 4. Length of male 5.8-6.5 mm and female 5.8 mm.
Derivatio nominis. The subspecies name is derived from its type locality.

*Callisina fasciata javana* ssp. nov.

**Holotype:** Male, Java occidental, Pengalengan, 4,000 ft, leg. H. Fruhstorfer (LM).  **Paratypes:** Java, leg. H. Fruhstorfer, 1 male (LM); - “Hollander Indien”, Tjibodas, October 1906, 1 female (LM).

**Description.** Antennal segments 9 and 10 feebly transverse, antennae fulvous with 4 apical segments black. Prothorax with strong dense punctures comparable in size with interspaces, without smooth central stripe; side margin of prothorax notarcuate, parallel-sided. Aedeagus as in Fig. 3. Length of male 5.4-6.5 mm, of female 6.7 mm.

Derivatio nominis. The subspecies name is derived from its type locality.

A key to subspecies is given below.

1(4) Antennal segments 9 and 10 feebly transverse or at least as wide as long. Prothorax without smooth central stripe.

2(3) Prothorax with sparse punctures, especially in middle, interspaces much larger than diameter of punctures. Sides of prothorax more or less arcuate, not parallel to each other. Apex of aedeagus as in Fig. 2. Thailand, Malacca, Sumatra

3(2) Prothorax densely punctate, interspaces mostly as large as diameter of punctures. Sides of prothorax parallel to each other. Apex of aedeagus as in Fig. 3. Java.

4(1) Antennal segments 9 and 10 of male feebly elongate, about 1.2 times as long as wide, of female as wide as long. Prothorax very densely punctate, with smooth central stripe, interspaces
mostly smaller than diameter of punctures. Sides of prothorax parallel to each other. Aedeagus as in Fig. 4. Bali.

C. fasciata bali ana ssp.nov.

Genus Xanthonia Baly, 1863

Genus Icogramma Weise, 1922, represented with two species from the Philippines is a new synonym of Xanthonia Baly. Weise compared his genus with Male gia Lefevre, 1883 (Weise, 1922), but in his time Xanthonia was known only from Japan (type of genus) and America.

Xanthonia insularis sp. nov.


Description. Entirely fulvous with more reddish head and prothorax, sometimes prothorax darkened or elytra blackish alongside margin and suture; underside might be black. Pubescence white.

Body robust, upperside distinctly pubescent, especially on elytra. Head shining, finely punctate, punctures moderately dense, frons broad, eyes strongly convex, anterior margin of clypeus arcuately emarginated. antennae reaching anterior quarter of elytra, proportions of segments as 6-4-5-5-5-5-5-5-5-5-5-7, preapical segments slightly widened, about 1.5 times as long as wide. Prothorax 1.3-1.4 times as wide as long, broadest just behind middle, with rounded side margins, surface dull, finely and densely punctate, with adpressed hairs directed mostly inward. Scutellum elongate triangular. Elytra 1.3 times as long as wide, subparallel with broadly rounded apex, surface with very dense rows of punctures (about 15), which are strongly confused in scutellar area, each puncture bearing moderately long hair directed
backwards, interspaces narrow, flat, shining and impunctate. Femora not toothed. Aedeagus parallel-sided with elongate-triangular acute apex (Fig. 5). Length of body 1.9-2.3 mm.

**Diagnosis.** This new species resembles *X. minuta* Pic, 1929 from China and Indochina and especially *X. lineigera* (Weise, 1922) from the Philippines. *X. lineigera* has practically the same colour, but differs with its convex or partly costate interspaces of elytral rows and cuneiform aedeagus (Fig. 6). *X. minuta* differs with dominantly black colour of the body, more broad elytra, having convex interspaces of rows, and truncate apex of aedeagus (Fig. 7). It is possible that *X. insularis* will be found on all neighbouring islands. The coloration of this species might be much variable.

**Derivatio nominis.** The specific name is derived from its type locality.

*Leprotoides hitamtitik* sp. nov.


**Description.** Entirely fulvous (55%), or elytra with a few piceous or black spots, sometimes only with one spot on humerus or just behind base; sometimes these spots enlarged and elytra being black with fulvous spots; prothorax black-sided and with two small spots in middle (15%), or almost entirely black, rarely upperside entirely black. Specimens of darkened prothorax with black scutellum. Sometimes breast and abdomen except for apex
also black. Upperside with white pubescence.

Body elongate ovate, distinctly pubescent on upperside, especially on elytra. Head broad, clypeus trapeziform with anterior margin feebly emarginated, strongly punctate, well separated posteriorly; vertex evenly convex, more finely punctate, with microsculptured interspaces. Eyes large, prominent, entire on inner margin. Antennae reaching behind middle of elytra, slender, proportions of segments as 10-5-11-12-12-12-12-12-11-10, preapical segments about 4 times as long as wide. Prothorax 1.15-1.2 times as wide as long, subquadrate with feebly rounded side margins, broadest near middle, finely and rather densely punctate, with very feeble and shallow, but distinct transverse impression in anterior quarter. Scutellum triangular with rounded apex, finely punctate. Elytra 1.6 times as long as wide with 15 regular or partly confused rows of rather large punctures, interspaces flat and narrow, sides bent downwards and not seen from above; with a short ridge going from humerus to middle of elytra, more developed in female. Femora not toothed, all tibiae not emarginated before apex, claws bifid, segment 1 of hind tarsus as long as following two joints combined together. Aedeagus parallel-sided with acute tooth on apex (Fig. 8), thin and straight in lateral view. Spermatheca absent. Length of body 2.9-3.6 mm.

**Diagnosis.** This species differs very well from *L. flavipes* Jacoby, 1896 described from Sumatra, with distinctly pubescent upperside, finely punctured and almost square prothorax, not costate interspaces of rows on elytra and large size. *L. flavipes* has its prothorax twice as wide as long and smaller body size of 2.2-2.7 mm.

**Derivatio nominis.** The specific name is derived from the Malay words, hitam (black) and titik (spot).

Both the species are more or less alike members of *Aoria* Baly, 1863 and *Xanthonia* Baly, 1863, but can be differentiated immediately by rather elongate body, with hind tibiae not emarginated before apex. The prothorax with a transverse impression might be included in the generic definition.
Tricliona oculata sp. nov.

**Holotype:** Male, Indonesia, Bali, I. 1996, leg. H. Hachinohe (SEHU). **Paratype:** same locality and date, 1 female (LM).

**Description.** Fulvous, head and prothorax more reddish, antennae pale flavous.

Body elongate ovate. Clypeus finely punctate, divided from frons with a group of dense and strong punctures, its anterior margin scarcely sinuate, frons distinctly punctate, grooved in middle, very narrow, about half of transverse diameter of large and strongly convex eyes, vertex finely and sparsely punctate. Antennae reaching middle of elytra, proportions of segments as 12-7-9-9-12-12-12-12-12-12-12, segments 5-11 moderately widened, about twice as long as wide. Prothorax 1.7 times as wide as long, broadest just behind middle, with sides evenly rounded, surface finely and sparsely punctate. Scutellum subquadrate with rounded apex, with a few microscopical punctures. Elytra 1.4-1.5 times as long as wide, with very feeble basal convexity and postbasal depression, with regular sulcate rows of punctures, more feeble on apical slope; interspaces moderately wide, smooth, convex, especially on sides, interspaces between 8th and 9th rows with a few large punctures. Anterior femora with large tooth, hind femora with smaller, but very distinct tooth. Aedeagus (Fig. 9) very thin in lateral view, broad, apex rounded with acute tip, underside concave. Length of male 5.1 mm, of female 5.6 mm.

**Diagnosis.** Near *T. sulcatipennis* Jacoby, 1896 from Sumatra, but this new species differs with the distinctly punctate head and prothorax, narrow frons, less transverse prothorax, toothed hind femora and larger size. This species were collected on mangrove leaves.

**Derivatio nominis.** The specific name is related to its large eyes.
Rhyparida microdentata sp. nov.

**Holotype:** Female, Indonesia, Bali Is., I. 1996, leg. H. Hachinohe (SEHU).

**Description.** Fulvous, vertex darkened, antennae black with 4 basal segments fulvous, prothorax with two small piceous spots in middle, each elytron with 3 small piceous spots: one on humerus, another on side margin behind humerus and the third behind middle on the fifth interspace.

Body elongate, almost parallel-sided. Head strongly and densely punctate, clypeus not divided from frons, with straight anterior margin, frons rather narrow, 0.75 times as wide as transverse diameter of eye. Antennae reaching middle of elytra, proportions of segments as 12-6-6-9-10-10-10-10-10-12, segments 5-11 slightly widened, about 3 times as long as wide. Prothorax 1.4 times as wide as long, broadest in middle, with sides strongly arcuate, surface strongly and densely punctate, with interspaces comparable with diameter of punctures. Scutellum triangular with acute apex and a few punctures at base. Elytra 1.6 times as long as wide, with feeble basal convexity and postbasal impression, rows of punctures regular, more or less sulcate, interspaces flat or feebly convex, impunctate except for 7th interspace, having a group of strong punctures. Anterior and posterior femora with small acute tooth. Length of body 4.3 mm.

**Diagnosis.** Near *Rh. nigrosignata* Jacoby, 1884 from Sumatra, but it differs with different colour of the upperside, densely punctate head and prothorax, and small tooth of fore and hind femora. *Rh. nigrosignata* has large tooth on fore femora and hind ones not armed.

**Derivatio nominis.** The specific name is related to its small tooth on fore and hind femora.
Colaspoides purpurata sp. nov.


Description. Head and upperside red purple, labrum piceous, palpi fulvous, antennae black with fulvous basal segments, underside piceous with very feeble metallic tint, legs black to reddish piceous.

Body elongate ovate. Head densely punctate on clypeus and especially frons, sparsely on vertex, which also has longitudinal impression in middle. Antennae reaching middle of elytra, thin, segments 3-11 subequal, preapical segments almost 4 times as long as wide. Prothorax twice as wide as long, broadest in middle, sides strongly rounded, surface shining, convex, finely and sparsely punctate in middle, much more densely on sides. Elytra 1.2 times as long as wide, with strong and dense, but not rugose punctures, arranged in rows on apical slope. Furrow of pygidium without ridge at bottom, narrowed to apex. Propleurae without microsculpture and punctures. Apical abdominal sternite not serrate on sides, with arcuate hind margin. All femora not toothed. Fore and mid tarsi with feebly widened and flattened 1st segment. Aedeagus (Fig. 10) with entirely sclerotized underside. Length of body 4.5-4.6 mm.

Diagnosis. This new species belongs to group D (Medvedev, 2003) with its metallic upperside, not metallic underside, smooth propleurae and not toothed femora; males without brushes and armament on abdomen and femora. It is near C. mentaweica L. Medvedev, 2003, but differs in the colour of upperside, finely punctate prothorax, not serrate 5th abdominal sternite, feebly widened first segment of fore and mid tarsi of males and different form of aedeagus.

Derivatio nominis. The specific name is related to its purple coloration.
Platycorynus hijau sp. nov.


**Description.** Metallic green with prothorax aeneous green, labrum dark fulvous, palpi fulvous.

Body robust. Head strongly punctate, clypeus sharply divided from frons, densely pubescent and very densely punctate, frons and vertex practically bare, impressed in middle, supraocular grooves broad. Antennae reaching anterior quarter of elytra, proportions of segments as 6-3-6-7-9-10-10-10-10-10-14, five apical segments widened, segments 9 and 10 about 1.4 times as long as wide. Prothorax 1.35 times as wide as long, broadest in middle, with sides feebly arcuate, surface densely punctate, interspaces comparable in size with punctures. Scutellum as wide as long, with rounded apex, shining, with deep large punctures at apex. Elytra 1.3 times as long as wide, parallel-sided with broadly rounded apices, surface with very feeble basal convexity, strongly punctate, punctures arranged in irregular, partly geminate rows, interspaces in inner part feebly convex, in outer part strongly convex or ridged. Furrow of pygidium narrow, parallel-sided, not ridged on bottom. Femora and tibiae not modified, claws with obtuse tooth. Aedeagus (Fig. 11) with acute apex, partly membranaceous on sides, concave on underside. Length of body 7.4 mm.

**Diagnosis.** Near *P. fraternus* (Baly, 1964) from Sumatra and Java, but this new species differs in having densely pubescent clypeus and densely punctate prothorax.

**Derivation nominis.** The specific name is derived from a Malay word ‘hijau’ meaning green.

Platycorynus rufescens sp. nov.

**Holotype:** Female, Indonesia, C. Bali, 5-8. XII. 1999, leg. H. Takizawa (SEHU). **Paratypes:** same locality and date, 3 females (HT, LM).
Description. Dark red, 5 apical antennal segments metallic blue, elytra with base, lateral margin and sutural area dark blue, but this colour merged with dominant red colour. Palpi fulvous. Body robust, elongate ovate. Head densely punctate, a little sparser on vertex, clypeus divided from frons with arcuate groove, less deep in middle, supraocular grooves broad. Antennae reaching base of elytra, proportions of segments as 11-6-6-7-9-12-10-10-10-11-11, five apical segments strongly widened, segments 9 and 10 as wide as long. Prothorax 1.3 times as wide as long, broadest near base and narrowed anteriorly, with side margins feebly arcuate, surface finely and sparsely punctate. Scutellum as long as wide, with broadly rounded apex. Elytra 1.25 times as long as wide, broadest behind middle, surface with scarcely visible traces of postbasal impression, not densely punctate, punctures larger than those on prothorax, sides behind middle with 2-3 feeble ridges. Furrow of pygidium deep, narrowed to apex, not ridged on bottom. Femora and tibiae not modified, claws feebly toothed at base. Spermatheca as in Fig. 12. Length of body 6.2-7.4 mm.

Diagnosis. Practically all species of this large genus have metallic coloured body. The species in question has dominantly red body, but in all other characters is a typical Platycorynus Chevrolat, 1837. Platycorynus fulvicornis (Jacoby, 1889) with fulvous body except for metallic blue elytra was erroneously placed in this genus and was removed to Chalcolema Jacoby, 1890 (Medvedev, 2000). Another species, P. rufipennis Pic, 1934 from Burma has metallic green head and prothorax, red elytra with black suture and elongate body and very possibly also belongs to Chalcolema.

Derivatio nominis. The specific name is related to its characteristic coloration.

A list of the subfamily Eumolpinae from Bali, Indonesia

Abirus flavopilosus Jacoby, 1884

**Distribution.** Bali Is. (new record), Sumatra.

*Aoria nigripes* (Baly, 1860)


**Distribution.** Bali Is. (new record), India, Andamans, Burma, Thailand, Cambodia, Laos, Vietnam, S. China, Hainan, Taiwan, Sumatra.

*Aulexis pallida* (Lefevre, 1887)


**Remark.** A lot of specimens were collected feeding on leaves of Lauraceae tree.

**Distribution.** Bali Is. (new record), Sumatra.

*Basilepta simplex* (Jacoby, 1884) ?


**Distribution.** Bali Is. (new record), Java.

*Basilepta flavescens* (Motschulak, 1866)


**Remark.** Jacoby’s species is fully identical with the type of *B. flavescens* Motschulsky.

**Distribution.** Bali Is. (new record), Thailand, Laos, Vietnam, Java.

*Basilepta nigromarginata* (Jacoby, 1896) ?


**Distribution.** Bali Is. (new record), Sumatra.

*Basilepta* sp.


*Callisina fasciata baliana* ssp.n.

*Cleorina aeneomicans* (Baly, 1867)

**Distribution.** Bali Is. (new record), Malaya, Sumatra, Java, Burma, Andamans, Thailand, Cambodia, Laos, Vietnam, Hainan, S. China, Taiwan.

**Remark.** Adults are usually found feeding on leaves of wild and cultivated zingers.

*Colaspoides purpurata* sp. nov.

*Colasposoma viridicoeruleum* (Motschulsky, 1860)


**Distribution.** Bali Is. (new record), Malaya, Sumatra, Java, Borneo, Timor, India, Burma, Andamans, Thailand, Laos, Cambodia, Vietnam, Hainan, S. China, Ryukyus, Taiwan.

**Remark.** Adults are usually found feeding on wild and cultivated *Ipomoea* spp.

*Leprotoides hitamtitik* sp. nov.

*Nodina baliana* sp. nov.

*Nodina fulvitarsis* Jcoby, 1896

Distribution. Bali Is. (new records), Sumatra.

*Pachnephorus porosus* Baly, 1878


**Distribution.** Bali Is. (new record), India, Burma, Thailand, Laos, Vietnam, China, Taiwan, Korea, E. Siberia.

*Pagria sumatrensis* Lefevre, 1887


**Distribution.** Bali Is. (new record), Sumatra.

*Pagria flavopustulata* Baly, 1874


**Distribution.** Bali Is. (new record), Taiwan, Japan.

*Phytorus dilatatus* Jacoby, 1884


**Distribution.** Bali Is. (new record), Singapore, Java.

*Platycorynus approximans* Baly, 1864

Distribution. Bali Is. (new record), India, Thailand, Malacca, Sumatra, Java.

*Platycorynus rufescens* sp. nov.

*Platycorynus hijau* sp. nov.

*Platycorynus lefevrei* (Jacoby, 1895)


*Rhyparida microdentata* sp. nov.

*Rhyparida* sp.


*Scelodonta dillwyni* (Stephens, 1831)


*Trichochrysea hirta* (Fabricius, 1801)

Distribution. Malacca, Sumatra, Bali, Lombok, Java, Nias, Sulawesi.
Tricliona oculata sp.n.

Xanthonia insularis sp. n.

Besides, 4 species are still in work at Dr. A. Moseyko (Zoological Institute, Sankt Peterburg). They are:

**Apolepis sp. 1**

**Apolepis sp. 2**
**Material.** 1 ex., Yeh Sumbul Negan, C. Bali Indonesia, 5-8. XII. 1999, H. Takizawa leg.

**Apolepis sp. 3**
**Material.** 1 ex., Yeh Sumbul Negan, C. Bali Indonesia, 5-8. XII. 1999, H. Takizawa leg.

**Lepidocolaspis sp.**

**REFERENCES**


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Figures 1 – 11. Aedeagus (1 – dorsal view, 2 – 11 – lateral view):
1 – Nodinabaliana n. sp., 2 – Callisinafasciatafasciata, 3 – C. fasciatajavana n. ssp., 4 – C. fasciatabaliana n. sp., 5 – Xanthoniainsularis n. sp., 6 – X. lineigera, 7 – X. minuta, 8 – Leprotooideshitamtitik n. sp., 9 – Triclionaoculata n. sp., 10 – Colaspoidespurpurata n. sp., 11 – Platycorynushijau n. sp..

Figure 12. – P. rufescens n. sp., spermatheca