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A revision of the genus *Colaspoides* Laporte, 1833 (Chrysomelidae, Eumolpinae) from Borneo

by Lev N. Medvedev

Abstract. A key to species of the genus *Colaspoides* in Borneo is given; 22 species are described as new for science: *Colaspoides sabahensis*, *C. staudingeri*, *C. sarawacensis*, *C. takizawai*, *C. pseudomodesta*, *C. tenuicornis*, *C. submetallica*, *C. gorbunovi*, *C. nitidicollis*, *C. curticornis*, *C. schawalleri*, *C. riedeli*, *C. ahmadi*, *C. rubra*, *C. sandakana*, *C. bolmi*, *C. pleuralis*, *C. cyaneipennis*, *C. obscuripes*, *C. viridiventris*, *C. shuteae* and *C. mirabilis* spp.nov. *C. fruhstorferi* Jacoby, 1898 is established as a new synonym for *C. robusta* Baly, 1867.

Key words. Chrysomelidae – Eumolpinae – *Colaspoides* – revision – new species

Introduction

The large genus *Colaspoides* Laporte, 1833, widely distributed in the Oriental, Australian and Neotropical Regions, is still rather poorly studied for Borneo. Just 15 species were described from the island in the 19th century (BALY 1867; JACOBY 1894, 1898], none in the 20th century and two in recent years (MEDVEDEV 2003, 2007).

I have had the good fortune to study large bodies of material held in several places: the British Museum of Natural History, London; Naturhistorisches Museum Basel; Staatliches Museum für Naturkunde in Stuttgart; the National Museum of Natural History, Washington; the Institute for Tropical Biology and Conservation, Sabah, Kinabalu; and my own collection. Almost all types were studied. This study generated a key to species in which 22 species are described as new to science. To date, 38 species are now known for Borneo (one species was synonymized). As is usual in this genus, the main characters for species differentiation are the structures of the aedeagus and the spermatheca; this is especially evident in the case of the numerous entirely fulvous species.

The genus was divided into seven more or less natural groups (MEDVEDEV 2003a), with one more group added in this publication.

Material

The following abbreviations are used for the institutions in which the material is deposited:

BMNH	.....	British Museum of Natural History, London
NHMB	.....	Naturhistorisches Museum Basel
SMNS	.....	Staatliches Museum für Naturkunde, Stuttgart
NMNH	.....	National Museum of Natural History, Washington
ITBC	.....	Institute for Tropical Biology and Conservation, Sabah, Kinabalu
HT	.....	Haruo Takizawa collection, Japan
LM	.....	L. N. Medvedev collection, Moscow

T a x o n o m y

A key to the groups of the genus *Colaspoides*

- 1(4) Propleurae distinctly punctate or densely microsculptured. Body metallic. Males without hairy brushes on abdomen or hind femora.
- 2(3) Propleurae distinctly punctate. Antennae thin. Body comparatively large or of moderate size. **Group 1**
- 3(2) Propleurae densely microsculptured. Antennae mostly with thickened apical segments. Body usually small. Continental Asia only. **Group 2 (not keyed here)**
- 4(1) Propleurae smooth and lustrous, rarely punctate, but in this case at least underside and legs non-metallic.
- 5(6) Upperside not entirely metallic, mostly fulvous or black, sometimes with metallic elytra. Occasional males with hairy brushes or armament on abdominal segments. **Group 3**
- 6(5) Upperside entirely metallic.
- 7(14) Ductus thin, spread-out or spiral, lacking large, thick spindle at centre. Elytra without basal convexity and postbasal impression.
- 8(9) Anterior or posterior femora, or both, toothed below. **Group 4**
- 9(8) Femora not toothed, sometimes anterior femora feebly toothed or angulate below.
- 10(11) Underside and femora distinctly metallic. **Group 5**
- 11(10) Underside and legs black, piceous or fulvous.
- 12(13) In males hind femora with hairy brush below or abdominal segments with hairy brushes or armament. Females are difficult to distinguish from the following group. Mostly represented in continental Asia, absent from Borneo. **Group 6 (not keyed here)**
- 13(12) Males without hairy brushes and armament on abdomen or hind femora. **Group 7**
- 14(7) Ductus with large, thick spindle at centre. Elytra with basal convexity and distinct postbasal impression. **Group 8**

Group 1

[Propleurae punctate. Body metallic.]

- 1(6) Elytra covered with numerous tubercles and/or vermiculate convexities, without postbasal impression. Antennae piceous with segment 1 metallic above and fulvous below, segments 2–4 fulvous.
- 2(5) Prothorax covered with tubercles or strongly rugose. Preapical antennal segments about 5 times as long as wide.

- 3(4) Body metallic green, labrum piceous to fulvous. Aedeagus with elongate-triangular and very acute apex (Fig. 1), spermatheca U-shaped (Fig. 11). Length 6.0–6.7 mm. ***C. sabahensis* sp.nov.**
- 4(3) Body metallic green with red cupreous sheen, labrum as in preceding species. Aedeagus with rounded apex and a short apical tip (Fig. 2), female unknown. Length 5.4 mm. ***C. staudingeri* sp.nov.**
- 5(2) Prothorax densely punctate, but without rough rugosities. Elytra with tubercles, vermicular elevations and 3 elevated interspaces along suture. Upperside metallic green, underside and legs violaceous blue. Spermatheca comma-shaped (Fig. 12). Male unknown. Length 6.2 mm. ***C. sarawacensis* sp.nov.**
- 6(1) Elytra without tubercles or feebly tuberculate at lateral margin.
- 7(12) Elytra strongly punctate, on sides transversely rugose or more or less tuberculate, without postbasal impression.
- 8(9) Prothorax with sparse or moderately dense punctures. Elytra more or less tuberculate at the sides. Metallic green, sometimes with aeneous or cupreous tint, antennae black with segment 1 metallic above and fulvous below, segments 2–4 fulvous, labrum fulvous. Aedeagus – Fig. 3. Spermatheca U-shaped (Fig. 13). Length 4.6–5.2 mm. ***C. tuberculata* Baly**
- 9(8) Prothorax very densely punctate. Elytra with transverse rugosity at the sides. Spermatheca not U-shaped. Preapical antennal segments about 2.0–2.3 times as long as wide.
- 10(11) Hind femora not toothed. Spermatheca very thick and short, almost round (Fig. 14). Body metallic green to bronze with reddish or dark brownish reflection, antennae black with metallic reflection, segment 1 metallic above, bases of segments 2–4 more or less fulvous. Aedeagus apex rounded with very short tip, underside with ovate impression before apex (Fig. 4). Length 5.6–5.9 mm. ***C. takizawai* L. Medvedev**
- 11(10) Hind femora toothed below. Spermatheca very thin, ring-shaped (Fig. 15). Metallic green, labrum and antennae fulvous (the apical segments a little darker than the basal), tibiae and tarsi dark fulvous to piceous. Length 6.3 mm. Male unknown. ***C. punctipleuris* L. Medvedev**
- 12 (7) Elytra not strongly punctate, with all interspaces flat and usually larger than punctures.
- 13(14) Elytra without postbasal impression, about as long as wide. Prothorax broad, 1.9–2.1 times as wide as long, 0.8 times as wide as elytra in humeri, surface moderately densely punctate. Body ovate, metallic green or blue, antennae black with metallic reflection, segment 1 metallic above, segment 2 fulvous, segments 3 and 4 with fulvous apex. Aedeagus broad, apex broadly rounded with a short tip, underside concave (Fig. 5). Spermatheca U-shaped (Fig. 16). Length 6.3–7.3 mm. ***C. robusta* Baly**

- 14(13) Elytra with distinct postbasal impression, about 1.3 times as long as wide. Prothorax narrow, 1.25 times as wide as long, 0.65 times as wide as elytra in humeri, surface very finely and sparsely punctate. Body elongate-ovate, metallic green, antennae as in preceding species. Aedeagus narrow, with triangular apex, not concave on underside (Fig. 6). Length 7.5 mm. Female unknown. *C. angusticollis* Jacoby

***Colaspoides sabahensis* sp.nov.**

Material examined. Holotype (male): Malaysia, Sabah, km. 53 road KK-Tambunan, Gn.Emas, 1650 m, 22.III–6.IV.2000, leg. Bolm (NHMB).

Paratypes: same locality and date, 1 female (NHMB); same locality, 700m, 1–5.IV.2000, 1 male, 1 female (LM); – Sabah, Kinabalu, 1 female (LM), – Malaysia, Sarawak, Al Dalan, Bario Kelambit highland, 5–7.IX.2007, leg. H.Takizawa, 2 ex. (ITBC, LM), – Malaysia, Sabah, Kinabalu Park, HQ, Panau, 17–19.III.2008, 1 ex., leg. H.Takizawa (ITBC), – Malaysia, Sabah, Poring Park, Ranau, 25–26.II.2008, leg. H.Takizawa, 1 ex. (ITBC).

Description. Metallic green, labrum fulvous, antennae black with segment 1 green above and fulvous below, segments 2–4 fulvous.

Male. Head lustrous, roughly sculptured, with longitudinal groove on vertex and smooth elevations above bases of antennae. Antennae thin, reaching beyond mid-elytra, proportions of segments: 8-4-8-7-10-10-11-10-10-10-10, segments 6–11 not widened, about 5 times as long as wide. Prothorax 2.2 times as wide as long, distinctly narrowing towards the front, with sides feebly rounded, surface very rugose, vermiculate. Scutellum narrow, with rounded apex and microscopically sparse punctures. Elytra 1.3 times as long as wide, all surfaces with numerous tubercles, with no rows of punctures along suture or on apical slope. Pygidium punctate, with parallel-sided central furrow, ridge on underside absent. Upperside of abdomen dark, feebly sclerotized. Propleurae lustrous, distinctly punctate. Abdominal sternites 4 and 5 feebly serrate at the sides, sternite 5 emarginate apically. All femora untoothed. Segment 1 of fore- and mid-tarsi distinctly widened. Aedeagus (Fig.3) with elongate-triangular and very acute apex, underside with broad elongate concavity delimited by a ridge on each side.

Length of body 6.0–6.2 mm.

Female. Elytra 1.2 times as long as wide. Abdominal sternite 5 with deep emargination on hind margin. Segment 1 of fore- and mid-tarsi not widened. Spermatheca U-shaped (Fig.4).

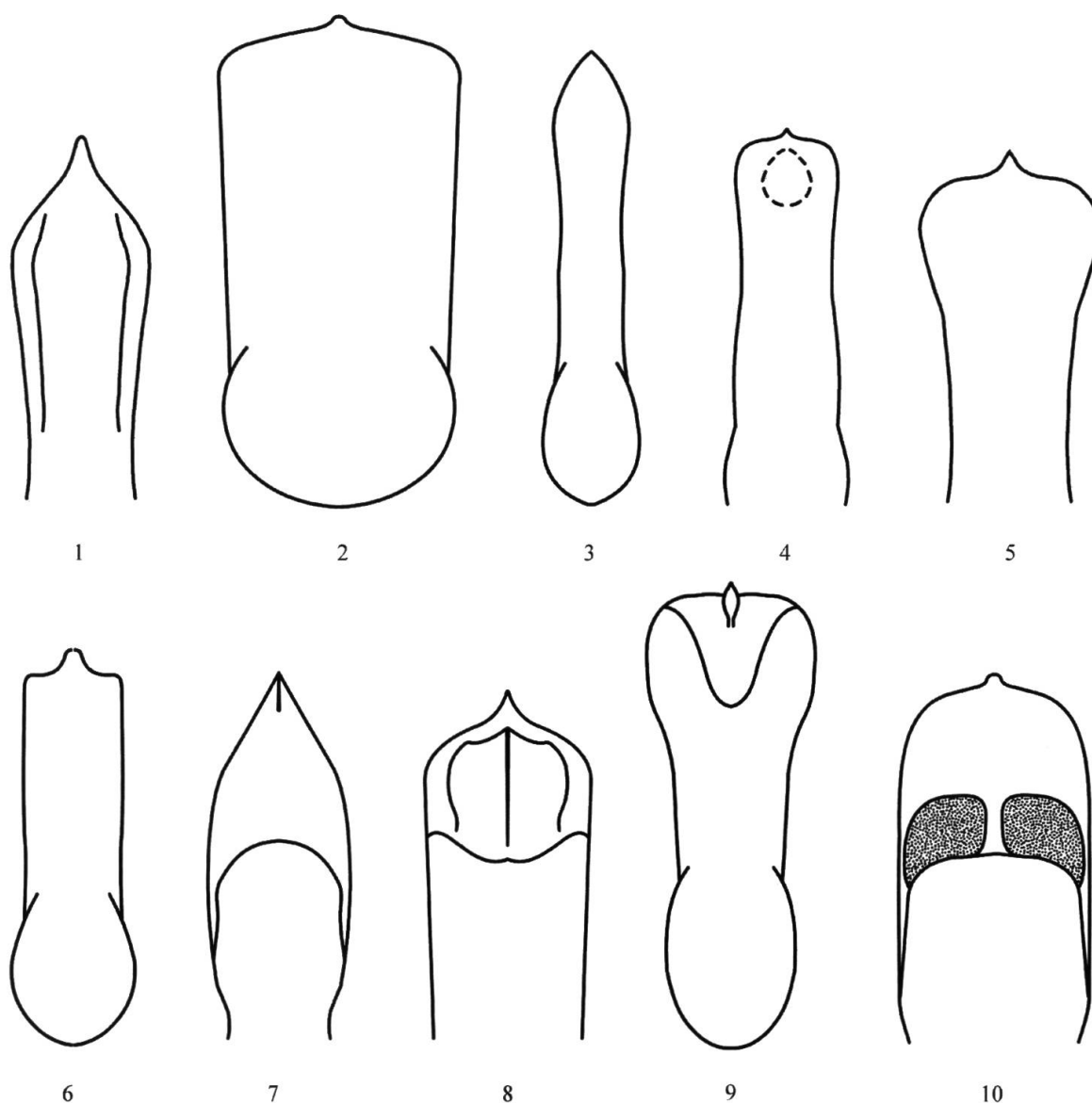
Length of body 6.5–6.7 mm.

Distribution. Sarawak, Sabah.

Differential diagnosis. Near *C. tuberculata* Baly, 1867, differs in highly rugose, vermiculate prothorax, strongly tuberculate elytra, form of aedeagus and spermatheca.

***Colaspoides staudingeri* sp.nov.**

Material examined. Holotype (male): Sarawak, ex. Staudinger (LM).



Figs 1–10. aedeagus, ventral view: 1 – *C. sabahensis* sp.nov., 2 – *C. staudingeri* sp.nov., 3 – *C. tuberculata* Baly, 4 – *C. takizawai* sp.nov., 5 – *C. robusta* Baly, type, 6 – *C. angusticollis* Jacoby, type, 7 – *C. modesta* Baly, 8 – *C. pseudomodesta* sp.nov., 9 – *C. fuscoaenea* Baly, type, 10 – *C. tenuicornis* sp.nov.

Description. Body metallic green with red cupreous reflection. Antennae piceous with segment 1 metallic above and fulvous below, segments 2–4 and labrum fulvous.

Morphologically identical with *C. sabahensis* L. Medvedev, but elytra with quite distinct, irregular row of punctures along suture and elytral tubercles lower. Aedeagus short, its apex broadly rounded with short apical tip, its underside feebly concave, with central ridge in apical part (Fig. 2).

Length of body 5.4 mm

Distribution. Sarawak.

Etymology. The species is named after its collector.

Differential diagnosis. Differs from *C. sabahensis* sp.nov. in other form and sculpture of aedeagus and smaller size.

***Colaspoides sarawacensis* sp.nov.**

Material examined. Holotype (female): Sarawak, ex Staudinger (LM).

Description. Upperside metallic green, underside and legs violaceous blue, antennae black with basal segment metallic above and fulvous below, segments 2 and 3 fulvous, labrum piceous.

Body ovate. Head with strong punctures and deep longitudinal impression on vertex. Antennae thin, preapical segments about 3 times as long as wide. Prothorax twice as wide as long, broadest near mid-length, side margins rounded, fore- and hind angles distinct, but not acute, surface with quite dense, strong punctures, finely punctate on interspaces, without rugosities or tubercles. Scutellum triangular, with a few fine punctures. Elytra 1.35 times as long as wide, surface with tubercles, vermicular convexities and a few rows at base and along suture with convex interspaces; postbasal impression absent. Propleurae punctate. All femora untoothed. Sides of 4th and 5th abdominal sternites serrate, hind margin of 5th sternite almost straight. Spermatheca (Fig. 12) comma-shaped.

Length of body 6.2 mm.

Distribution. Sarawak.

Differential diagnosis. Differs from *C. sabahensis* sp.nov. and *C. staudingeri* sp.nov. in sculpture of prothorax and elytra. Theoretically this species might be a female of *C. staudingeri* sp.nov., but this seems very doubtful since females of this genus are usually more roughly punctate than males.

***Colaspoides tuberculata* Baly, 1867**

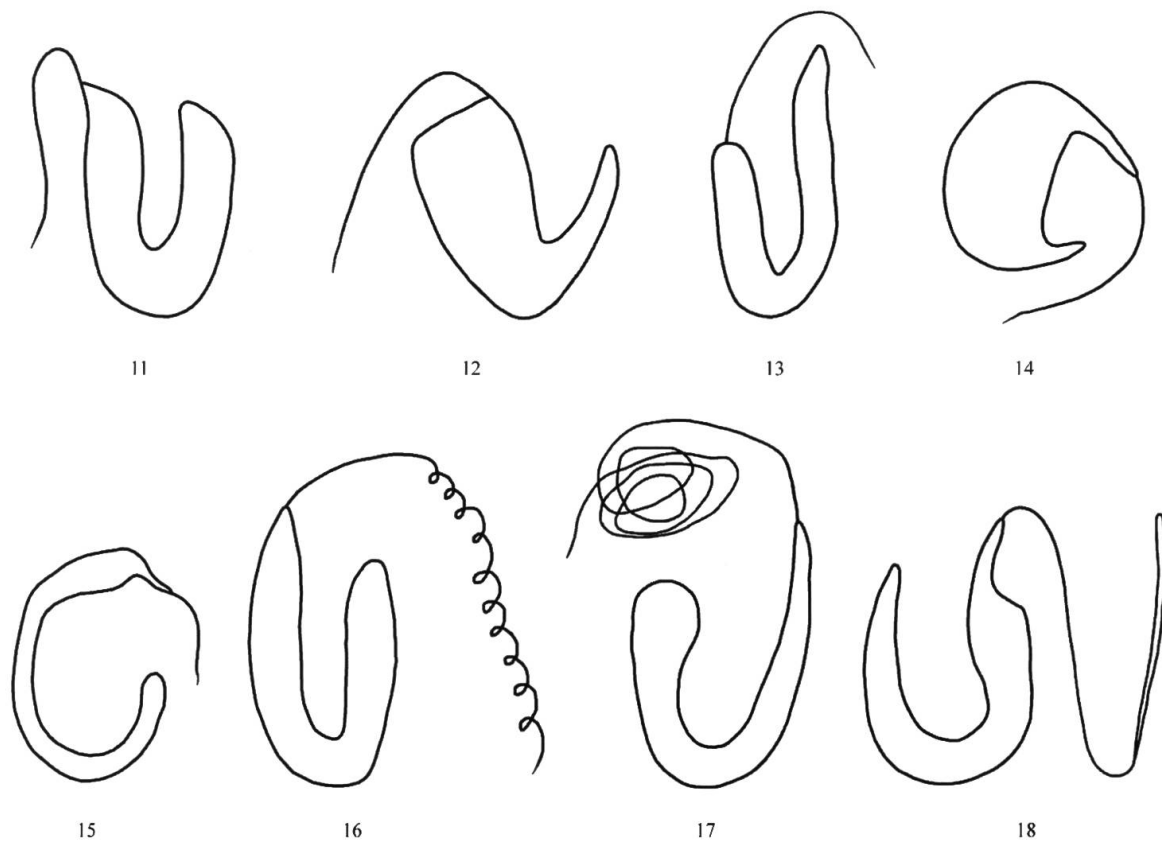
Material examined. 2 type specimens (females) from Sarawak (BMNH), – Borneo, Sandakan, leg. Baker, 4 ex. (NHMB, 1 ex.-LM), – Sarawak, Semengoh Forest Reserve, 11–21.IX.1966, leg. J. Clark, 1 female (USNM); – W. Sarawak, Mt. Matang, I.1914, leg. G.E. Bryant, ex F. Monros collection, 1 female (BMNH), – Borneo, 1 female (LM), – Malaysia, Sabah, Pulau Gaya, Kota Kinabalu, 21.III.2008, leg. H.Takizawa, 1 ex. (ITBC), – same locality, 1 ex. (ITBC), – Malaysia, Sabah, Kipouvo JI, Tambunan, Penampang, 8.I.2009, leg. H.Takizawa, 1 ex. (ITBC); – same locality, 1.VII.2007, 1 ex. (LM), – Malaysia, Sarawak, Lanjak Entimau W., Sanct. HQ, Kapit, 18–28.VI.2008, leg. H.Takizawa, 4 ex. (ITBC).

Distribution. Sarawak, Sabah.

***Colaspoides takizawai* sp.nov.**

Material examined. Holotype (male): Malaysia, Sabah, KPG. Kiapada, Inenam, Kota Kinabalu, 15.XII.2007, leg. H.Takizawa (ITBC).

Paratypes: same locality, 18.V.2008, leg. H.Takizawa, 1 female (HT); 5.VII.2008, leg. H. Takizawa, 1 female (ITBC); 17.VIII.2008, leg. H. Takizawa, 1 male (LM); 21.X.2007, leg. H. Takizawa, 1 male, 1 female (ITBC);



Figs 11–18. spermatheca: 11 – *C. sabahensis* sp.nov., 12 – *C. sarawacensis* sp.nov., 13 – *C. tuberculata* Baly, type, 14 – *C. takizawai* sp.nov., 15 – *C. punctipleuris* L. Medvedev 2003, 16 – *C. robusta* Baly, type, 17 – *C. biplagiata* Baly, type, 18 – *C. fuscoaenea* Baly.

9.XI.2008, leg. H. Takizawa, 1 male (ITBC); 15.XII.2007, leg. H. Takizawa, 1 male (HT). Kg. Kipao, Inanam, Kota Kinabalu, 7.VII.2007, leg. H. Takizawa, 1 male, 1 female (LM). Kg. Mansiang, Menggatal, Kota Kinabalu, 22.IV.2007, leg. H. Takizawa, 1 male (ITBC). Kg. Pultan, Menggatal, Kota Kinabalu, 9.VI.2007, leg. H. Takizawa, 1 female (ITBC). Kg. Togung, Menggatal, Kota Kinabalu, 19.V.2007, leg. H. Takizawa, 1 female (ITBC). Telipok, Kota Kinabalu, 5.V.2007, leg. H. Takizawa, 1 male (ITBC). Kg. Raganan, Kiulu, Tuaran, 16.IX.2008, leg. H. Takizawa, 1 male (ITBC). Kg. Babagon, Penampang, 16.IX.2008, leg. H. Takizawa, 1 female (ITBC). Kg. Timpango, Babagon, Penampang, 25.XII.2007, leg. H. Takizawa, 1 male (ITBC). Kg. Moyog, Penampang, 30.X.2008, leg. H. Takizawa, 1 female (ITBC). Kg. Kipouvo, Penampang, 8.I.2008, leg. H. Takizawa (ITBC).

Description. Metallic green (female) or greenish-bronze (male). Coloration variable from metallic green to bronze with greenish, reddish or dark brownish reflections, labrum piceous, antennae black with feeble metallic gloss, bases of segments 2–4 more or less fulvous, segment 1 metallic green.

Male. Head lustrous, densely punctate, especially on clypeus and near eyes. Antennae almost reach mid-elytra, proportions of segments: 10-5-12-10-11-8-15-15-14-13-17, segments 6–11 slightly widened, about 2.1–2.3 times as long as wide. Prothorax 1.6 times as wide as long, narrowing sharply at the front, sides distinctly rounded,

surface very densely punctate, interspaces narrow, in basal half more or less costate. Scutellum broad, subquadrate with rounded apex and sparse microscopic punctation. Elytra 1.4 times as long as wide, surface roughly sculptured, with large punctures along suture and transverse rugosity on remainder of surface. Pygidium finely punctate with central furrow widened at base, distinctly narrowing to apex and without longitudinal ridge below. Upperside of abdomen dark, quite lightly sclerotized. Propleurae lustrous, strongly punctate. Abdominal sternites 4 and 5 not serrate on sides, sternite 5 feebly emarginated on hind margin. All femora untoothed. Segment 1 of fore- and mid-tarsi moderately widened. Aedeagus (Fig.1) with almost rounded apex and very short tip, underside with feeble ovate impression before apex.

Length of body 5.6 mm.

Female. Elytra 1.2 times as long as wide. Abdominal sternite 5 deeply emarginated apically. Segment 1 of fore- and mid-tarsi not widened. Spermatheca short and very thick (Fig.2).

Length of body 5.9 mm.

Distribution. Sabah.

Etymology. The species is dedicated to Dr. H. Takizawa, a well-known Chrysomelidae specialist.

Biological notes. This species is quite common on a wide range of plants in secondary forest and old gum plantations in the lowlands (altitude *c.* 30–150 m). Its exact food plant remains unknown.

Differential diagnosis. This species is near *C. punctipleuris* L. Medvedev, 2003, but differs in colour of antennae and legs, other sculpture of elytra and especially in very different spermatheca.

***Colaspoides punctipleuris* L. Medvedev, 2003**

Material examined. Holotype (female) from Borneo, no more exact data available (BMNH).

Distribution. Borneo.

***Colaspoides robusta* Baly, 1867**

C. fruhstorferi Jacoby, 1898 **syn.nov.**

Material examined. 2 type specimens of *C. robusta* Baly (male and female) from Sarawak (BMNH), – NW Borneo, Sarawak, Kuching, Baco-N.P., 27–29.III.1990, leg. A. Riedel, 1 male, 2 females (SMNS, 1 ex. – LM); Sarawak, Semengoh Forest Reserve, 11–21.IX.1966, leg. J. Clark, 1 female (USNM).

Distribution. Sarawak.

Remarks. In the original description of *C. fruhstorferi* no locality is indicated at all; further, the colour of the antennae is unclear, given in the diagnosis as: “antennae (basal joints excepted) dark blue”, which implies that the basal joints are fulvous. In contrast, in the comparison with other species, this is given as: “differing from either in the dark

blue antennae which have no fulvous basal joints". In fact, the antennae are dark blue with segment 2 and apices of segments 3 and 4 fulvous.

The types of *C. robusta* are metallic blue, other specimens are metallic green and quite identical with the description of *C. fruhstorferi*. Both species are identical in very characteristic structure of aedeagus and spermatheca, as well as specific colour of antennae; I therefore accept *C. fruhstorferi* Jacoby as a synonym of *C. robusta* Baly.

***Colaspoides angusticollis* Jacoby, 1898**

Material examined. A type (male) from Kinabalu (BMNH).

Distribution. Sabah.

Group 3

[Upperside not entirely metallic, propleurae mostly impunctate, lustrous.]

- 1(6) Fore- and hind femora with very distinct tooth.
- 2(5) Body entirely fulvous, upperside lustrous, prothorax with quite strong, sparse punctures, elytra strongly punctate. Abdomen of male with erect hairs in middle.
- 3(4) Aedeagus with elongate-triangular, almost cuneiform apex (Fig. 8), its underside concave in basal part. Length 4.9–5.0 mm. Sabah. *C. pseudomodesta* sp.nov.
- 4(3) Aedeagus apex rounded-triangular with acute apical tip, underside with short apical ridge and impression before apex (Fig. 7). Length 5.6–5.8 mm. Sarawak. *C. modesta* Baly
- 5(2) Red-fulvous, elytra black with red-fulvous band in middle (Fig. 19). Upperside with microsculpture, prothorax finely and sparsely punctate, elytra strongly so. Spermatheca – Fig. 17. Length 5.8 mm. Male unknown. *C. biplagiata* Baly
- 6(1) Hind femora not toothed.
- 7(16) Fore-femora with small tooth or distinctly angulate at mid-underside. Abdomen of male without erect hairs at centre. Body entirely fulvous or upperside with metallic green lustre.
- 8(15) Prothorax distinctly punctate. Upperside with metallic green lustre.
- 9(14) Apex of aedeagus truncate or rounded. Antennal segment 4 a little longer than 3.
- 10(13) Apex of aedeagus truncate or rounded-truncate.
- 11(12) Apex of aedeagus truncate with short apical tip, underside with preapical groove (Fig. 9). Segment 1 of fore- and mid-tarsi of male distinctly widened, rectangular. Spermatheca – Fig. 18. Head distinctly punctate. Length 4.4–4.9 mm. *C. fuscoaenea* Baly

- 12(11) Apex of aedeagus rounded-truncate with small apical tip, underside with two non-sclerotized areas in middle part, concave beyond them (Fig. 10). Segment 1 of fore- and mid-tarsi of male moderately widened, triangular. Frontoververtex impunctate. Length 3.4–3.5 mm. *C. tenuicornis* sp.nov.
- 13(10) Apex of aedeagus broadly rounded, without apical tip, underside concave, without additional sculpture (Fig. 31). Length 3.5–3.6 mm. *C. submetallica* sp.nov.
- 14(9) Apex of aedeagus elongate-triangular, acute (Fig. 32). Antennal segment 4 shorter than 3. Length 4.5 mm. *C. gorbunovi* sp.nov.
- 15(8) Prothorax impunctate. Upperside without metallic green lustre. Apex of aedeagus subtruncate with acute apical tip, underside with apical and basal concavities divided by oblique ridges (Fig.33). Spermatheca – Fig. 41. Length 3.3–4.0 mm. *C. nitidicollis* sp.nov.
- 16(7) Fore-femora neither toothed nor angulate midway along underside.
- 17(38) Body fulvous to dark fulvous, prothorax sometimes darker than elytra, upperside sometimes with metallic lustre.
- 18(35) Propleurae impunctate.
- 19(30) Apex of aedeagus triangular or rounded.
- 20(21) Aedeagus narrow, with rounded apex, evenly convex on underside (Fig. 34). Upperside without metallic lustre. Antennae short, fulvous with 4 apical segments black. Length 3.3 mm. *C. curticornis* sp.nov.
- 21(20) Aedeagus with triangular apex. Antennae fulvous or with darkened apical segment.
- 22(23) Upperside with weak or distinct metallic lustre. Prothorax broadest around mid-length. Head and prothorax strongly punctate. Aedeagus on underside with sharply delimited, drop-shaped preapical impression and longitudinal ridge (Fig. 35). Spermatheca – Fig. 42. Length 4.4–4.6 mm. *C. schawalleri* sp.nov.
- 23(22) Upperside without metallic lustre. Prothorax broadest at base. Underside of aedeagus without distinct sculpture.
- 24(25) Abdomen of male with transverse vertical plate on 4th sternite and erect hairs on sternites 1–4. Antennal segment 3 about twice as long as 2, preapical segments about 4–5 times as long as wide. Prothorax finely and very sparsely punctate. Aedeagus – Fig. 36. Length of male 4.1–4.4 mm. Females usually with piceous spot on elytra, which might be strongly enlarged, rarely upperside piceous. Spermatheca – Fig.43. (see items 42, 47). *C. balyana* L. Medvedev (males)
- 25(24) Abdomen of male without transverse vertical plate on 4th sternite. Preapical antennal segments about 2.5–3 times as long as wide.
- 26(27) Body larger, 4.0–5.0 mm. Abdomen of male with erect hairs on sternites 1–4. Antennal segment 3 about twice as long as 2. Prothorax very finely

- and sparsely punctate. Apex of aedeagus triangular with quite a long apical tip (Fig. 37). Females sometimes with bicoloured elytra or piceous upperside, spermatheca – Fig.44. Length 4.0–4.3 mm. See also items 42, 46. *C. brevicollis* Jacoby
- 27(26) Body smaller, 3.0–3.5 mm. Antennal segment 3 about 1.5 times as long as 2.
- 28(29) Apex of aedeagus short triangular with a small apical tip (Fig. 38). Spermatheca widened in angular fashion on apex of ductus-bearing branch (Fig.45). Prothorax with distinct and moderately dense punctures. Length 3.0–3.4 mm. *C. riedeli* sp.nov.
- 29(28) Aedeagus with rounded triangular apex ending in quite a long tip (Fig.39). Spermatheca not widened in angular fashion on apex of ductus-bearing branch (Fig.46). Prothorax with fine, sparse punctures. Length 3.0–3.5 mm. See also item 42. *C. ahmadi* sp.nov.
- 30(19) Apex of aedeagus truncate.
- 31(32) Aedeagus narrow, evenly convex on underside (Fig.40). Red with black tarsi. Length 4.0 mm. *C. rubra* sp.nov.
- 32(31) Aedeagus quite broad, sculptured on underside.
- 33(34) Body entirely fulvous. Head impunctate, prothorax finely and sparsely punctate. Aedeagus on underside with deep and sharply delimited triangular impression in apical half, concave and feebly sclerotized in basal half (Fig.49). Length 3.9 mm. *C. sandakana* sp.nov.
- 34(33) Body fulvous with apices of femora and tibiae blackish. Head and prothorax distinctly and quite densely punctate. Aedeagus on underside before apex with two convex, non-sclerotized areas, divided by a narrow space; basal part concave (Fig. 50). Length 4.6 mm. *C. bolmi* sp.nov.
- 35(18) Propleurae distinctly punctate.
- 36(37) Upperside dark reddish-fulvous with very strong metallic lustre, in lower light appears entirely violaceous. Proportions of antennal segments 2–4 are 5-10-10, preapical segments about 3.5 times as long as wide. Prothorax densely punctate, elytra strongly and very densely, but not rugosely, punctate. Underside piceous. Aedeagus – Fig. 57. Length 3.8 mm. Slightly unclear species, also included in group 7, only type is known. *C. violacea* Baly
- 37(36) Body red-fulvous, narrow lateral margins of prothorax and elytra with metallic green tint. Aedeagus – Fig. 51. Length 4.5 mm. *C. pleuralis* sp.nov.
- 38(17) Upperside not entirely fulvous.
- 39(44) Prothorax fulvous or red-fulvous.
- 40(43) Elytra fulvous with black marks or black with fulvous marks. Prothorax broadest at base. Preapical antennal segments not widened.

- 41(42) Elytra black with large, ovate, fulvous spot at centre (Fig. 22).
Spermatheca – Fig. 47. Length 2.8 mm. **C. sp. A**
- 42(41) Elytra otherwise marked (Figs 20, 21, 23–30), spermatheca - Figs 36, 37,
39. See also items 24, 26, 46, 47. **Females of**
C. brevicollis Jacoby, C. balyana L. Medvedev, C. ahmadi sp.nov.
- 43(40) Elytra metallic blue, 6 terminal antennal segments distinctly widened,
about 1.5 times as long as wide. Aedeagus – Fig. 52. Length 2.8 mm.
Sabah. **C. cyaneipennis sp.nov.**
- 44(39) Upperside entirely piceous or black. Females.
- 45(48) Prothorax broadest at base. Propleurae impunctate. Body short ovate.
- 46(47) Spermatheca – Fig. 44. Length 4.0–4.5 mm. See also items 26 and 42. ...
..... **C. brevicollis Jacoby**
- 47(46) Spermatheca – Fig. 43. Length 4.7–5.0 mm. See also items 24 and 42.
..... **C. balyana L. Medvedev**
- 48(45) Prothorax broadest just beyond midpoint. Propleurae distinctly punctate.
Body elongate-ovate. Underside and legs from fulvous to piceous or
black. Spermatheca – Fig. 48. Length of body 4.1–4.9 mm. Narrow
lateral margins of prothorax and elytra may exhibit metallic green tint.
Possibly females of *C. pleuralis* sp.nov. **C. sp. B**

***Colaspoides modesta* Baly, 1867**

Material examined. Borneo, no more precise data (LM).

Distribution. Sarawak (type).

***Colaspoides pseudomodesta* sp.nov.**

Material examined. Holotype (male): East Malaysia, Borneo, Sabah, Lok Kawi Wildlife Park, 5°51'N, 116°4'E, 5.VII.2009 (LM). Paratype: same locality and date, 1 female (LM).

Description. Morphology and coloration entirely identical with *C. modesta* Baly, 1867, differs only in other form and sculpture of aedeagus and in smaller size. Aedeagus with elongate-triangular, almost cuneiform apex, its underside concave in basal part (Fig. 8).
Length 4.9–5.0 mm.

Distribution. Sabah.

Differential diagnosis. Differs from *C. modesta* Baly only in quite different form of aedeagus. See key.

***Colaspoides biplagiata* Baly, 1867**

Material examined. A type (female) was studied.

Distribution. Sarawak.

***Colaspoides fuscoaenea* Baly, 1867**

Material examined. Borneo, 1 type (male) (BMNH): [Sabah], Kinabalu, 1 male (LM); – Borneo, Sabah, Crocker Range N.P., NW Keningau, 900–1200m, 16–20.XI.1996, leg. W.Schawaller, 1 male (SMNS), 1 female (LM), – Malaysia, Sabah, Kundasang, Ranau, 16.III.2009, leg. H.Takizawa, 1 male (LM), – same locality, 16.VIII.2008, 1 female (ITBC), – Malaysia, Sabah, Poring Park, Ranau, 16–17.V.2008, leg. H.Takizawa, 1 female (ITBC), – Malaysia, Sarawak, Lanjak Entimau W., Sanct.HQ Kapit, 18–28.VI.2008, leg. H.Takizawa, 1 male (ITBC).

Distribution. Sabah, Sarawak.

***Colaspoides tenuicornis* sp.nov.**

Material examined. Holotype (male): Sarawak, ex Staudinger (LM). Paratype: same label, 1 female (LM).

Description. Fulvous with prothorax reddish-fulvous, head and upperside with distinct metallic gloss.

Body elongate-ovate. Head lustrous, clypeus triangular, sparsely punctate, almost delimited from frons, with anterior margin weakly concave midway, frontovertex impunctate, with shallow central impression, ocular grooves almost indistinct. Antennae almost reach apex of elytra, proportions of segments 2–4 are 1:1.5:2, preapical segments thin, about 4 times as long as wide. Prothorax 1.7 times as wide as long, broadest just beyond mid-length, anterior angles acute, hind angles obtuse, surface lustrous, with quite strong and moderately dense punctures. Scutellum triangular. Elytra 1.3 times as long as wide, surface without postbasal impression, strongly and densely punctate, punctures confused, but arranged in regular rows in apical third and partly along suture. Central furrow of pygidium parallel-sided, widened at base, without ridge along the bottom. Propleurae impunctate. Fifth abdominal sternite of male very feebly serrate at the sides and arcuately excavated on hind margin. Fore-femora with very small but acute tooth midway along underside, other femora not toothed. Segment 1 of fore- and mid-tarsi moderately widened in male. Aedeagus with apex rounded truncate and small apical tip, underside with two non-sclerotized areas in middle part, deeply concave beyond them, apical part with central impression, which is grooved before apex (Fig. 10).

Length of body 3.4–3.5 mm.

Distribution. Sarawak.

Differential diagnosis. Near *C. fuscoaenea* Baly, 1867, differs in impunctate frontovertex and other form of aedeagus.

***Colaspoides submetallica* sp.nov.**

Material examined. Holotype (male): East Malaysia, Borneo, Sabah, Kinabalu Mt., 6°N, 116°33'E, 1500m, 27–31.VII.2009, leg. O.Gorbunov (LM). Paratypes: Borneo, Sandakan [Sabah], leg. Baker, 3 males, 1 female (NHMB, LM).

Description. Fulvous, upperside with metallic gloss, more distinct on sides.

Body elongate-ovate. Clypeus trapeziform, divided from frons, distinctly punctate in posterior part, with fore-margin concave, frontovertex almost entirely impunctate,

without impression. Antennae reach apical third of elytra, proportions of segments are as in *C. tenuicornis* sp.nov. (above)

Prothorax twice as wide as long, broadest just beyond mid-length, surface with strong and moderately dense punctures. Scutellum and elytra as in *C. tenuicornis* sp.nov. Furrow of pygidium narrowing from base to apex, without ridge along the bottom. Propleurae impunctate. Fifth abdominal sternite very feebly serrate at the side and slightly concave, almost straight at hind margin. Fore-femora with small tooth. Segment 1 of fore- and mid-tarsi of male moderately widened. Aedeagus with apex broadly rounded, without apical tip, underside concave, without additional sculpture (Fig. 31).

Length of body 3.5–3.6 mm.

Distribution. Sabah.

Differential diagnosis. Very near to *C. tenuicornis* sp.nov., only significant difference in form and structure of aedeagus.

Colaspoides gorbunovi sp.nov.

Material examined. Holotype (male): East Malaysia, Borneo, Sabah, Lok Kawi Wildlife Park, 5°51'N, 116°4'E, 5.VII.2009, leg. O.Gorbunov (LM).

Description. Fulvous with darkened apical antennal segments, head and upperside with very distinct metallic green lustre.

Body ovate. Head strongly punctate, clypeus trapeziform, not divided from frontovertex, with slightly concave anterior margin, frons with convex impunctate area in middle just behind clypeus. Antennae reach halfway along elytra, proportions of segments 2–4 are 8-20-17, preapical segments about 3–3.5 times as long as wide. Prothorax 1.8 times as wide as long, broadest around mid-length, with rounded side margins and obtuse fore- and hind angles, surface very lustrous, densely punctate. Scutellum elongate-triangular. Elytra 1.25 times as long as wide, surface without postbasal impression, strongly and densely punctate. Furrow of pygidium narrowing to apex, without ridge along the bottom. Propleurae impunctate. Fifth abdominal sternite feebly serrate on sides, hind margin almost straight. Fore-femora with well-developed tooth. Segment 1 of fore- and mid-tarsi distinctly widened, triangular. Aedeagus (not fully sclerotized) with elongate-triangular and acute apex (Fig.32).

Length of body 4.5 mm.

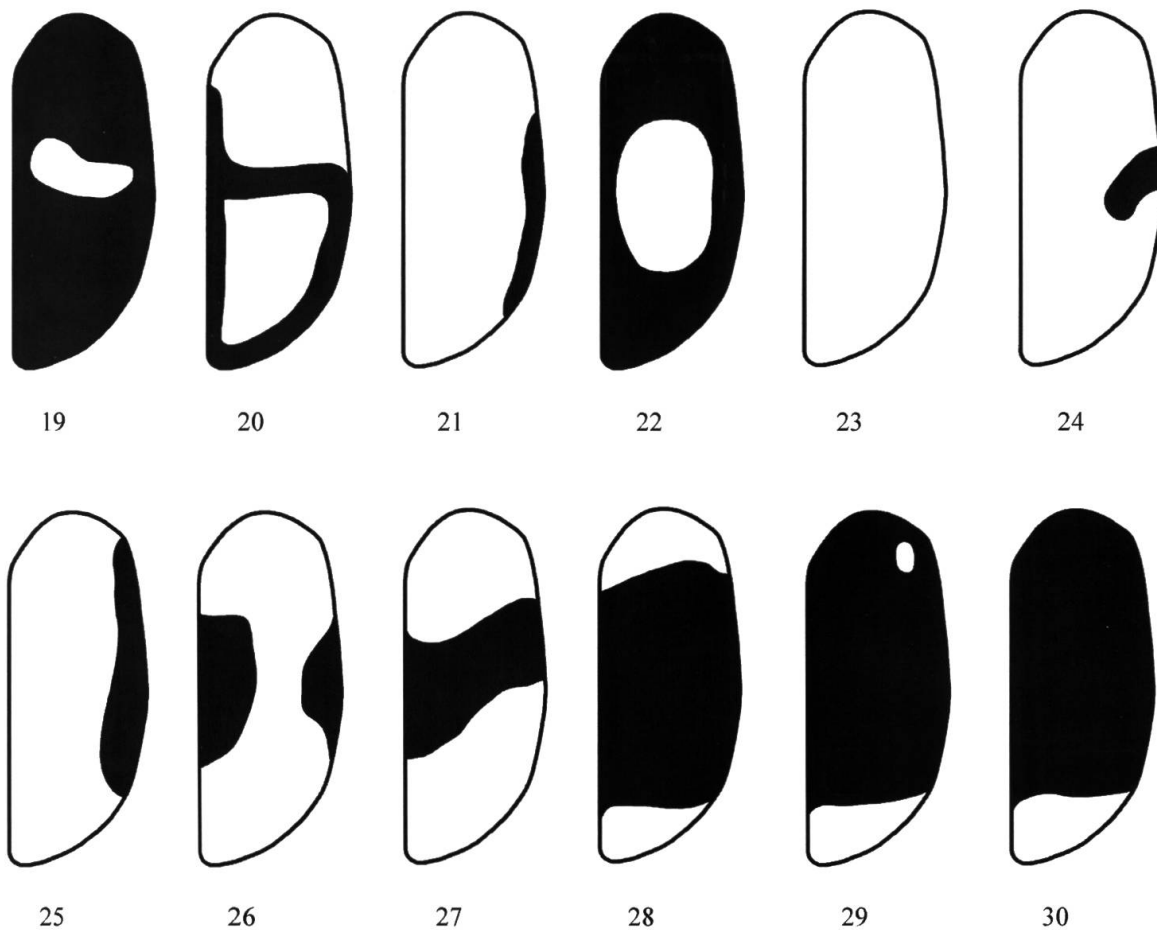
Distribution. Sabah.

Etymology. The species is named after its collector.

Differential diagnosis. Near *C. fuscoarena* Baly, 1867, differs mainly in form of aedeagus with elongate and acute apex.

Colaspoides nitidicollis sp.nov.

Material examined. Holotype (male): East Malaysia, Borneo, Sabah, Lok Kawi Wildlife Park, 5°51'N, 116°4'E, 5.VII.2009, leg. O.Gorbunov (LM). Paratypes: same locality and date, 1 female (LM); – Borneo, Sandakan [East Sabah], leg. Baker, 1 male (NHMB).



Figs 19–30. elytral pattern: 19 – *C. biplagiata* Baly, type, 20 – *C. brevicollis* Jacoby, 21 – *C. ahmadi* sp.nov, 22 – *C. sp. A*, 23–30 – *C. balyana* L. Medvedev.

Description. Entirely fulvous, no metallic gloss.

Male. Body ovate. Head almost impunctate, just a few punctures on clypeus, which is triangular, not divided from frons, with anterior margin straight, vertex without central impression, ocular grooves very feeble, almost indiscernible. Antennae reach past halfway along elytra, segment 3 twice as long as 2, segment 4 a little longer than 3, preapical segments thin, about 3 times as long as wide. Prothorax 1.7 times as wide as long, broadest around mid-length, side margins rounded, fore- and hind-angles obtuse, surface lustrous, finely and very sparsely punctate. Scutellum triangular. Elytra 1.35 times as long as wide, parallel-sided with broadly rounded apices, surface without postbasal impression, strongly and densely punctate, partly arranged in irregular rows on apical slope. Central groove of pygidium parallel-sided, widened only at base, without ridge along the bottom. Propleurae impunctate. Fifth abdominal sternite not serrate at the sides, with transverse impression and straight hind margin. Fore-femora with acute tooth, remaining femora not toothed. Segment 1 of fore- and mid-tarsi slightly widened.

Apex of aedeagus subtruncate with acute apical tip, underside with apical and basal concavities divided by oblique ridges (Fig. 33).

Length of body 3.3–3.4 mm.

Female. Elytra a little broader. Segment 1 of fore- and mid-tarsi thin. Spermatheca – Fig 41. Length of body 4.0 mm.

Distribution. Sabah.

Differential diagnosis. Near *C. fuscoarena* Baly, 1867, differs in form of aedeagus and fulvous upperside without metallic lustre.

***Colaspoides curticornis* sp.nov.**

Material examined. Holotype (male): East Malaysia, Borneo, Sabah, Kinabalu Mts, 6°N, 110°37'E, 1500m, 27–31.VII.2009, leg. O.Gorbunov leg. (LM).

Description. Fulvous with head and prothorax reddish-fulvous, 4 apical antennal segments black.

Body ovate. Clypeus not divided from frons, strongly punctate in hind part, with emarginated anterior margin, frontovertex with a few punctures and longitudinal impression. Antennae reach anterior third of elytra, segment 3 about 1.5 times as long as 2 and a little longer than 4, preapical segments moderately thickened, about twice as long as wide. Prothorax 1.3 times as wide as long, broadest before base, with rounded side margins, surface strongly punctate. Scutellum triangular. Elytra 1.25 times as long as wide, surface strongly punctate; punctures along side margins, on apical slope and along suture arranged in quite regular rows. Propleurae impunctate. Fifth abdominal sternite not serrate at the sides. Femora not toothed, segment 1 of fore- and mid-tarsi moderately widened, triangular. Aedeagus (Fig. 34) narrow, with rounded apex, evenly convex on underside. Length of body 3.5 mm.

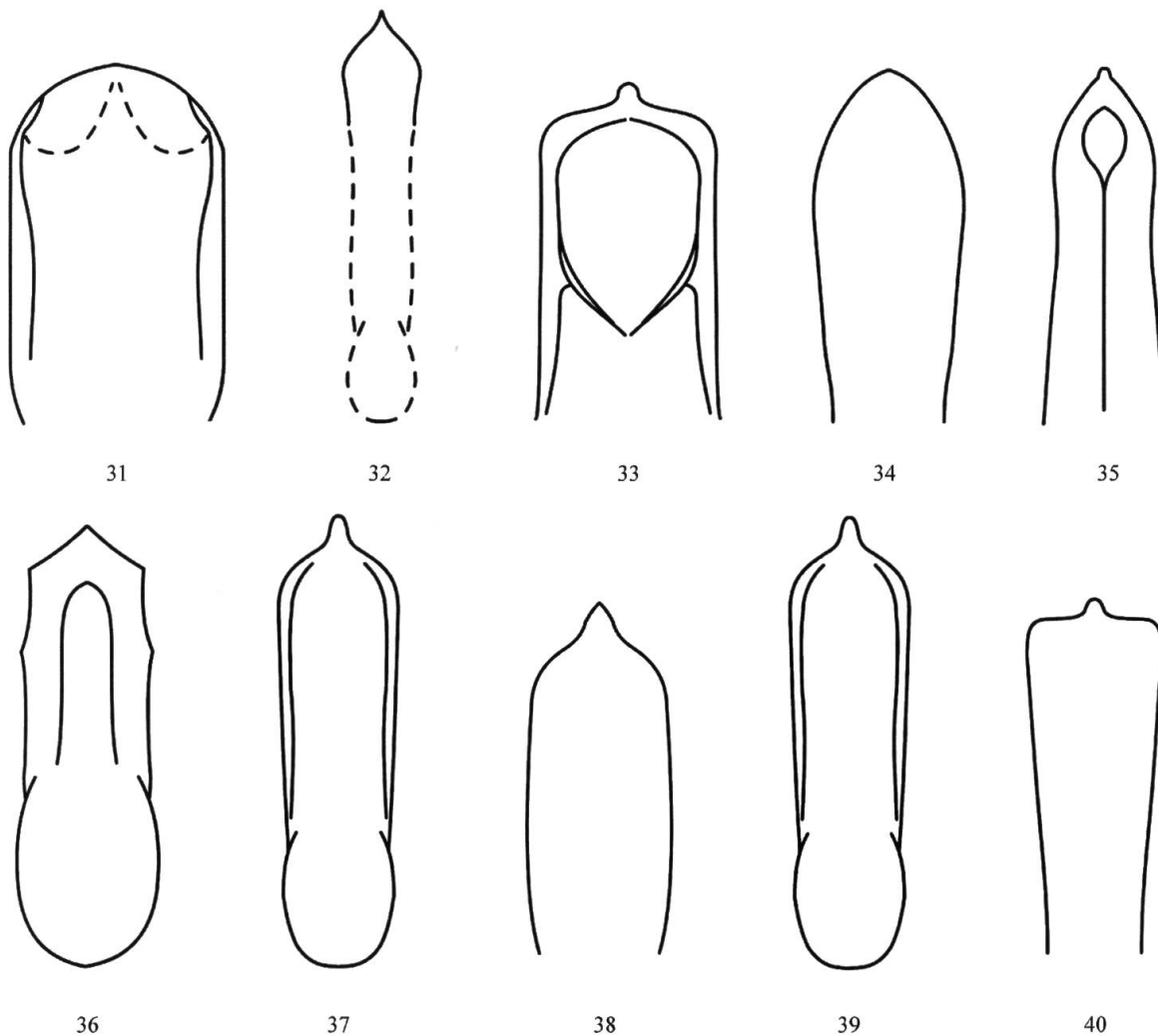
Differential diagnosis. Differs from the nearest fulvous species in rather short antennae, which have widened preapical segments.

***Colaspoides schawalleri* sp.nov.**

Material examined. Holotype (male): East Malaysia, Borneo, Sabah, Kinabalu Mts, 6°N, 110°37'E, 1500m, 27–31.VII.2009, leg. O.Gorbunov (LM). Paratypes: Borneo, Sabah, Sapulut, 1.VII.1996, leg. J.Kodada, 2 females (SMNS, LM).

Description. Fulvous, upperside with metallic gloss (in one female very intense and blue).

Body ovate. Clypeus not divided from frons, rectangular, strongly punctate, with weakly arcuate anterior margin, frontovertex more sparsely punctate, with longitudinal impression. Antennae reach halfway along elytra, segment 3 twice as long as 2 and a little longer than 4, preapical segments about 2.5 times as long as wide. Prothorax 1.8 times as wide as long, broadest beyond centre, with rounded side margins and obtuse fore- and hind-angles, surface lustrous, densely punctate. Scutellum triangular. Elytra 1.25 times as long as wide, without basal convexity, strongly and densely punctate,



Figs 31–40. aedeagus, ventral view: 31 – *C. submetallica* sp.nov, 32 – *C. gorbunovi* sp.nov, 33 – *C. nitidicollis* sp.nov, 34 – *C. curticornis* sp.nov, 35 – *C. schawalleri* sp.nov, 36 – *C. balyana* L. Medvedev, 37 – *C. brevicollis* Jacoby, type, 38 – *C. riedeli* sp.nov, 39 – *C. ahmadi* sp.nov, 40 – *C. rubra* sp.nov.

punctures confused and only on apical slope partly arranged in regular rows. Furrow of pygidium feebly narrowing from base to apex, without ridge along the bottom. Propleurae impunctate. Fifth abdominal sternite serrate at the sides, with hind margin straight in male and concave in female. Femora not toothed, but fore-femora with trace of angulation below. Segment 1 of fore- and mid-tarsi distinctly widened in male. Aedeagus (Fig.35) with triangular apex, underside with drop-shaped preapical impression and longitudinal ridge. Spermatheca – Fig. 42.

Length of body 4.4–4.6 mm.

Distribution. Sabah.

Etymology. Named in honour of Dr. W. Schawaller, who provided me with material in his care.

Differential diagnosis. Differs immediately from nearest species in metallic lustre of upperside, and form of aedeagus (especially specific impression on underside) and spermatheca.

***Colaspoides balyana* L.Medvedev, 2007**

Material examined. Type series from Sandakan, 58 specimens (USNM, LM), – Borneo, Brunei, 1 female (LM), – “Indonesia”, Borneo, Brunei, leg. Watertradt, ex coll. F.Monros, 2 females (LM), – Malaysia, Sabah, UMS hill Kota Kinabalu, 9.IV.2008, leg. H.Takizawa, 4 ex. (ITBC), – same, 3.IV.2008, 1 ex. (LM), – same, 22.IX.2007, 1 ex. (ITBC), – same, 22.V.2007, 1 ex. (LM), – same, 24.IV.2007, 3 ex. (ITBC), – same, 12.VI.2007, 1 ex. (LM), – same, 1.V.2007, 1 ex. (ITBC), – same, 1.III.2009, 1 ex. (ITBC)..

Distribution. Sabah, Brunei.

***Colaspoides brevicollis* Jacoby, 1898**

Material examined. Type series from Sabah (Kinabalu): 1 male, 2 females (BMNH), – W.Sarawak, Quop, 19.IV.1914, leg. Bryant, 1 female (BMNH), – Sarawak, foot of Mt. Dulit, junction of river Tinjar & Lejok, 5.X.1932, old secondary forest, leg. B.Hobby & A.Moore, 1 male, 1 female (BMNH), – Sarawak, R.Kapah trib., of River Tinjar, 2.X.1932, leg. B.Hobby & A.Moore, clearing for paddy, on bark of felled trees, 1 male (LM), 2 females (BMNH), – Malaysia, Sabah, Kg. Moyog Penampang, 13.IX.2008, leg. H.Takizawa, 1 ex. (ITBC), – Malaysia, Sabah, Kg.Guramboi Penampang, 28.IX.2008, leg. H.Takizawa, 1 ex. (LM), – Malaysia, Sabah, TV station, Telipok Kota Kinabalu, 8.IX.2007, leg. H.Takizawa, 1 ex. (ITBC).

Distribution. Sabah, Sarawak.

***Colaspoides riedeli* sp.nov.**

Material examined. Holotype (male): NW Borneo, Sarawak, Kuching, Bako-N.P., 27–29.III.1990, leg. A. Riedel (SMNS). Paratypes. Sarawak, Bako National Park, 28.IX.1966, leg. J. & Th. Clark, 3 females (USNM, 1 ex. LM).

Description. Fulvous with antennae more pale, upperside without metallic gloss.

Male. Body ovate. Head finely punctate, clypeus subquadrate, not divided from frons, with straight anterior margin, vertex without impressions. Antennae reach halfway along elytra, proportions of segments 2–4 are 8-11-13, preapical segments slightly widened, about 2.5 times as long as wide. Prothorax 1.8 times as wide as long, broadest at base and sharply narrowing towards the front, sides feebly rounded, fore- and hind angles obtuse, surface with fine and moderately dense punctures. Scutellum triangular with rounded apex. Elytra 1.2 times as long as wide, surface without postbasal impression, with large and moderately dense punctures arranged on sides and apical slope in subregular rows. Furrow of pygidium narrowing from base to apex. Propleurae impunctate. Abdomen without erect hairs in male. Fifth abdominal sternite feebly serrate at the sides, with slightly concave hind margin. All femora not toothed. Segment 1 of fore- and mid-tarsi slightly widened. Aedeagus (Fig. 38) with short triangular apex and small acute tip, underside slightly concave, without sculpture.

Length of body 3.4 mm.

Female. Spermatheca – Fig. 45.

Length of body 3.0–3.4 mm.

Distribution. Sarawak.

Etymology. The species is named after its collector.

Differential diagnosis. Near *C. brevicollis* Jacoby, 1898, differs in smaller size, other form of aedeagus and spermatheca and absence of erect hairs on abdomen of male.

***Colaspoides ahmadi* sp.nov.**

Material examined. Holotype (male): Malaysia, Sabah, Pulau Gaya, Kota Kinabalu, 28.III.2008, leg. H.Takizawa (ITBC). Paratypes: same locality and date, 1 female (LM), – Malaysia, Sabah, Kiulu, Tamparuli Tuaran, Kota Kinabalu, 27.V.2007, leg. H.Takizawa, 1 female (ITBC).

Description. Red-fulvous, antennae paler with darkened apical segments, upperside without metallic gloss, one female with blackish lateral margin of elytra (Fig. 21).

Body ovate. Clypeus quadrate, punctate, not divided from frons, with slightly concave anterior margin, frontovertex almost entirely impunctate. Antennae reach halfway along elytra, proportions of segments 2–4 are 8-11-13, preapical segments about 3.5 times as long as wide. Prothorax as in *C. riedeli* sp.nov.; surface with fine, sparse punctures. Elytra, pygidium and propleurae as in *C. riedeli* sp.nov. Abdomen with erect hairs on sternites 1–4 in male, sides of 4th and 5th sternites distinctly serrate. All femora not toothed. Segment 1 of fore- and mid-tarsi slightly widened. Aedeagus with rounded-triangular apex ending in quite a long tip, underside feebly concave, without sculpture (Fig. 39). Spermatheca (Fig. 46) not widened angularly on apex of ductus-bearing branch.

Length of male 3.0 mm, of female 3.2–3.5 mm.

Distribution. Sabah.

Etymology. Named in honour of Dr. Abdul Hamid Ahmad, who provided me with material in his care.

Differential diagnosis. Very near to *C. riedeli* sp.nov., differs clearly in form of aedeagus and spermatheca, also in some other morphological characters.

***Colaspoides rubra* sp.nov.**

Material examined. Holotype (male): Borneo, Sabah, Lok Kawi Wildlife Park, 5°51'N, 110°04'E, 5.VII.2009, leg. O.Gorbunov (LM).

Description. Red, tarsi black; claws and apex of claw segment fulvous.

Body ovate. Clypeus strongly punctate, poorly divided from frons, with arcuate anterior margin, frontovertex with a few punctures at centre. Proportions of antennal segments: 10-5-7-8-8- (following segments missing). Prothorax twice as wide as long, broadest at base, with strongly rounded side margins and acute fore- and hind angles, surface with fine and moderately dense punctures. Scutellum triangular with rounded apex. Elytra 1.1 times as long as wide, without basal convexity, strongly convex, with large and moderately dense, confused punctures, arranged in subregular rows on apical third. Furrow of pygidium narrowing from base to apex, not ridged along the bottom.

Propleurae impunctate. Fifth abdominal sternite not serrate at the sides, with straight hind margin. All femora not toothed. Segment 1 of fore- and mid-tarsi feebly widened, triangular. Aedeagus narrow, widening from base to apex (Fig. 40).

Length of body 4.0 mm.

Distribution. Sabah.

Differential diagnosis. Belongs to group of species nearest to *C. brevicollis* Jacoby (with prothorax broadest at base), but differs in colour of body, especially tarsi, and truncate apex of aedeagus.

***Colaspoides sandakana* sp.nov.**

Material examined. Holotype (male): Borneo, Sandakan, leg. Baker (NHMB).

Description. Entirely fulvous.

Body elongate-ovate. Head almost entirely impunctate, clypeus triangular, delimited from frons, with arcuate anterior margin. Antennae reach halfway along elytra, proportions of segments 2–4: 5-9-9, preapical segments thin, about 4–5 times as long as wide. Prothorax 1.8 times as wide as long, broadest around mid-length, with rounded side margins and obtuse angles, surface distinctly and rather sparsely punctate. Scutellum triangular. Elytra 1.4 times as long as wide, surface strongly and confusedly punctate but with a few rows on apical slope. Furrow of pygidium parallel-sided, without ridge on bottom. Propleurae impunctate. Fifth sternite of abdomen weakly serrate at the sides. All femora not toothed. Segment 1 of fore- and mid-tarsi strongly widened. Underside of aedeagus (Fig. 49) with deep and sharply delimited triangular impression in apical half, concave and weakly sclerotized in basal half.

Length of body 3.9 mm.

Distribution. Sabah.

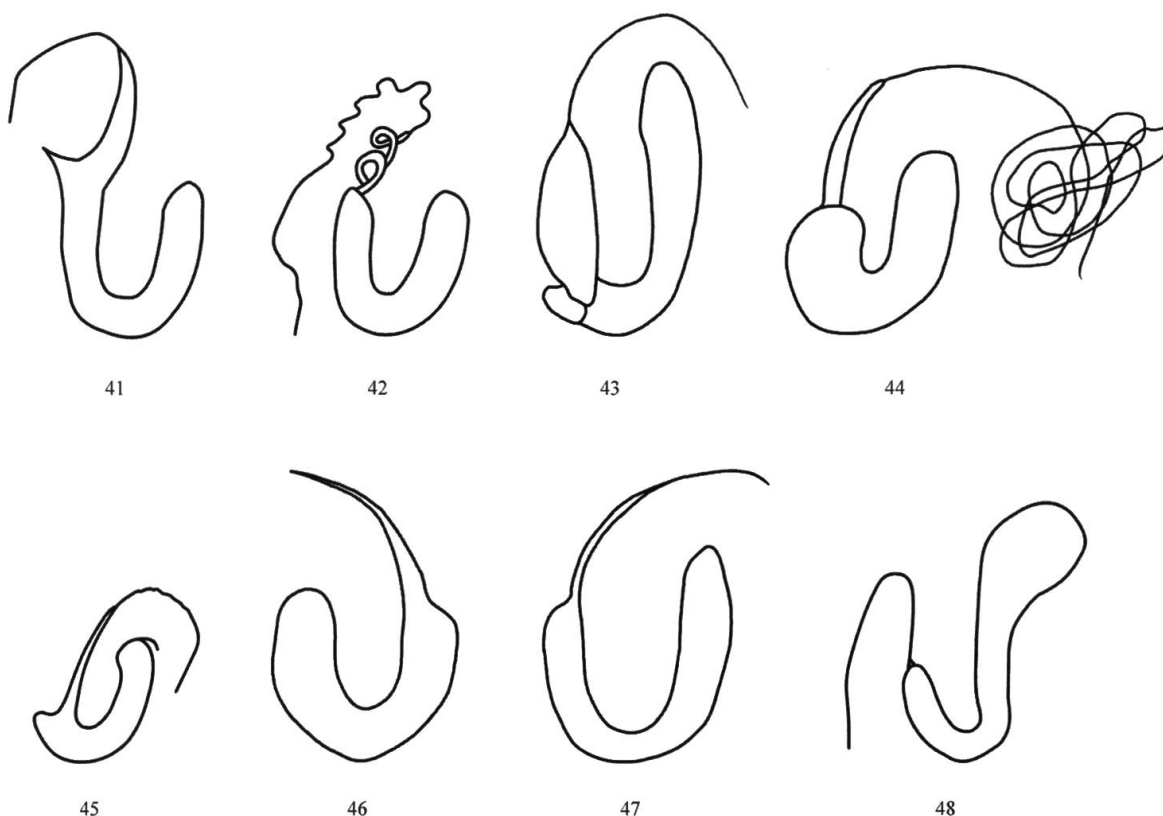
Differential diagnosis. See key.

***Colaspoides bolmi* sp.nov.**

Material examined. Holotype (male): Borneo, Sabah, Tibow, 45 km NE of Sapulut, 600–900m, 7–15.IV.2000, leg. Bolm (NHMB).

Description. Fulvous with darker prothorax, apical antennal segments, apices of femora and tibiae more or less blackish.

Body elongate-ovate. Clypeus trapeziform, not divided from frons, slightly arcuate on anterior margin, strongly punctate; frontovertex more finely and sparsely punctate. Antennae reach halfway along elytra, proportions of segments 2–4 are 4-11-10, preapical segments about 3 times as long as wide. Prothorax 1.75 times as wide as long, broadest beyond mid-length, with lightly rounded side margins and obtuse angles, surface not strongly punctate but densely so, especially at the sides. Scutellum triangular with rounded apex. Elytra 1.25 times as long as wide, surface densely and confusedly punctate, with a few rows on apical slope. Furrow of pygidium parallel-sided, but



Figs 41–48. spermatheca: 41 – *C. nitidicollis* sp.nov, 42 – *C. schawalleri* sp.nov, 43 – *C. balyana* L. Medvedev, 44 – *C. brevicollis* Jacoby, type, 45 – *C. riedeli* sp.nov, 46 – *C. ahmadi* sp.nov, 47 – sp. A, 48 – sp. B.

widened at base, without ridge along the bottom. Fifth sternite of abdomen serrate at the sides, with almost straight hind margin. All femora not toothed. Segment 1 of fore- and mid-tarsi moderately widened. Aedeagus on underside before apex with two convex and non-sclerotized areas divided by a narrow space; basal part convex (Fig. 50).

Length of body 4.6 mm.

Distribution. Sabah.

Etymology. The species is named after its collector.

Differential diagnosis. Differs from all fulvous species in unusual structure of aedeagus and from most of them in its black tibiae.

Colaspoides violacea Baly, 1867

See below, group 7.

***Colaspoides pleuralis* sp.nov.**

Material examined. Holotype (male): Borneo, Sandakan, leg. Baker (NHMB).

Description. Red fulvous, narrow lateral margins of prothorax and elytra with metallic green tint.

Body elongate-ovate. Clypeus triangular, poorly delimited from frons, with feebly concave anterior margin; hind part of clypeus and frons with deep, sparse punctures, vertex almost impunctate. Antennae reach halfway along elytra, proportions of segments 2–4 are 5-11-10, preapical segments thin, about 4 times as long as wide. Prothorax 1.8 times as wide as long, broadest beyond mid-length, side margins rounded, anterior and posterior angles obtuse, surface with moderately strong, dense punctures, but all interspaces flat and about twice as wide as punctures. Scutellum triangular with rounded apex, impunctate. Elytra 1.25 times as long as wide, surface densely and confusedly punctate, especially at the sides, with a few rows on apical slope. Furrow of pygidium parallel-sided without ridge along the bottom. Propleurae punctate. Fifth abdominal sternite feebly serrate at the sides with almost straight hind margin. All femora not toothed. Segment 1 of fore- and mid-tarsi moderately widened. Aedeagus (Fig. 51) narrowing from base to truncate apex, with an apical tip and angulate lateroapical angles; this makes the apex appear almost tridentate; underside with central impressed line in apical half and feebly sclerotized areas on each side of this line.

Length of body 4.5 mm.

Distribution. Sabah.

Differential diagnosis. Differs clearly from all fulvous species in its distinctly punctured propleurae.

***Colaspoides* sp. A**

Material examined. East Malaysia, Borneo, Sabah, Kinabalu Mt, 1500m, 6°N, 116°33'E, 27–31.VII.2009, leg. O.Gorbunov, 1 female (LM).

Distribution. Sabah.

Remark. This form might be a new species or an unusual colour form of any species from the *C. brevicollis* group.

***Colaspoides cyaneipennis* sp.nov.**

Material examined. Holotype (male): Borneo, Sabah, Tibow, 45km NE of Sapulut, 600–900m, 7–15.IV.2000, leg. Bolm (NHMB).

Description. Reddish-fulvous, elytra metallic blue, 6 apical antennal segments, tibiae and tarsi black, abdomen piceous.

Body ovate. Head with feeble ocular grooves, clypeus trapeziform, not separated from frons, with anterior margin feebly undulate, surface finely punctate, frontovertex very finely and sparsely punctate, with deep longitudinal groove on vertex. Antennae

reach halfway along elytra, with 5 apical segments triangularly widened, about 1.4 times as long as wide. Prothorax 2.25 times as wide as long, broadest before base, with rounded side margins and obtuse angles, surface lustrous, with sparse and quite large punctures. Scutellum semicircular, with a few microscopic punctures. Elytra 1.2 times as long as wide, broadest at the shoulders, without postbasal impression, with strong, but not dense, punctures, partly arranged in irregular rows, especially on apical slopes, without rugosity on sides. Furrow of pygidium not ridged along the middle. Propleurae lustrous, impunctate. Fifth abdominal sternite not serrate at the sides, with slightly concave hind margin. All femora not toothed. Segment 1 of fore- and mid-tarsi moderately widened. Aedeagus (Fig. 52) on underside moderately convex, lacking sculpture.

Length of body 2.9 mm.

Distribution. Sabah.

Differential diagnosis. Differs clearly from all species in this group in its combination of red-fulvous body with metallic blue elytra, widened preapical antennal segments and form of aedeagus.

***Colaspoides* sp. B**

Material examined. Borneo, Sabah, Batu Punggul Resort, 29.VI–I.VII.1996, leg. J.Kodada, 3 females (SMNS, 1 ex. – LM), – Malaysia, Sabah, Taman B, Crocker NQ, Keningau, 25.XI.2007, leg. H.Takizawa, 2 females (LM).

Distribution. Sabah.

Remark. Very possibly females of *C. pleuralis* sp.nov. rather than separate species.

Group 4

[Posterior or both femora toothed below. Upperside metallic.]

- 1 (2) Elytra with dense regular rows, more or less confused only in sutural area. Head, including clypeus, with fine or moderately strong punctures. Metallic green, purple or red-cupreous, antennae fulvous with blackish apical segments, labrum and palpi fulvous, underside and legs often fulvous with metallic reflection. Ductus-bearing branch of spermatheca with tubercle halfway along outer side (Fig. 60). Fore-femora usually with distinct tooth. Aedeagus with acute elongate-triangular apex (Fig. 53). Length 6.3–8.6 mm. ***C. regularis* Baly**
- 2(1) Elytra confusedly punctate, punctures only partly arranged in regular rows. Frons and vertex almost entirely impunctate, antennae black with 5 basal segments fulvous, labrum and palpi fulvous, underside and legs partly transparent and fulvous. Ductus-bearing branch of spermatheca without tubercle on outer side (Fig. 61). Fore-femora with very feeble tooth, looking like angulation. Length 7.0 mm. Male unknown. ***C. borneoensis* Jacoby**

***Colaspoides regularis* Baly, 1867**

Material examined. Sarawak, foot of Mt. Dulit, junction of rivers Tinjar & Lejok, secondary forest, 10–16.VIII. and 14.IX.1932, on light and in secondary forest, Oxford Univ. Exp., leg. B. Hobby & A. Moore, 1 male, 4 females (BMNH); – Sarawak, Puak, 31.IV.1914, leg. G.E. Bryant, 1 female (BMNH); – B.N.Borneo, Mt. Kinabalu, Kiau, 3000 ft., 14.IV.1929, leg. M.H.Pendlebury, 1 female (BMNH) – Sarawak, Semengoh Forest Reservation, 15 mi. SO Kuching, 14.IX.1966, leg. T. & M. Clarke, 2 females (USNM); – B.N. Borneo, Mt. Kinabalu, Kiau, 3000 ft., 11–14.IV.1929, leg. H. Pendlebury, 1 female (BMNH); – Borneo, Kinabalu, 1 male, 1 female (LM) – Borneo, Sandakan, 1 female (USNM), – Malaysia, Sarawak. Lanjak Entimau W., Sanct. HQ, Kapit, 18–28.VI.2008, leg. H.Takizawa, 7 ex. (ITBC), – Malaysia, Sabah, Kg. Silau Ranau, 1.III.2008, leg. H.Takizawa, 2 ex. (ITBC), – same locality, 16–17.V.2008, 1 ex. (LM), – same locality, 9–10.VII.2008, 1 ex. (ITBC), – Java, Buitenzorg, Bryant & Palmer Coll., 1 female (BMNH), – Java, Bantar Gebang, Bryant & Palmer Coll., 1 female (LM).

Distribution. Sarawak, Sabah. Java.

***Colaspoides borneoensis* Jacoby, 1898.**

Material examined. Type from Sarawak, female ex coll G. Doria (BMNH).

Distribution. Sarawak.

Group 5

[Metallic green, labrum and palpi fulvous. Preapical antennal segments twice as long as wide. Spermatheca U-shaped, ductus spiralled or simple, with thicker basal part. Male unknown.]

- 1(2) Basal antennal segment dark green above. Head deeply and closely punctate, more sparsely on clypeus, vertex with very deep longitudinal groove. Prothorax with strong and moderately dense punctures. Elytra deeply punctate-striate, interstices strongly convex from middle to apex, in females transversely raised at the sides. Length 4.2–5.2 mm. ***C. malayanus* Jacoby**
- 2(1) Basal antennal segment entirely fulvous.. Head finely and not densely punctate, more coarsely on clypeus, vertex without deep longitudinal groove. Prothorax with quite fine punctures, not dense. Elytra finely and confusedly punctate, interstices not strongly convex, females without transverse rugosity at the sides, mostly with 1–2 longitudinal elevations along side margins.
- 3(4) Ductus nitidiform in basal half and spiralled in apical part, distinctly divided from spermatheca (Fig. 62). Length 4.0–4.5 mm. ***C. coeruleipes* Baly**
- 4(3) Ductus entirely nitidiform, not distinctly divided from spermatheca (Fig. 63). Length 4.4 mm. ***C. sp. C***

***Colaspoides malayanus* Jacoby, 1894**

Material examined. No material.

Distribution. Kalimantan, Selatan (Martapura). This single and somewhat unclear species is known from southern Borneo.

***Colaspoides coeruleipes* Baly, 1867**

Material examined. A type (female) from Borneo, no more exact data (BMNH), – Malaysia, Sabah, Kundasang, Ranau, 14.VII.2007, leg. H.Takizawa, 1 female (ITBC), – Malaysia, Sabah, Poring Park, Ranau, 4–5.IV.2008, leg. H.Takizawa, 1 female (LM), – same locality, 26–27.X.2007, 1 female (ITBC), – Borneo, Sandakan, leg. Baker, 4 females (NHMB, 2 ex. – LM)..

Distribution. Sabah.

Remark. The name of the species in the original description was given twice as “*coerulipes*”, but Baly’s original label on the type is “*coeruleipes*”.

***Colaspoides* sp. C**

Material examined. Malaysia, Sarawak, Lanjak Entimau W., Sanct. HQ, Kapit, 18–28.VI.2008, leg. H.Takizawa, 1 female (ITBC).

Group 7

[Upperside metallic (rarely elytra or upperside more or less fulvous with metallic gloss in immature specimens, underside fulvous or piceous (in one species metallic), legs fulvous or piceous, propleurae impunctate or with a few punctures.]

- 1(4) Antennal segments 2–4 subequal, preapical segments widened, 1.5–2 times as long as wide. Sides of elytra with two more or less distinct ridges. Propleurae impunctate.
- 2(3) Underside and legs piceous to black. Aedeagus – Fig. 54, spermatheca – Fig. 64. Length 2.9–3.8 mm. ***C. obscuripes* sp.nov.**
- 3(2) Underside dark greenish-bronze, legs fulvous. Aedeagus – Fig. 55, spermatheca – Fig. 65. Length 3.2–4.1 mm. ***C. viridiventris* sp.nov.**
- 4(1) Antennal segments 3 and 4 distinctly longer than 2, preapical segments thin, 3–4 times as long as wide. Elytra mostly not costate at the sides. Propleurae more or less punctate.
- 5(6) Anterior femora with small tooth or at least distinctly angulate below. Proportions of antennal segments 2–4 are 5-10-8, preapical segments about 3–3.5 times as long as wide. Prothorax finely and quite densely punctate. Body elongate-ovate. Underside piceous to fulvous, legs fulvous. Upperside of male usually metallic green, female with prothorax dark green, purple- or red-cupreous, elytra usually red-

- cupreous; young specimens often more or less fulvous with metallic gloss. Aedeagus with apex broadly rounded, tip short; underside deeply concave (Fig. 56). Spermatheca – figs 66, 67. Length of male 3.2–3.8 mm, of female 3.5–4.2 mm. *C. viridimarginata* Baly
- 6(5) Anterior femora not toothed. Apex of aedeagus more or less triangular.
- 7(8) Underside of aedeagus with deep, sharply delimited, drop-shaped impression near apex (Fig. 57). Upperside dark reddish-fulvous with very strong metallic lustre, appearing entirely violaceous in low light. Proportions of antennal segments 2–4: 5-10-10, preapical segments about 3.5 times as long as wide. Prothorax densely punctate, elytra strongly and very densely, but not rugosely, punctate. Underside piceous. Length 3.8 mm. *C. violacea* Baly
- 8(7) Underside of aedeagus lacking such a depression near apex. Upperside of males metallic green. Underside and legs fulvous, tibiae sometimes darkened.
- 9(10) Aedeagus quite broad with rounded-triangular apex, underside concave with narrow longitudinal impression in apical third (Fig. 58). Spermatheca U-shaped, base of ductus spiralled one full turn (Fig. 68). Body broadly ovate. Prothorax metallic green or greenish-aeneous, elytra red-cupreous. Proportions of antennal segments 2–4: 5-10-8, preapical segments about 3 times as long as wide. Length of possible male 3.0–3.3 mm, of female 3.9–4.4 mm. *C. insignis* Baly
- 10(9) Aedeagus rather narrow with triangular apex, underside slightly convex with narrow longitudinal impression along its whole length (Fig. 59). Spermatheca hook-like, ductus thick basally, then thread-shaped with stick-shaped piece on end (Fig. 69). Body elongate-ovate. Upperside metallic green. Proportions of antennal segments 2–4: are 5-8-9, preapical segments about 4 times as long as wide. Length of male 3.4–3.7 mm, of female 4.0–4.4 mm. *C. shuteae* sp.nov.

***Colaspoides obscuripes* sp.nov.**

Material examined. Holotype (male): East Malaysia, Borneo, Sabah, Lok Kawi Wildlife Park, 5°51'N, 116°4'E, 5.VII.2009, leg. O.Gorbunov (LM). Paratypes: same locality and date, 1 female (LM), – Malaysia, Sabah, Gn. Alab, Crocker R. Park, Penampang, 14.X.2007, leg. H.Takizawa, 2 females (ITBC), same locality, 7.II.2008, 1 female (LM), same locality, 12.IV.2008, 3 female (ITBC, 1 ex.– LM).

Description. Head and upperside metallic green (holotype and paratype from same locality) or head and prothorax greenish-black with more or less purple sheen, elytra metallic red-cupreous. Antennae with segment 1 black above and fulvous below, 2–5 fulvous, 6–11 black, labrum, underside and legs piceous to black. Body elongate-ovate. Head strongly punctate, clypeus transverse, not divided from frons, with anterior margin angularly emarginated, vertex without impressions. Antennae reach anterior third of elytra, 5 apical segments distinctly widened, segments 2–4 subequal, preapical segments

about twice as long as wide. Prothorax 1.9 times as wide as long, broadest beyond mid-length, side margins arcuate (mostly in anterior half), fore- and hind angles not produced, surface with strong and moderately dense punctures. Elytra 1.2 times as long as wide, without postbasal impression, strongly and confusedly punctate but with a few rows on apical slope and on sides, two outermost interspaces more or less costate beyond centre. Propleurae impunctate. Underside finely punctate and microsculptured. Fifth abdominal sternite not serrate at the sides, with straight (male) or feebly concave (female) hind margin. Segment 1 of fore- and mid-tarsi not widened in male. All femora not toothed. Aedeagus (Fig. 54) with apex triangular and acute tip, feebly convex on underside, lacking sculpture. Spermatheca C-shaped with one branch and basal part of ductus thick (spiralled, Fig. 64).

Length of male 2.9 mm, of female 3.2–3.8 mm.

Distribution. Sabah.

Differential diagnosis. Near *C. viridimarginata* Baly, differs in non-toothed anterior femora, subequal antennal segments 2–4 and widened preapical antennal segments.

***Colaspoides viridiventris* sp.nov.**

Material examined. Holotype (male): Malaysia, Sabah, Mesilau, summit tr., Ranau, 2300–2600m, 31.I.2009, leg. H.Takizawa (ITBC). Paratypes: same locality and date, 1 male (LM), – East Malaysia, Borneo, Sabah, Kinabalu Mt., 6°N, 116°33'E, 1500m, 27–31.VII.2009, leg. O.Gorbunov, 1 female (LM), – British North Borneo, Mt.Kinabalu, Kamborangah, 7150 ft, 27.III.1929, leg. H.M.Pendlebury, F.M.S.Museum, 4 females (BMNH, 1 ex.– LM), – Borneo, Sabah, Mt.Kinabalu N.P., Layang- Layang, 2621 m, 1.V.1987, beating foliage, leg. D.E.Bright, 4 females (USNM, 1 ex.– LM).

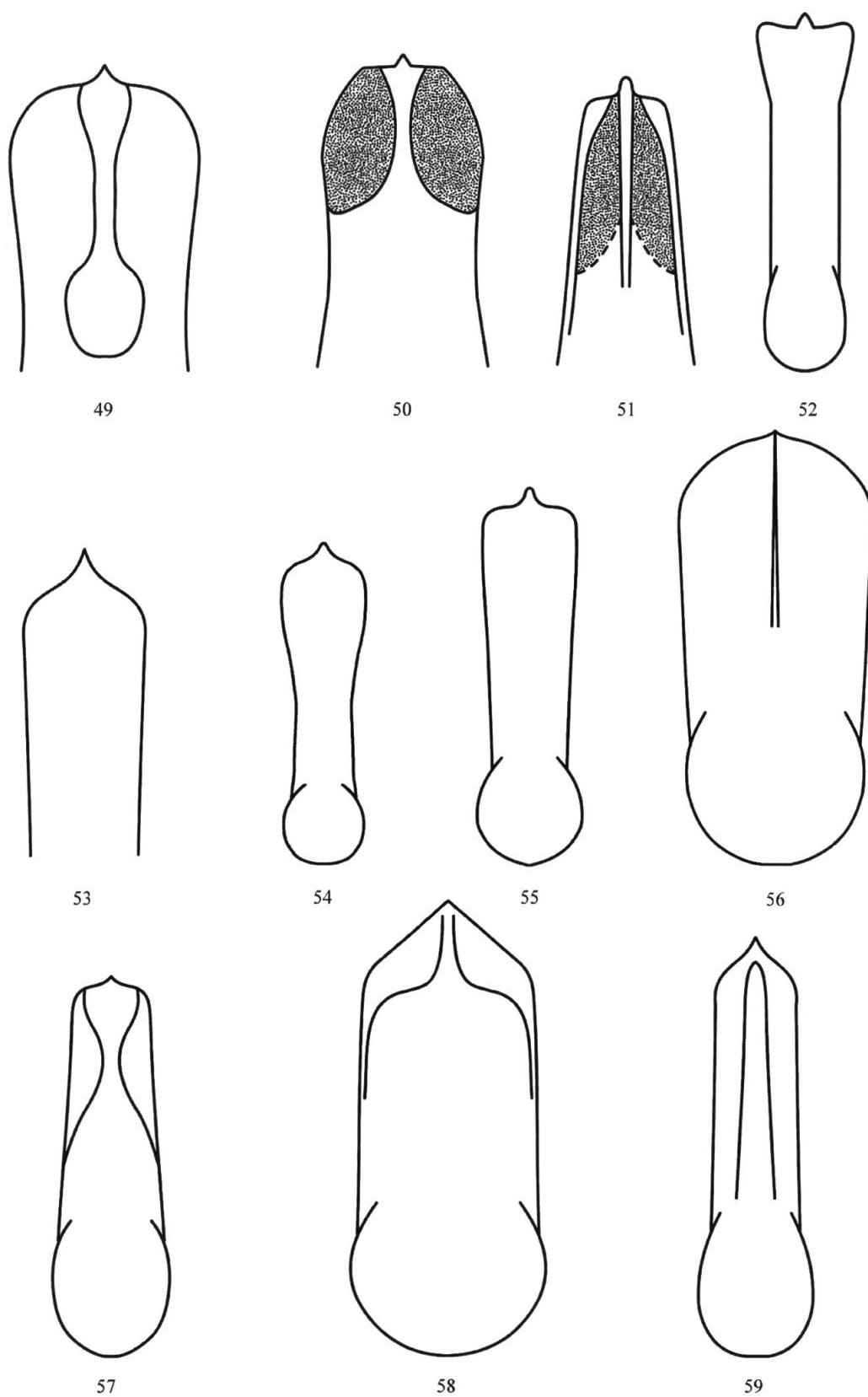
Description. Metallic bronze, underside dark greenish-bronze, labrum, mandibles, palpi and legs fulvous, antennae black with 5 basal segments fulvous.

Body elongate-ovate. Head strongly and densely punctate, clypeus transverse, not divided from frons, with anterior margin arcuately emarginated, vertex without impressions. Antennae reach anterior quarter of elytra, 5 apical segments moderately widened, segments 2–4 subequal, preapical segments about 1.5 times as long as wide. Prothorax 1.7 times as wide as long, broadest beyond mid-length, hind angles acute, fore-angles especially so. Surface strongly and densely punctate. Elytra 1.4 times as long as wide, without postbasal impression, strongly and confusedly punctate but with a few rows on sides and on apical slope, on sides with two obtuse ridges. Propleurae impunctate. Fifth abdominal sternite not serrate at the sides, with hind margin broadly concave. Furrow of pygidium narrowing slightly from base to apex, without ridge along the bottom. All femora not toothed. Aedeagus narrow, moderately widening from base to subtruncate apex, with acute apical tip (Fig. 55), thin in lateral view. Spermatheca – Fig. 65.

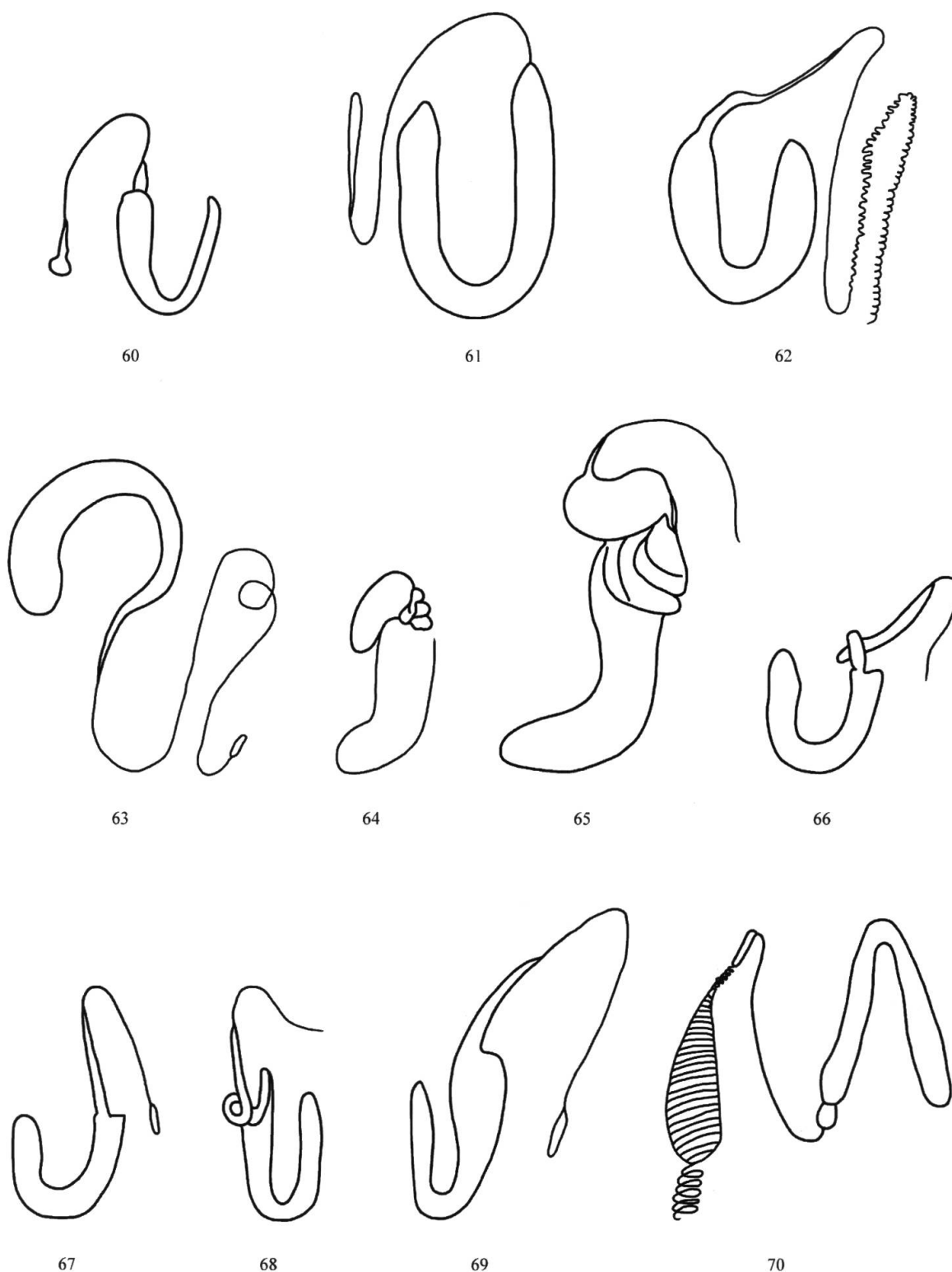
Length of male 3.2–3.3 mm, of female 3.2–4.1 mm.

Distribution. Sabah.

Differential diagnosis. Near *C. obscuripes* sp.nov., differs in having metallic bronze upperside, metallic green underside, fulvous legs and a slightly different form of aedeagus.



Figs 49–59. aedeagus, ventral view: 49 – *C. sandakana* sp.nov, 50 – *C. bolmi* sp.nov, 51 – *C. pleuralis* sp.nov, 52 – *C. cyanipennis* sp.nov, 53 – *C. regularis* Baly, 54 – *C. obscuripes* sp.nov, 55 – *C. viridiventris* sp.nov, 56 – *C. viridimarginata*, 57 – *C. violacea*, type, 58 – *C. insignis* Baly, 59 – *C. shuteae* sp.nov.



Figs 60–70. spermatheca: 60 – *C. regularis* Baly, 61 – *C. borneoensis*, Baly, type, 62 – *C. coeruleipes* Baly, type, 63 – *C. sp. C.*, 64 – *C. obscuripes* sp.nov, 65 – *C. viridiventr*is sp.nov, 66 – *C. viridimarginata* Baly, type, 67 – *C. viridimarginata* Baly, Ranau, 68 – *C. insignis* Baly, 69 – *C. shuteae* sp.nov, 70 – *C. mirabilis* sp.nov.

***Colaspoides viridimarginata* Baly, 1867**

Material examined. A type female from Borneo without more exact data (BMNH), – Sarawak, Quop, III.1914, leg. Bryant, 4 females (BMNH, 1 ex. – LM), – Sarawak, foot of Mt. Dulit, junction of rivers Tinjar and Lejok trap 5, on light, 4.X.1932, leg. B.Hobby & A.Moore, 1 female (BMNH), – same label, 5.X.1932, 1 female (BMNH), – same label, in rotten felled timber, 13.VIII.1932, 1 female (BMNH), – Sarawak, between Tijar & Rumah Bulan Ding, old secondary forest, 10.XI.1932, leg. B.Hobby & A.Moore, 1 female (LM), – Sarawak, Mt. Dulit, R. Layan, 2500 ft, primary forest, 17.XI.1932, leg. B.Hobby & A.Moore, 1 male (BMNH), – Sarawak, Semengoh Forest Reservation, 15 miles SO Kuching, 16.IX.1966, leg. J. & Th.Clark, 1 male (USNM), – Borneo, Brunei, 1 male (LM), – Malaysia, Sabah, Gunung Emas, Crocker Mts, 22.IV.1993, leg. Jenis & Strba, 1 male (LM), – [Sabah] Borneo, Sandakan, leg. Baker, 1 male, 6 females (USNM, 1 ex. – LM), – Malaysia, Sabah, Pubau Gaya, Kota Kinabalu, 28.III.2008, leg. H.Takizawa, 5 males (ITBC), – same locality, 21.III.2008, leg. H.Takizawa, 1 female (ITBC), – Malaysia, Sabah, Kapad Inanam, Kota Kinabalu, 18.V.2008, leg. H.Takizawa, 1 male, 1 female (LM), – Malaysia, Sabah, Lower Mamut, Ranau, 22.III.2008, leg. H.Takizawa, 1 female (LM), – Malaysia, Sabah, Kg. Silau, Ranau, 1.III.2008, leg. H.Takizawa, 1 male, 5 females (ITBC), – Malaysia, Sabah, Poring Park, Ranau, 29–30.IX.2007, leg. H.Takizawa, 1 male (ITBC), same locality, 25–26.II.2008, 1 male, 2 females (ITBC), – same locality, 22–24.III.2008, 1 male, 1 female (ITBC), – Malaysia, Sabah, Rg. Sinarut Daru, Ranau, 21.VII.2007, leg. H.Takizawa, 2 females (ITBC), – Malaysia, Sarawak, Lanjak Entimau W, Sanct HQ, Kapit, 18–28.VI.2008, leg. H.Takizawa, 1 male, 1 female (ITBC).

Distribution. Sarawak, Brunei, Sabah.

Remark. The thin part of the ductus has a loop near the base in the type specimen (Fig. 66), but other females lack this feature (Fig. 67). However, the ductus is thin and highly flexible, so the loop may well be an artefact of preparation and of no taxonomical consequence.

***Colaspoides violacea* Baly, 1867**

Material examined. Type (female) from Sarawak.

Distribution. Sarawak.

Remark. This species, which I include in group 7, has an entirely violaceous blue upperside in daylight or low artificial light, and this colour corresponds with the original description. However, under strong artificial light, the colour of the upperside is dark reddish-fulvous with a strong metallic lustre; because of this, I also include the species in the key to group 3.

***Colaspoides insignis* Baly, 1867**

Material examined. Borneo, Sabah, Tibow, 45km NE of Sapulut, 600–900m, 7–15.IV.2000, leg. Bolm, 3 females (NHMB), – Sandakan, leg. Baker, 2 males (NHMB, LM). Type described from Sarawak.

Distribution. Sabah, Sarawak.

***Colaspoides shuteae* sp.nov.**

Material examined. Holotype (male): Borneo, Peugaron, leg. Doherti, Fry coll.1905 (BMNH).

Paratypes: same label, 2 females (BMNH); – Borneo, Jam Luz, German Mission, Fry coll.1905, 1 male (LM).

Description. Head and upperside metallic green, antennae black with 5–7 basal segments fulvous, mouth parts, epipleurae, pygidium, underside and legs fulvous.

Body elongate-ovate. Clypeus triangular, not divided from frons, distinctly punctate, with slightly emarginated anterior margin, frontovertex with a few punctures, without depression. Antennae reach halfway along elytra, proportions of segments 2–4 are 5-8-9, preapical segments thin, about 4 times as wide as long, broadest just beyond mid-length, rounded at the sides, with fore- and hind angles acute but not produced, surface with quite large and moderately dense punctures. Elytra 1.4 times as long as wide, strongly and densely punctate, partly arranged in rows on apical slope. Furrow of pygidium broad at base, further parallel-sided, without ridge along the bottom. Propleurae impunctate. Fifth abdominal sternite not serrate at the sides, its hind margin almost straight in male, with trapeziform excavation in female. All femora not toothed. Segment 1 of fore- and mid-tarsi feebly widened in male. Aedeagus (Fig. 59) parallel-sided with triangular apex and central sulcus on underside. Spermatheca hook-like, ductus thick basally, then thread-shaped with stick-shaped piece on end (Fig. 69).

Length of male 3.4–3.7 mm, of female 4.0–4.4 mm.

Etymology. Named in honour of Dr. S. Shute, who provided me with material in his care, including the Baly and Jacoby types.

Differential diagnosis. Differs from *C. insignis* Baly in more elongate body, colour of upperside and other form of aedeagus and spermatheca.

Group 8

[Ductus with large, thick spindle in the middle. Elytra with basal convexity and distinct postbasal impression. Colour as in group 7.]

Colaspoides mirabilis sp.nov.

Material examined. Holotype (male): East Malaysia, Borneo, Sabah, Lok Kawi Wildlife Park, 5°51'N, 116°4'E, 5.VII.2009, leg. O. Gorbunov (LM).

Description. Head and upperside bright metallic, purple-red, scutellum metallic green, antennae black with segments 1 and 2 fulvous, 3 and 4 fulvous at apex, underside and legs black with very feeble metallic tint. Body broad, elongate-ovate. Head distinctly punctate, more sparsely on anterior half of clypeus and vertex, clypeus broadly triangular, poorly divided from frons, with very slightly concave anterior margin, frons with longitudinal impression. Antennae reach anterior third of elytra, proportions of segments 2–4 are 6-12-12, preapical segments about 3–3.5 times as long as wide. Prothorax 1.8 times as wide as long, broadest before mid-length, side margins rounded, fore- and hind angles distinct, more or less acute, surface with moderately large and rather sparse punctures, all interspaces flat and about twice as large as diameter of punctures. Scutellum triangular with rounded apex, impunctate. Elytra 1.3 times as long as wide, broadly rounded at apices, surface with basal convexity, delimited to the rear and outer border with very distinct impression, punctures confused, of the same size and density as on prothorax, on apical slope not arranged in regular rows, all interspaces flat.

Propleurae lustrous, impunctate. Furrow of pygidium parallel-sided, without ridge along the bottom. Fifth abdominal sternite weakly serrate at the sides and with slightly concave hind margin. All femora not toothed. Spermatheca U-shaped, ductus thread-shaped at first with slightly curved stick-shaped piece, then thicker part briefly prolonged and quite thin spiralled part, as large, thick spindle-shaped part, ending as thin spiral; this unusual spindle entirely formed of spiralling ductus (Fig. 70).

Length of body 5.2 mm.

Distribution. Sabah.

Differential diagnosis. Differs from all species of the genus in unique structure of ductus, also in well-developed postbasal impression on elytra, very rare in *Colaspoides*.

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References

- BALY J. (1867): *Phytophaga Malayana*. Transactions of the Entomological Society of London, **Ser. 3, Vol.4**: 1–300.
- JACOBY M. (1894): *Descriptions of new genera and species of Phytophagous Coleoptera obtained by W. Doherty in the Malayan Archipelago*. Novitates Zoologici **1(2)**: 267–330.
- JACOBY M. (1898): *New species of Phytophagous Coleoptera from Australia and Malayan regions*. Annales de la Societe Entomologique de Belgique **42**: 350–380.
- MEDVEDEV L. (2003): *Contribution to the knowledge of the genus Colaspoides Laporte 1833 (Coleoptera, Chrysomelidae, Eumolpinae)*. Doriana, supplemento agli Annali Mus. Stor. Nat. **8 (337)**: 1–11.
- MEDVEDEV L. (2003a): *Revision of the genus Colaspoides Laporte (Chrysomelidae, Eumolpinae) from continental Asia*. Russ. Entomol. Journ. **12(3)**: 257–297.
- MEDVEDEV L. (2007): *New taxa of Oriental Chrysomelidae (Coleoptera)*. Euroasian Entomological Journal **6(4)**: 433–438.

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