

New and poorly known leaf beetles (Insecta: Coleoptera: Chrysomelidae) from China and Indochina

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Abstract

The seven new species are described as new for science: *Smaragdina vietnamica*, *Pyrrhalta weigeli*, *Monolepta atypica*, *Hyphaenia caviceps*, *Agonita multiimpressa* (Vietnam), *Hyphaenia holzschuhi* (Laos) and *Aphthona wrasei* (China). *Aetheomorpha cyanea* Pic, 1928 is firstly found in China.

Key words: Coleoptera, Chrysomelidae, new species, new record, China, Indochina

Introduction

I had an opportunity to study interesting material from China and Indochina from Natural History Museum of Erfurt thanks to amiability of my friend and college, Matthias Hartmann. As a result of this study seven species are described as new for science and one species is firstly recorded for China.

Next abbreviations are used for depository places of new species:

NME – Naturkundemuseum Erfurt, Erfurt, Germany.

LM – author's collection, Moscow, Russia.

Taxonomical part

Smaragdina vietnamica sp. nov. (fig. 1, 6)

Holotype (male): N. Vietnam, Thai Nguyen Prov., vic. Ngoc Thanh, vic. Me Linh (IEBR station), 21°23'3"N, 105°42'44"E, 19.V.2012, 60–80 m, leg. A. Weigel (NME).

Paratypes: same locality, 3 females (NME, 1 ex. – LM).

Description. Entirely fulvous.

Male. Body elongate, elytra parallel-sided. Clypeus with concave anterior margin, impunctate; frons narrow, about 0,8 times as wide as transverse diameter

of eye, with 3 grooves and punctures near eyes, vertex impunctate. Antennae distinctly serrate from the 4th segment, segments 4–10 acutely triangular, proportions of segments are as 8–4–3–9–8–8–8–8–11. Prothorax twice as wide as long, broadest near middle, side margins rounded, as well as anterior and posterior angles, surface shining and impunctate. Scutellum triangular, finely punctured at base. Elytra 1.5 times as long as wide, finely and densely punctate, with shining interspaces. Pygidium with exposed apical part. Aedeagus (fig. 1) with finger-like apical process, evenly convex on underside. Length of body 5.4 mm.

Female. Frons as wide as transverse diameter of eye. Elytra slightly widened to behind, pygidium not exposed. Spermatheca – fig. 6. Length of body 5.8–6.2 mm.

Diagnosis. Very near to *S. pseudodivisa* L. Medvedev, 2013, having almost same type of aedeagus, but differs well in narrow frons in both sexes, color of elytra not more pale than prothorax, aedeagus without longitudinal elevation on underside and body much larger. In keys of Oriental *Smaragdina* (MEDVEDEV 2010, WARCHALOVSKY 2012) this species and *S. pseudodivisa* L. Medvedev, 2013 must be placed near *S. daklaka* L. Medvedev, 2010.

Derivatio nominis. The name is connected with country of its distribution.

Aetheomorpha cyanea Pic, 1928

Material. China, S. Yunnan (Xishuanbanna), 23 km NW Jinghong Na Ban village (NNNR), N22°10'04", E100°39'52", 680 m, 26.IV.2009, leg. A. Weigel, 1 male. Remark. Firstly found in China, was known from Laos and Thailand.

Pyrrhalta weigeli sp. nov. (fig. 2)

Holotype (male): N Vietnam, Ninh Binh prov., 90 km SW Hanoi, Cuc Phuong NP, primates resc. Centr., 190 m, Li-Fa, N20°14'24", E105°42'53", 25.IV.2012, leg. A. Weigel (NME).

Description. Head, prothorax and scutellum fulvous, antennae entirely black, only segment 2 with fulvous base, elytra black with narrow lateral and more broad apical margins fulvous, underside dark fulvous, legs fulvous. Body elongate, distinctly widened to behind. Head finely punctuate, with short pubescence, clypeus short and triangular, frontal tubercles narrow, obliquely placed. Antennae reach almost middle of elytra, proportions of segments are as 13–6–9–12–11–10–10–9–9–10, apical segments not thickened. Prothorax twice as long as wide, broadest in middle, anterior angles produced, posterior angles obtuse, surface dull, with two impressions in middle, finely and densely punctuate, with short dense hairs. Scutellum triangular with rounded apex. Elytra 1.6 times as long as wide, dull, with feeble ridge near side margin from anterior third to apical slope of elytron, punctures of surface very dense, pubescence rather long and light. Aedeagus (fig. 2) thin and long, slightly asymmetrical. Length 7.8 mm.

Diagnosis. Differs from all species of China and Indochina with color of elytra.

Derivatio nominis. Species is named after its collection.

Monoleta atypica sp. nov.

Holotype (female): N Vietnam, Vinh Hue Prov., vic. Tam Dao Town, Tam Dao NP, 21°27'N, 105°38'E, 700–1000 m, 2–5.V. 2013, leg. A. Weigel (NME).

Description. Fulvous, labrum, antennae except basal segment, tibiae and tarsi black, elytra fulvous with rather narrow basal band red, middle part of suture and extreme apex black.

Body elongate ovate. Head practically impunctate and shining, clypeus triangular, strongly convex, interantennal space very broad, distinctly larger than transverse diameter of eyes, frontal tubercles feeble and transverse, frons about 3 times as wide as transverse diameter of eye. Antennae reach a little behind middle of elytra, proportions of segments are as 12–3–7–11–12–12–12–12–11–10 (last segment absent). Prothorax 1.6 times as wide as long, broadest near middle, side margins feebly rounded, surface shining, without impressions, very finely punctuate. Scutellum triangular, impunctate. Elytra 1.6 times as long as wide, moderately lustrous, finely and densely punctuate, segment 1 of hind tarsus about 2.5 times as long as the next segments combined. Length of body 6.0 mm.

Diagnosis. Differs from all continental species of this genus with unusual elytral pattern. Morphologically seems to be near *M. postfasciata* Gressitt & Kimoto, 1963 from China.

Derivatio nominis. The name is connected with unusual color of upperside.

Hyphaenia caviceps sp. nov. (fig. 3)

Holotype (male): N Vietnam, Ninh Dinh Prov., 90 km SW Hanoi, Cuc Phuong NP, primates resc. Centre, Li-Fa, N20°14'24", E102°45'53", 25/IV.2012, leg. A. Weigel (NME).

Description. Head, antennae (with slightly darkened apical segments), prothorax, scutellum, pro- and mesosternum and legs fulvous, elytra metallic blue, metasternum and abdomen black.

Head impunctate, with deep round cavity before eyes, delimited on sides with ridged elevations and posteriorly with interantennal ridge, frontal tubercles almost indistinct, partly delimited behind with deep groove, vertex shining, partly microsculptured. Antennae reach apical slope of elytra, proportions of segments are as 16–3–19–24–20–20–19–19–19–15–18, all segments not modified, hairs on segments 3–11 short, rather dense and erect. Prothorax 1.4 times as wide as long, broadest in anterior third, surface with two large and rounded impressions, shining, without distinct punctures. Scutellum triangular, impunctate. Elytra 1.5 times as long as wide, slightly widened to behind, with feeble basal convexity, finely and very densely punctuate, with narrow microsculptured interspaces. Segment 1 of all tarsi thin and long. Aedeagus (fig. 3) split at apex, slightly asymmetrical. Length of body 5.2 mm..

Diagnosis. Near *H. aenea* Laboissiere, 1936 from China (Yunnan) and *H. patrikeevi* L. Medvedev & Romanov, 2013 from China (Sichuan), but both these species have unmodified head and other form of aedeagus.

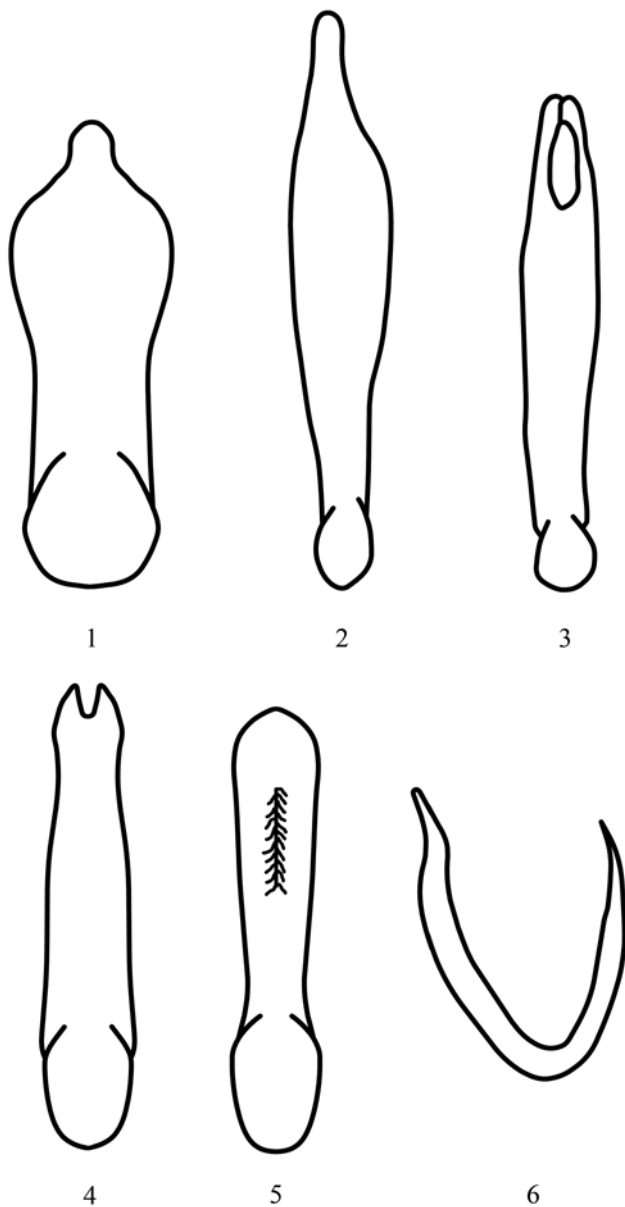
Derivatio nominis. The name is connected with structure of head.

Hyphaenia holzschuhi sp. nov. (fig. 4)

Holotype (male): NE Laos, Prov. Hua Phan Ban Saleui, Phou Pan (Mt.), 20°12'N, 104°01'E, 11.IV.–15.V.2012, 1300–1900 m, leg. C. Holzschuh (NME).

Paratype: same locality and date, 1 male (NME).

Figs 1–5 – aedeagus: 1 – *Smaragdina vietnamica*,
2 – *Pyrrhalta weigeli*, 3 – *Hyphaenia caviceps*,
4 – *Hyphaenia holzschuhi*, 5 – *Aphthona wrasei*,
6 – *Smaragdina vietnamica*, spermatheca.



Description. Entirely fulvous with black antennae except basal fulvous segments.

Head without excavation, clypeus triangular, without central ridge, frontal tubercles transverse, practically united, and produced into interantennal space, vertex smooth, impunctate, sharply divided from frontal tubercles. Antennae almost reach apices of elytra, proportions of segments are as 12–3–12–22–21–18–20–

19–20–18–18, and all segments thin, with short erect hairs, comparable in length with thickness of segments. Prothorax 1.3 times as wide as long, broadest in middle, with arcuate side margins, with rounded anterior and obtuse posterior angles, surface with feeble lateral grooves, finely microsculptured, without distinct punctures. Scutellum triangular, finely microsculptured. Elytra 1.8 times as long as wide, practically parallel-



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Figs 7,8 – *Agonita multiimpressa*: 7 – general view, 8 – prothorax.

sided, finely and densely punctuate. Aedeagus (fig. 4) with bifurcate apex. Length of body 4.5–4.6 mm.

Diagnosis. Near *H. testacea* L. Medvedev, 2001 from Thailand, but head not modified, antennae shorter, with other proportions of segments, prothorax broadest in



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middle, underside entirely fulvous, apical processes of aedeagus different and body larger.

Derivatio nominis. Species is named after its collector.

Aphthona wrasei sp. nov. (fig. 5)

Holotype (male): China (S. Shaanxi), Micang Shan, 40 km SW. Hanzhong, 32°52'65"N/106° 37'11"E, 1530 m. (N slope, mixed secondary forest, litter (mess sifted), 18.VIII.2012, D.W. Wrase [31] (NME).

Description. Head and upperside metallic green, underside dark metallic, antennae black with 4 basal segments fulvous, fore and mid legs fulvous with bases of femora black and tarsi darkened, hind legs with entirely black femora.

Body elongate. Vertex impunctate, frontal tubercles convex, obliquely placed, frontal ridge narrow broadly convex in lateral view. Antennae with 5th segment longer than 4th and 6th. Prothorax 1.3 times as wide as long, broadest near middle, side margins rounded, practically not explanate, surface shining, without any basal depression, impunctate. Elytra 1.5 times as long as wide, parallel-sided, with apices broadly rounded, surface shining, with distinct humeral tubercle, without postbasal impression, densely punctuate, interspaces mostly narrower than diameter of punctures. Segment 1 of posterior tarsus about 3 times as long as wide. Ae-

deagus (fig. 5) almost straight in lateral view, with apex broadly rounded, but not widened and without apical denticle, underside evenly convex with flattened apical part and feebly ridged in apical third. Length of body 2.3 mm.

Diagnosis. This species belongs to „*viridis*“ group (KONSTANTINOV & LINGAFELTER 2002), including 7 species. It seems to be nearest to *A. omeishanica* Konstantinov & Lingafelter, 2002, but differs well in form of aedeagus, larger size and other color of legs.

Derivatio nominis. Species is named after its collector.

Agonita multiimpressa sp. nov. (fig. 7,8)

Holotype (sex not determined): N Vietnam, Ninh Binh Pr., 90 km SW Hanoi, Cuc Phuong NP, primates resc. Centr., Li Fa, N20°14'24", E105°42'53", 25.IV.2012, leg. A. Weigel (NME).

Description. Fulvous, antennae, apical 1/6 of elytra and tarsi black.

Body elongate, parallel-sided. Head broad, eyes strongly convex, interocular space almost twice as wide as diameter of eye, impunctate. Antennae moderately stout, 4 apical segments a little wider than preceding and dull, segments 1–7 shining, proportions of segments are as 7–7–10–7–6–5–5–5–5–10. Prothorax 1.1 times as wide as long, broadest near middle, side margins arcuate, surface shining, with 8 impressions: 4 large and subquadrate along anterior margin, small round groove in middle, triangular impression, before scutellum and curved and punctured impression on each side of base (fig. 8). Scutellum trapeziform, impunctate. Elytra 2.2 times as long as wide, surface with 3 distinct and uninterrupted ridges, the inner interspace with 3 rows of punctures, other three interspaces with 2 rows. Length 5.2 mm.

Diagnosis. Near *A. coomani* (Pic, 1924) from Vietnam and Laos, but differs immediately from it (and other Vietnamese species) with numerous impressions of prothorax; also *A. coomani* has antennae fulvous with blackish apical segment and elytral interspace between the suture and the first ridge with two rows of punctures, the lateral ridge broadly interrupted in middle. It seems that *A. coomani* (Pic, 1924) might be identical with *A. tavoya* Maulik, 1919.

Derivatio nominis. The name is connected with unusual structure of prothorax.

References

- MEDVEDEV, L. N. (2010): A key to Oriental continental species of *Smaragdina* Chevrolat, 1936 (Chrysomelidae, Clytrinae). – Entomologica Basiliensia **32**: 227–258.
- KONSTANTINOV, A. & S. LINGAFELTER (2002): Revision of the Oriental species of *Aphthona* Chevrolat (Coleoptera, Chrysomelidae). – Washington: 1–349.
- WARCHALOVSKY, A. (2012): An attempt on an introductory review of *Smaragdina* Chevrolat, 1836 species from the continental part of Southeastern Asia (Coleoptera: Chrysomelidae: Clytrinae). – Genus **23** (1): 39–97.

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