New taxa of Oriental leaf beetles (Insecta: Coleoptera: Chrysomelidae)

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Abstract

The genus *Hirtolema* with *H. metallica* sp. nov. and seven further species, *Mimastra telnovi* sp. nov., *Doryidella bicolora* sp. nov., *D. bisbipunctata* sp. nov., *Sphaeroderma timorensis* sp. nov., *Manobidia nigricollis* sp. nov., and *Nisotra fulva* are described as new for science.

Key words: Chrysomelidae, new genus, new species, Oriental region

Preface

Thanks to amiability of my friends and colleagues Dr. Matthias Hartmann (Erfurt) and Dr. Dmitry Telnov (Riga) I had a good opportunity to study a rather large quantity of material from China, Vietnam, Malaysia and the Pacific Islands, including New Guinea. As a result of this study 1 genus and 7 species are described as new for science.

The following abbreviations are used for depositories of type material of the new species:

NME – Naturkundemuseum Erfurt, Erfurt, Germany

LM – author's collection, Moscow, Russia

Hirtolema gen. nov.

Description. Head and upper side with long erect hairs. Head not constricted behind eyes, with large central triangle, bordered on sides. Prothorax as long as wide, constricted in basal quarter. Elytra seriate-punctate, without shortened scutellar row and ridged on side of apical slope, with two small spots of scales behind humerus and before apical slope. Hind femora neither thickened nor toothed. Tarsal claws fused on basal quarter.

Diagnosis. Differs immediately from all genera of *Criocerinae* with pubescent upper side.

Type species: *Hirtolema metallica*, sp. nov.

Hirtolema metallica sp. nov.

Holotype (female): Indonesia E., W New Guinea, Doberai Peninsula, Arfak mts, Anggi Gigi Lake S, Upper vill. 2–2.5 km NNE, 1°17'10" S, 133°54'18"E, 9.IX.2015, 1900–2480 m, primary mid montane rainforest, beaten, leg. D. Telnov (NME).

Description. Head and upper side metallic bronze with more or less light pubescence, antennae, underside and legs black, elytral spots of scales white.

Labrum and clypeus with long, dense white hairs, frontovertex finely punctured, hardly pubescent. Antennae reach apical slope of elytra, proportions of segments are as 9–5–5–7–7–7–7–8–8–8–12, segment 9 almost twice as long as wide. Prothorax with large punctures in anterior part, almost impunctate in basal half. Elytra shining, interspaces of rows impunctate, posthumeral spot of scales very small, preapical spot much larger. Length of body 2.4 mm.

Mimastra telnovi sp. nov.

Holotype (male): Indonesia, W. Java, Halimun-Salak NP, Mt. Salak, Kawa Ratu crater trail, from 6°44'51"S, 106°42'45"E to 6°42'12"S, 106°42'10"E, 30.VIII.2017, 1100–1400–1220 m, primary lower to mid-montane rainforest, leg. D. Telnov (NME).

Paratypes: same locality and date, 5 males, 1 female (NME, 2 ex. – LM).

Description. Fulvous, antennae black with fulvous basal segment, elytra metallic green, abdomen black.

Body narrow and elongate. Head impunctate and shining, clypeus rectangular, frontal tubercles triangular, touching each other, moderately convex, vertex impressed anteriorly. Antennae of male reaching apex of elytra, basal segment thickened to apex, next segments thin and parallel-sided, their proportions are as 12–4–9–12–12–12–12–12–12–10–9, segment 9 about 6 times as long as wide. Prothorax 1.4 times as wide as long, broadest near anterior angles, which are thickened and have a long bristle, lateral margins practically straight, surface with a transverse impression in middle,

finely punctate. Scutellum triangular, microsculptured. Elytra parallel-sided, 2.4 times as long as wide, strongly and partly rugosely punctate, with very sparse and short erect hairs. Anterior and mid tarsi of male without widened segments. Aedeagus (fig. 3) with rounded apex. Length of male 4.7–5.1 mm, of female 5.7 mm.
Diagnosis. Near *M. rugosa* Jacoby, 1886, which however larger and with entirely black underside, tibiae and tarsi.

***Doryidella bicolora* sp. nov.**

Holotype (male): Malaysia, Kelantan, 90 km N of Gua Musang, Guning Basor, Kampong Kubur Datu, 1700 m, 10.IV.–5.V.2016, leg. Petr Cechovsky (NME).
Paratypes: same locality and date, 5 males, 3 females (NME, 2 ex. – LM).
Description. Head black including palpi, labrum fulvous with black base, antennae fulvous with darkened basal segment. Upperside black with reddish apical quarter of elytra (fig. 1). Breast black, abdomen, including pygidium, fulvous, legs black.
Body elongate ovate, broadest before apex. Clypeus triangular, finely punctate, frontal tubercles transverse, sharply delimited, impunctate, vertex finely and sparsely punctate, grooved longitudinally. Antennae of male reach apical slope of elytra, proportions of segments are as 10–3–4–20–19–18–18–18–18–18–17, all segments thin, segment 9 about 6 times as long as wide. Prothorax twice as wide as long, lateral margins slightly arcuate, anterior angles distinct, surface convex, shining, sparsely punctate. Scutellum triangular, finely and sparsely punctate. Elytra 1.45 times as long as wide, moderately widened to behind, with lateral margins almost straight, surface densely punctate, with basal convexity. Basal segment of fore and mid tarsi not widened in male. Aedeagus narrow and elongate, with broadly rounded apex (fig. 4). Length of male 7.4–7.7 mm, of female 8.0–8.7 mm.
Diagnosis. Near *D. pallida* (Jacoby, 1892) from Myanmar and Indochina, differs by fulvous antennae, dark upper side and bicolored elytra.

***Doryidella bisbipunctata* sp. nov.**

Holotype (male): Malaysia, Kelantan, 90 km N of Gua Musang, Guning Basor, Kampong Kubur Datu, 1700 m, 10.IV.–5.V.2016, leg. Petr Cechovsky (NME).
Description. Head fulvous with black clypeus and frontal tubercles, antennae fulvous, slightly darkened apically, prothorax fulvous with black pattern on sides, scutellum fulvous, elytra fulvous, each elytron with 2 small black spots before middle (fig. 2), breast black, abdomen fulvous, partly darkened entirely, legs black with bases of femora and tarsi fulvous.
Body elongate. Head practically impunctate, clypeus triangular, frontal tubercles transverse, sharply delimited posteriorly, vertex deeply grooved anteriorly. Antennae reach apical slope of elytra, proportions of segments are as 10–3–4–12–11–11–11–11–12–12–14, all segments thin, segment 9 about 6 times as long as wide. Prothorax 2.4 times as wide as long, lateral margins almost straight, anterior angles distinct, surface feebly convex, slightly impressed on each side in middle, distinctly punctate in basal half. Scutellum triangular, impunctate. Elytra 1.4 times as long as wide, slightly widened to behind, with lateral margins almost straight, surface convex, shining, densely punctate, without basal convexity. Basal segment of anterior and mid tarsi not widened. Aedeagus narrow and elongate, with apex very narrowly rounded (fig. 5). Length 7.3 mm.
Diagnosis. Near *D. pallida* (Jacoby,1892) differs with black patterns on head and prothorax, 2 black spots on elytra, partly black underside and legs, as well as narrowly rounded apex of aedeagus.

***Sphaeroderma timorensis* sp. nov.**

Holotype (male) Indonesia E, Timor W., foot of Gunung Fatutimau peak, 9°35'09"S, 123°56'30"E, 1300–1500 m, 07.IV.2016, gally [gallery?] rainforest, leg. L. Wagner (NME).
Description. Fulvous, antennae black with 4 basal segments and apical quarter of 11th segment fulvous, posterior femora black, mid femora slightly darkened in middle.
Body ovate, 1.55 times as long as wide. Head impunctate, frontal tubercles ovate, convex and sharply delimited posteriorly with transverse impression, vertex microsculptured. Antennae reach middle of elytra, proportions of segments are as 12–8–7–8–8–9–10–10–10–11–15, 5 apical segments slightly widened, segment 9 about 1.5 times as long as wide. Prothorax 1.65 times as wide as long, broadest before base, lateral margins feebly arcuate, anterior angles obtuse, surface

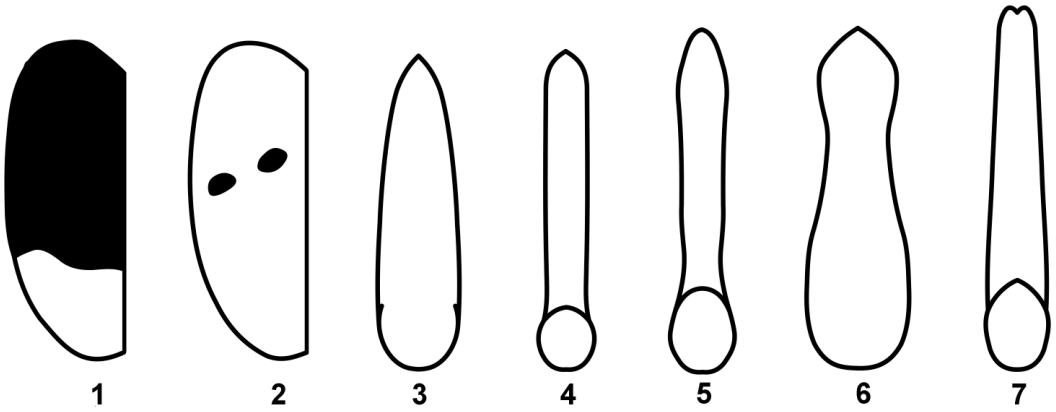

Fig. 1–2: A pattern of elytron: 1 – *Doryidella bicolora* **sp. nov.**, 2 – *D. bisbipunctata* **sp. nov.**
Fig. 3–7: Aedeagus, ventral view: 3 – *Mimastra telnovi* **sp. nov.**, 4 – *Doryidella bicolora* **sp. nov.**, 5 – *D. bisbipunctata* **sp. nov.**, 6 – *Sphaeroderma timorensis* **sp. nov.**, 7 – *Manobidia nigricollis* **sp. nov.**

convex, shining, finely punctate. Scutellum triangular, microsculptured. Elytra 1.2 times as long as wide, with partly confused rows of punctured, without basal convexity. Aedeagus – fig. 6. Length of body 3.0 mm.
Diagnosis. Near *S. rafflesi* Jacoby, 1896 from Sumatra, which however has mid tibiae and hind legs black, aedeagus with angulate apex and curved in lateral view (Medvedev, 2008).

Manobidia nigricollis sp. nov.

Holotype (male): Indonesia E., Timor W., Gunung Fatutimau peak, 9°34'51"S, 123°56'22"E, 1700–1730 m, 07.IV.2016, dry grassland, leg. L. Wagner (NME).
Paratype: same locality, 9°35' 09"S, 123°56'30"E, 1300–1500 m, 07.IV.2016, gally [gallery?] rainforest, leg. L. Wagner, 3 females (one without head and prothorax) (NME, 1 ex. – LM).
Description. Black, antennae with 5 basal segments fulvous, elytra metallic blue.
Body almost parallel-sided, feebly widened to behind, time as long as wide. Head impunctate, clypeus triangular and flat, frontal tubercles small and poorly delimited, vertex feebly convex, without any impressions. Antennae reach anterior third of elytra, proportions of segments are as 8–7–8–9–9–9–9–10–8–13, segment 9 twice as long as wide. Prothorax 1.5 times as wide as long, without basal impression, surface with moderately strong and rather dense punctures. Scutellum triangular with rounded apex, microsculptured. Elytra 1.6 times as long as wide, parallel-sided in male, slightly widened to behind in female, surface with regular rows, confused on apical slope, interspaces narrow and finely punctate. Segment 1 of fore and mid tarsi not widened in male, elongate triangular. Aedeagus thin and long, slightly curved in lateral view, with emarginated apex (fig. 7). Length of male 2.2 mm, of female 2.4–2.7 mm.
Diagnosis. This species can only be compared with *M. manilensis* L. Medvedev, 1993 and *M. puncticollis* L. Medvedev, 1993, both from the Philippines, which are however half the size, and have black elytra and fulvous legs.

Nisotra fulva sp. nov.

Holotype (female): Malaysia, Kelantan, 90 km N of Gua Musang, Guning Basor,
Kampong Kubur Datu, 1700 m, 10.IV.–5.V.2016, leg. Petr Cechovsky (NME).
Description. Fulvous, antennal segments 5–11, underside and posterior femora black.
Body elongate ovate, 1.7 times as long as wide. Clypeus finely punctate, frontal tubercles small, triangular, feebly delimited, vertex practically impunctate. Antennae reach anterior quarter of elytra, proportions of segments are as 9–5–7–7–5–5–5–6–7–7–10, segments 5–11 thickened, segment 9 twice as long as wide. Prothorax

1.65 times as long as wide, broadest in anterior third, lateral margins distinctly rounded, anterior angles obtuse, surface with deep and rather long impressed line on each side of anterior margin and with posterior notch on each side of base, punctures of surface comparatively sparse and small. Scutellum triangular with broadly rounded apex, finely micro-sculptured. Elytra about 1.3 times as long as wide, broadest in apical third, with duplicate rows of punctures. Length of body 3.8 mm.
Diagnosis. Very near to *N. brunnea* Jacoby, 1894 from Sumatra and Tanimbar, which however has the body entirely red fulvous, including posterior legs.

References

MEDVEDEV, L. N. (2008): To the knowledge of the genus *Sphaeroderma* Stephens, 1831 from the Oriental region. – Entomologica Basiliensia, **30**: 277–303.

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