

## New and little-known flea beetles (Chrysomelidae: Alticinae) from Southeastern Asia

### Новые и малоизвестные виды земляных блошек (Chrysomelidae: Alticinae) из Юго-Восточной Азии

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**Ключевые слова:** Coleoptera, Chrysomelidae, Alticinae, *Acrocrypta*, Blepharidini, *Asiophrida*, Малайзия, Борнео.

**Abstract.** Two new species of *Acrocrypta* Baly, 1862 are described from Borneo. Additional data concerning tribe Blepharidini Leng, 1920 of Malaysia, including a list of species and a key to species of the genus *Asiophrida* Medvedev, 1999 are given.

**Резюме.** Описываются 2 новых вида *Acrocrypta* Baly, 1862 с Борнео. Уточняются данные по составу трибы Blepharidini Leng, 1920 Малайзии, приводится полный список видов и определительная таблица видов рода *Asiophrida* Medvedev, 1999.

Below we propose descriptions of two new species of the genus *Acrocrypta* Baly, 1862 and notes about *Asiophrida flavicollis* L. Medvedev, 1999 from Borneo. Besides, additional data about Blepharidini of Malaysia are given because some species are absent in the catalogue of Malaysian Chrysomelidae [Mohamedsaid, 2004].

The material was collected by the first author during his expeditions in Malaysia.

Next abbreviations are used for depository places of types:

NHM – collection of Natural History Museum (London, United Kingdom);

LM – L. Medvedev's collection (Moscow, Russia);

PR – P. Romantsov's collection (Saint Petersburg, Russia).

#### *Acrocrypta trimaculata* sp. n. (Color plate 8: 1, 6, 7)

**Material.** Holotype, ♂: "MALAYSIA, Pahang, Cameron Highlands, Tanah Rata dist. h ~ 1500 m, N 04°28'34", E 101°23'19", in the daytime, 24.III.2013 P. Romantsov leg." (PR).

**Description.** Fulvous, antennae (except 2 basal and apical segments) darkened, meso- and metasternum, tibiae and 1<sup>st</sup> and 2<sup>nd</sup> (partly) abdomen segments black. Prothorax with wide longitudinal black stripe in the middle, elytra with irregular form large black transverse spot on each elytron. Eyes light with two round black spots. General view – Color plate 8: 1.

Body widely oval, convex, 1.5 times as long as wide. Vertex finely and sparsely punctuate, interantennal space almost flat, frontal tubercles triangular, flat and delimited posteriorly with straight impressed line. Antennae reach anterior third of elytra, proportions of segments are as 18 : 8 : 10 : 14 : 13 : 11 : 12 : 11 : 11 : 10 : 17 (length of segments from 1 to 0.25 mm), 3<sup>rd</sup> and following antennal segments are flattened and expanded. Maxillary palpi with penultimate segment swollen. Prothorax 2.2 times as wide as long, broadest at base, side margins almost straight, fore angles obtuse, thickened, hind broadly triangular, front margin widely concave, posterior margin strongly convex, surface with very small and shallow punctation, all margins bordered. Anterior coxal cavities closed posteriorly. Intercostal prosternal process relatively narrow in middle, concave, with bordered margins, abruptly expanding beyond procoxae. Scutellum elongated, triangular, with rounded apex, impunctate. Elytra 1.2 times as long as wide, surface with small and shallow punctation, apical part impunctate. Segment 1 of all tarsi not widened. Abdomen with 5 distinctly visible sternites. Basal sternite as long as 3 following sternites together. Apical sternite as long as a half length of 3 preceding sternites combined. Apical sternite entire, pygidium rounded at apex. Hind tibiae slightly curved, with spur at apex on each, fore and middle tibiae unspined. Claws appendiculate. Aedeagus (Color plate 8: 6, 7) parallel-sided with elongate triangular apex, strongly curved in the apical quarter (in lateral view), length of aedeagus 1.7 mm. Length of body 6.6 mm.

**Differential diagnosis.** *Acrocrypta trimaculata* sp. n. can be distinguished from all *Acrocrypta* species having dark pattern on the upper side of the body by its color with combination of large black spots on the elytra and prothorax (one on pronotum and one on each elytron) which are not known in other representatives of the genus. In the key of the genus [Döberl, 2001] this species must be positioned after 34(1). *Acrocrypta nigrofasciata* Jacoby, 1884 from Sumatra having a large size and flattened antennal segments is related close to the new species but differs by entirely fulvous prothorax and color pattern of elytra (Color plate 6: 4).

**Etymology.** The name of the new species refers to its coloration.

*Acrocrypta semilimbata* sp. n.  
(Color plate 8: 2, 3, 8, 9, 11)

**Material.** Holotype, ♂: "MALAYSIA, N Borneo, Sabah, ~16 km NW Tambunan, Crocker Range, h ~ 1660 m, at light, N 05°48'47", E 116°20'16" 24.VI.2014 A. Klimenko leg." (PR). Paratype: 1♀, "Borneo, Sabah, Km 53 road KT-Tambunan, E slope GN Emas, 700 m, 1-5 Apr. 2000, Bolm lgt." (LM).

**Description.** Fulvous, 4–8 antennal segments, meso- and metasternum, femora (except upper side near the apex), tibiae, tarsi and 1<sup>st</sup> abdomen segment black. Elytra with basal margin (wider on humeral area), lateral margin (except the apex) and suture black. Eyes light with a few black spots. General view – Color plate 8: 2.

Body widely oval, convex, 1.4 times as long as wide. Head impunctate, shining vertex convex, frontal tubercles triangular, flat and delimited posteriorly with straight impressed line. Antennae reach anterior third of elytra, proportions of segments are as 20 : 8 : 14 : 16 : 15 : 15 : 15 : 13 : 13 : 12 : 16 (length of segments from 1 to 0.25 mm), all segments cylindrical, neither flattened nor expanded. Maxillary palpi with penultimate segment swollen. Prothorax 2.3 times as wide as long, broadest at base, side margins almost straight, fore angles obtuse, thickened, hind broadly triangular, front margin widely concave, posterior margin strongly convex, surface with very small and shallow punctation, all margins bordered. Anterior coxal cavities closed posteriorly. Intercoxal prosternal process narrow with parallel sides, channeled in middle, its margins bordered, abruptly expanding beyond procoxae. Scutellum elongated, triangular, with rounded apex, impunctate. Elytra 1.17 times as long as wide, very seldom and shallow punctation. Elytral epipleuron wide, slightly concave. Abdomen with 5 distinctly visible sternites, basal sternite as long as 3 following sternites together, apical sternite entire, pygidium rounded at apex. Segment 1 of all tarsi not widened. Hind tibiae straight, with spur at apex, fore and middle tibiae unspined. Claws appendiculate. Aedeagus (Color plate 8: 8, 9) parallel-sided without any impressions on ventral side, slightly curved in lateral view with apex strongly bent ventrally. Apex rounded triangular with small tooth, length of aedeagus 2.25 mm. Length of body 7.1 mm.

Female. General view – Color plate 6: 3. Elytra a little wide, 1.12 times as long as wide, length of body 8.6 mm, spermatheca – Color plate 6: 11, length of spermatheca 0.45 mm.

**Differential diagnosis.** *Acrocrypta semilimbata* sp. n. can be distinguished from all *Acrocrypta* species having dark pattern on elytra and entirely fulvous prothorax by color of elytra, having black margins except extreme apex, but lacking transverse bands and by not expanded antennal segments. In the key of the genus [Döberl, 2001] this species must be positioned after thesis 53(52).

**Etymology.** The name of the new species refers to the black edging of each elytron open at the apex.

**Note.** We have one more specimen (1♀, "B.N. Borneo, Mt. Kinabalu, Lumu Lumu, 8.4.1929," NHM) which is very similar to this new species. But this specimen is more dull and has more darkened legs and antennae. Moreover its black lateral margin of elytra is slightly narrower, spermathecae of these specimens are not completely identical. These facts do not allow us to include this specimen in the type series.

*Asiophrida flavicollis* L. Medvedev, 1999  
(Color plate 8: 5, 10)

**Material.** 1♂: "MALAYSIA, N Borneo, Sabah, ~16 km NW Tambunan, Crocker Range, h ~ 1660 m, at light, N 05°48'47", E 116°20'16", 16.IV.2013 P. Romantsov leg." (PR).

*Asiophrida flavicollis* refers to the tribe Blepharidini, which was reviewed by Medvedev in 1999. Only a single male of this species was described [Medvedev, 1999]. One female of this rare species was found in the last expedition on Borneo. We give the images of general view and spermatheca (Color plate 8: 5, 10). Length of body 5.9 mm, length of spermatheca 0.7 mm. This species (as well as *Ophrida tarsalis* L. Medvedev, 1999) was not included in the catalogue of the Malaysian Chrysomelidae [Mohamedsaid, 2004], although *Ophrida borneensis* Medvedev, 1999 described in the same paper, is present in the catalogue. Considering this circumstance, and taking into account that after the revision of the Blepharidini group one more species was described from Malaysia [Mohamedsaid, Barroga, 2000], we consider it is necessary to give the list of all Malaysian Blepharidini and the key to Malaysian representatives of the genus *Asiophrida* Medvedev, 1999.

**Genus *Podontia* Dalman, 1824**  
*Podontia affinis* (Gröndal, 1808)

*Galleruca affinis* Gröndal, 1808: 289.

*Podontia affinis*: Dalman, 1824: 25; Mohamedsaid, 1989a: 279; 2000: 357; 2004: 134.

**Distribution.** Peninsular Malaysia, Java, India, Myanmar, Thailand, Cambodia, Laos, Vietnam, China.

*Podontia flava* Baly, 1865

*Podontia flava* Baly, 1865: 404; Mohamedsaid, 1989a: 278; 2000: 357; 2004: 134.

**Distribution.** Borneo (Sarawak, Sabah), Brunei.

*Podontia jalur* Mohamedsaid, 1989

*Podontia jalur* Mohamedsaid, 1989a: 281; 2000: 357; 2004: 134.

**Distribution.** Peninsular Malaysia.

*Podontia lutea* (Olivier, 1790)

*Chrysomela lutea* Olivier, 1790: 692.

*Podontia lutea*: Gemminger, Harold, 1876: 3522; Reid, 1997: 36; Mohamedsaid, 2004: 134.

**Distribution:** Burma, Laos, Vietnam, China, Korea, Taiwan, Thailand, Borneo.

*Podontia quatuordecimpunctata* (Linnaeus, 1767)

*Chrysomela quatuordecimpunctata* Linnaeus, 1767: 599.

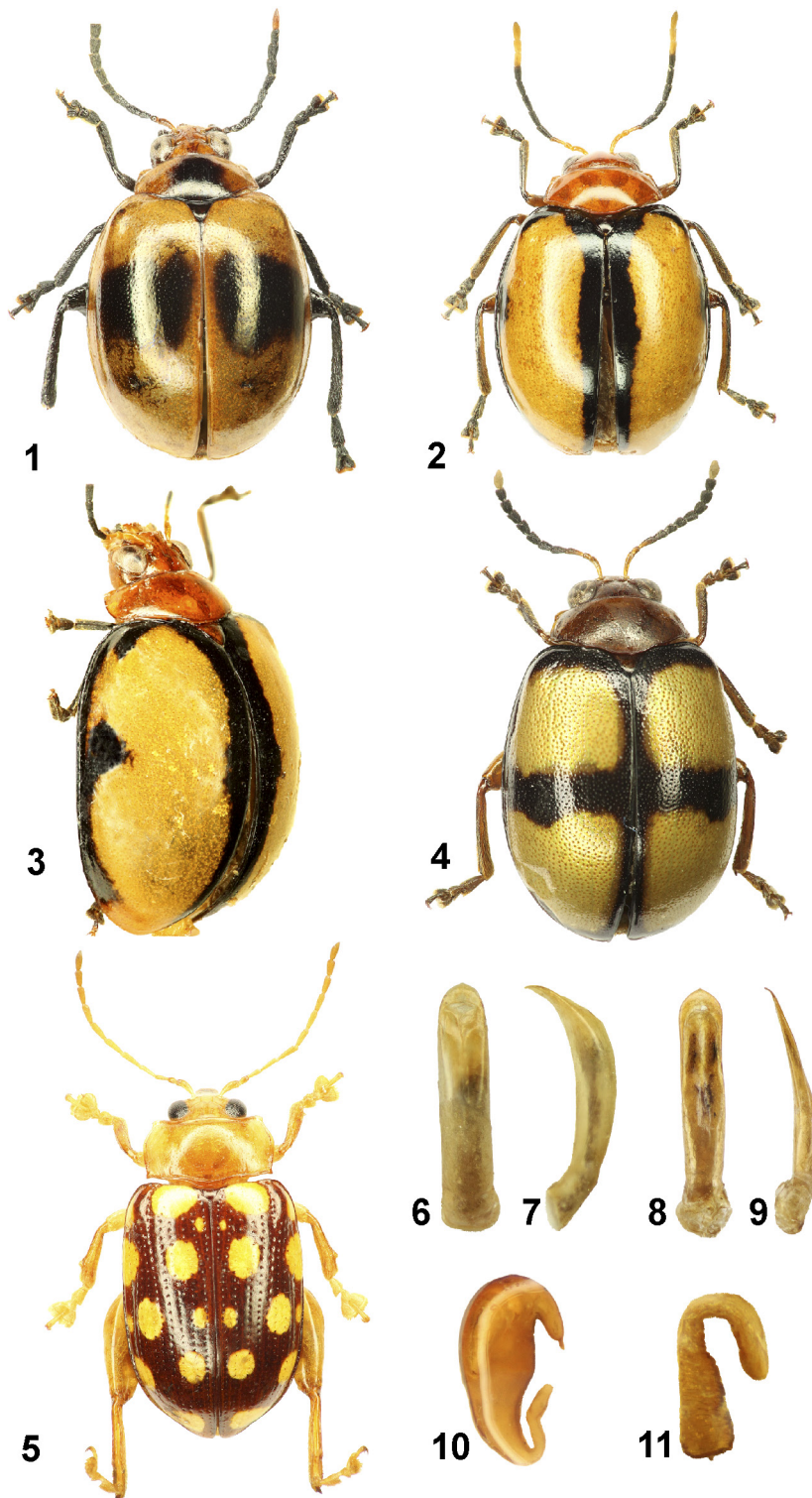
*Podontia quatuordecimpunctata*: Dalman, 1824: 24; Corbett, Yusope, 1921: 192–200; Maulik, 1926: 227; Mohamedsaid, 1989a: 279; 2000: 357; 2004: 134.

**Distribution.** Peninsular Malaysia, India, Nepal, Myanmar, Thailand, Laos, Cambodia.

**Genus *Ophrida* Chapuis, 1875**  
*Ophrida borneensis* Medvedev, 1999

*Ophrida borneensis* Medvedev, 1999: 178; Mohamedsaid, 2004: 134.

**Distribution.** Sabah.



Figs 1–11. Species of genera *Acrocrypta* and *Asiophrida*, general view and details of structure.

1 – *Acrocrypta trimaculata* sp. n., male, holotype; 2 – *Acrocrypta semilimbata* sp. n., male, holotype; 3 – *Acrocrypta semilimbata* sp. n., female, paratype; 4 – *Acrocrypta nigrofasciata*; 5 – *Asiophrida flavicollis*; 6–7 – *Acrocrypta trimaculata* sp. n., aedeagus: 6 – dorsal view, 7 – lateral view; 8–9 – *Acrocrypta semilimbata* sp. n., aedeagus: 8 – dorsal view, 9 – lateral view; 10 – *Asiophrida flavicollis*, spermatheca; 11 – *Acrocrypta trimaculata* sp. n., spermatheca.

Рис. 1–11. Виды родов *Acrocrypta* и *Asiophrida*, общий вид и детали строения.

1 – *Acrocrypta trimaculata* sp. n., самец, голотип; 2 – *Acrocrypta semilimbata* sp. n., самец, голотип; 3 – *Acrocrypta semilimbata* sp. n., самка, паратип; 4 – *Acrocrypta nigrofasciata*; 5 – *Asiophrida flavicollis*; 6–7 – *Acrocrypta trimaculata* sp. n., эдеагус: 6 – вид сверху, 7 – вид сбоку; 8–9 – *Acrocrypta semilimbata* sp. n., эдеагус: 8 – вид сверху, 9 – вид сбоку; 10 – *Asiophrida flavicollis*, сперматека; 11 – *Acrocrypta trimaculata* sp. n., сперматека.

*Ophrida guttata* Chapuis, 1875

*Ophrida guttata* Chapuis, 1875: 31; Mohamedsaid, 1989b: 29; 2000: 357; 2004: 134.

**Distribution.** Peninsular Malaysia, Sumatra.

*Ophrida tarsalis* Medvedev, 1999

*Ophrida tarsalis* Medvedev, 1999: 179.

**Distribution.** Borneo.

**Genus *Asiophrida* Medvedev, 1999**

*Asiophrida flavicollis* Medvedev, 1999

*Asiophrida flavicollis* Medvedev, 1999: 182.

**Distribution.** Borneo.

*Asiophrida kuning* (Mohamedsaid et Barroga, 2000)

*Ophrida kuning* Mohamedsaid, Barroga, 2000: 94; Mohamedsaid, 2000; 357.

*Asiophrida kuning*: Mohamedsaid, 2004: 135.

**Distribution.** Peninsular Malaysia.

*Asiophrida nigripennis* (Baly, 1881)

*Blepharida nigripennis* Baly, 1881: 54.

*Ophrida nigripennis*: Mohamedsaid, 1989: 29b; 2000: 357.

*Asiophrida nigripennis*: Medvedev, 1999: 182; Mohamedsaid, 2004: 135.

**Distribution.** Peninsular Malaysia, Sumatra.

**Key to species of the genus *Asiophrida* Medvedev, 1999**

- 1(4). Elytra uncolored, black or fulvous.
- 2(3). Elytra black. Prothorax without distinct basal impressions. Length 8.5–11 mm. Malacca, Sumatra .....  
..... *A. nigripennis*
- 3(4). Elytra and body fulvous. Antennae fulvous with segments 9–11 blackish. Prothorax with basal impressions. Length 10.4 mm. Malacca ..... *A. kuning*
- 4(1). Elytra dark brown with 8 large and 3 small fulvous spots arranged in 5 transverse rows (2, 2, 3, 2, 1). Prothorax pale flavous, with distinct basal impressions, delimited on sides with longitudinal grooves. Length 5.9–7 mm. Borneo ..... *A. flavicollis*

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