

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

Autor(en): **Medvedev, Lev N.**

Objektyp: **Article**

Zeitschrift: **Entomologica Basiliensia et Collectionis Frey**

Band (Jahr): **28 (2006)**

PDF erstellt am: **13.07.2024**

Persistenter Link: <https://doi.org/10.5169/seals-980993>

Nutzungsbedingungen

Die ETH-Bibliothek ist Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Inhalten der Zeitschriften. Die Rechte liegen in der Regel bei den Herausgebern.

Die auf der Plattform e-periodica veröffentlichten Dokumente stehen für nicht-kommerzielle Zwecke in Lehre und Forschung sowie für die private Nutzung frei zur Verfügung. Einzelne Dateien oder Ausdrucke aus diesem Angebot können zusammen mit diesen Nutzungsbedingungen und den korrekten Herkunftsbezeichnungen weitergegeben werden.

Das Veröffentlichen von Bildern in Print- und Online-Publikationen ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Die systematische Speicherung von Teilen des elektronischen Angebots auf anderen Servern bedarf ebenfalls des schriftlichen Einverständnisses der Rechteinhaber.

Haftungsausschluss

Alle Angaben erfolgen ohne Gewähr für Vollständigkeit oder Richtigkeit. Es wird keine Haftung übernommen für Schäden durch die Verwendung von Informationen aus diesem Online-Angebot oder durch das Fehlen von Informationen. Dies gilt auch für Inhalte Dritter, die über dieses Angebot zugänglich sind.

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

by Lev N. Medvedev

Abstract. A revision of the Philippine species of the genus *Colaspoides* Laporte, 1833 is proposed. Seventeen species are recorded, including 12 new species new to science: *Colaspoides laysi*, *C. weisei*, *C. basilana*, *C. negrosana*, *C. mindorensis*, *C. bakeri*, *C. rufiventris*, *C. sculpturata*, *C. purpurata*, *C. subtuberculata*, *C. parrotti*, *C. macgregori* spp.nov. *C. phalerata* Weise, 1922 is a new synonym for *C. philippinensis* Baly, 1867. *C. nigella* Weise, 1922 is transferred to the genus *Aulacia* Baly, 1867.

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

Introduction

The Philippine fauna of the genus *Colaspoides* Laporte, 1833 has to date been very poorly investigated. Only one species, *C. philippinensis* Baly, 1867, was described in the 19th century. WEISE (1922) described 3 new species and gave a key to Philippine species. Three more species were described 20 years ago (MEDVEDEV 1988).

I have had excellent opportunity to study large bodies of material from certain European and American museums and from my own collection, including a large series collected by Mr. P. Lays on Luzon and Mindanao. As a result of this investigation, the general number of species has increased to 17, including 12 new species.

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

NHMB	.....	Naturhistorisches Museum, Basel
SMNS	.....	Staatliches Museum fuer Naturkunde, Stuttgart
ISNB	.....	Institut des Sciences Naturelle, Bruxelles
USNM	.....	United States National Museum, Washington
NRS	.....	Naturhistoriska Museum, Stockholm
LM	.....	The L. Medvedev Collection, Moscow

Taxonomy

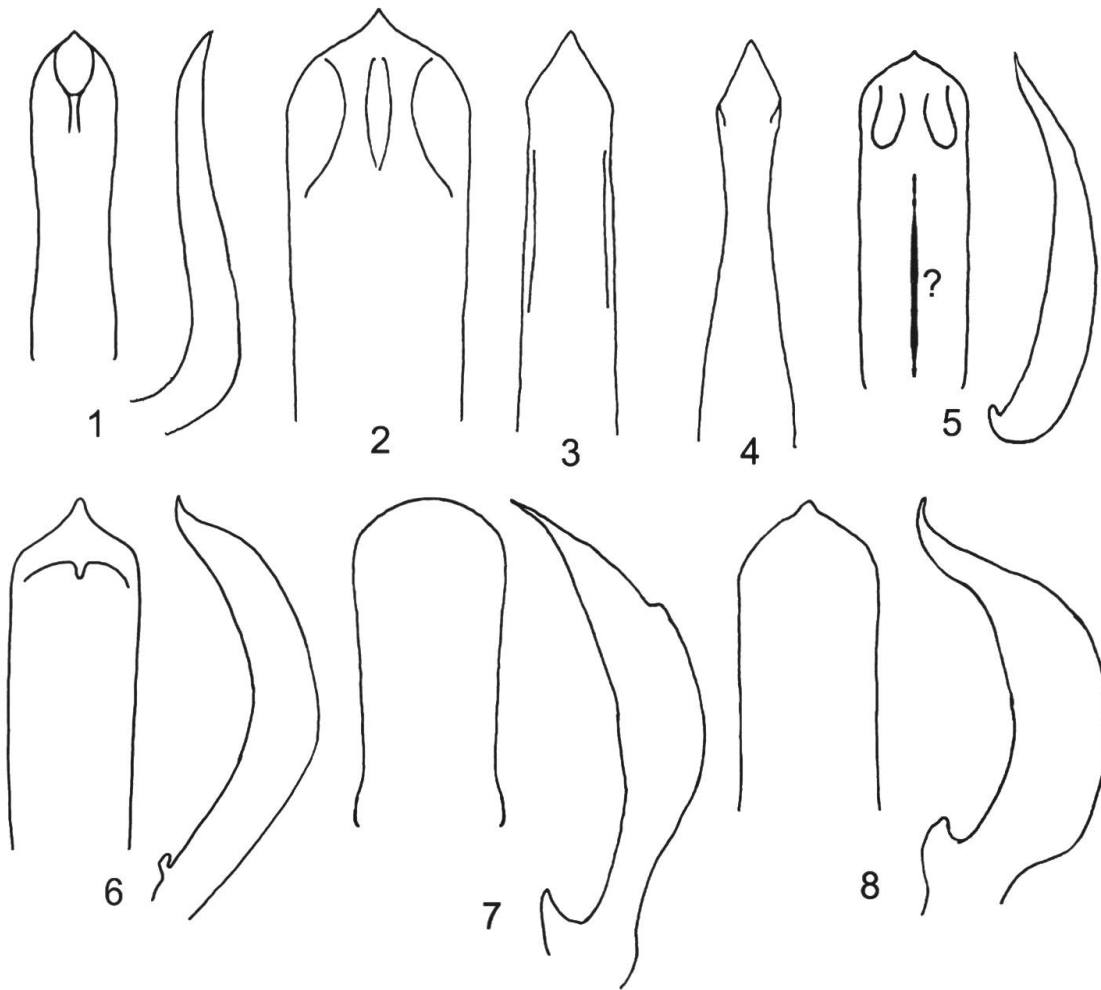
A key to the species

- 1(16) Upperside fulvous or piceous to black, sometimes partly with metallic sheen, but not entirely metallic.
- 2(11) Body entirely fulvous. Propleurae impunctate in central part, but often more or less punctuate at base and near anterior angles. Species differ mostly in form of aedeagus and spermatheca.
- 3(4) Aedeagus narrow, with sharply delimited apical impression on underside (Fig. 1). Spermatheca spiraled (Fig. 15). Prothorax lustrous, rather densely punctuate. Body larger, 4.0–5.7 mm. *C. laysi* sp.nov.

- 4(3) Apical impression on underside of aedeagus shallow, not delimited, or absent. Spermatheca not spiraled.
- 5(6) Aedeagus broad, about twice as long as wide (Fig. 2). Prothorax lustrous, finely punctuate. Anterior femora with very small tooth. Spermatheca – Fig. 16. Length of body 3.7–4.4 mm. ... ***C. weisei* sp.nov.**
- 6(5) Aedeagus narrow, 4–5 times as long as wide.
- 7(8) Prothorax impunctate and lustrous. Aedeagus with acute spear-like apex (Fig. 3). Anterior femora with distinct tooth. Side margins of prothorax almost not explanate. Length of body 3.0 mm. ***C. basilana* sp.nov.**
- 8(7) Prothorax distinctly punctuate.
- 9(10) Head and upperside with dense microsculpture. Sides of prothorax rather broadly explanate (as wide as intermediate antennal segment). Anterior femora with short but very distinct tooth. Aedeagus without ridge on underside (Fig. 4). Length of body 4.0 mm. ***C. negrosana* sp.nov.**
- 10(9) Head and upperside lustrous or with poorly visible microsculpture. Sides of prothorax not broadly explanate. Anterior femora with very short tooth. Aedeagus with central ridge in middle part of underside (Fig. 5). Spermatheca – Fig. 17. Length of body 3.7–4.7 mm. ***C. icterica* Weise**
- 11(2) Upperside dark fulvous to piceous or bicolor. Elytra longitudinally costate on sides.
- 12(13) Propleurae punctuate. Prothorax, elytral sides, suture and underside piceous. Anterior femora not toothed. Elytra with one feeble ridge. Spermatheca – Fig. 18. Length of body 4.6 mm. Mindoro. ***C. mindorensis* sp.nov.**
- 13(12) Propleurae impunctate (except for a few punctures near base and anterior angles). Elytra unicolored.
- 14(15) Upperside dark fulvous to piceous, prothorax occasionally darker than elytra. Anterior femora with very short tooth. Elytra with 1 feeble ridge laterally. Spermatheca – Fig. 17. Length of body 3.9–4.7 mm. See also point 10. ***C. icterica* Weise** [females, part]
- 15(14) Upperside dark piceous to black with very feeble bluish sheen, elytra occasionally fulvous. Anterior femora with rather large acute tooth. Elytra with sharp ridge from humerus to apical slope and a few feeble ridges. Spermatheca – Fig. 19. Length of body 4.3–4.6 mm. ***C. bakeri* sp.nov.**

- 16(1) Upperside entirely metallic.
- 17(18) Underside and legs reddish-fulvous with metathorax darker. Upperside metallic green. Punctures on upperside moderately dense, without rugosities on elytra. Propleurae not punctuate. Length of body 5.0 mm. *C. rufiventris* sp.nov.
- 18(17) Underside and legs metallic.
- 19(20) Propleurae impunctate except for a few punctures at base. Upperside strongly, but not rugosely, punctuate, usually with flat or slightly convex interspaces. Aedeagus – Fig. 6, spermatheca – Fig. 20. Length of body 3.8–5.8 mm. *C. philippinensis* Baly
- 20(19) Propleurae distinctly, sometimes strongly, punctuate.
- 21(30) Elytra with tubercles or convexities punctures absent or more or less developed only along suture and on apical slope.
- 22(27) Elytra practically entirely covered with tubercles, punctures absent. Species from Mindanao.
- 23(24) Elytra with high, rounded tubercles, surface appearing serrate or undulate in lateral view. Last abdominal sternite of female with trapeziform incisure on apex, having small protuberance at centre (Fig. 36). Spermatheca thick, C-like (Fig. 21). Prothorax extremely densely punctuate, interspaces very narrow and costate. Upperside bright green. Length of body 7.0 mm. Male unknown. *C. sculpturata* sp.nov.
- 24(23) Elytra with tubercles less high, in lateral view appearing serrate or undulate. Spermatheca less thick, globose or thickened at one end. Last abdominal sternite of female without trapeziform incisure.
- 25(26) Prothorax densely punctuate, with convex (but not costate) interspaces. Spermatheca globose at one end (Fig. 22). Aedeagus of male narrowly rounded at apex (Fig. 7). Upperside of female purple or red-cupreous, of male green or partly red-cupreous. Length of male 4.8–5.0 mm, of female 6.2–7.1 mm. *C. purpurata* sp.nov.
- 26(25) Prothorax sparsely punctuate, with flat interspaces, which are much larger than the punctures. Spermatheca thickened, but not globose at one end (Fig. 23). Upperside green with slight red-cupreous sheen. Length of body 6.8 mm. Male unknown. *C. sp. A*
- 27(22) Elytra with 1–2 rows of punctures along suture and 2–3 regular rows of punctures on apical slope. Last abdominal sternite of female not emarginated on hind edge.

- 28(29) Species from Mindanao. Elytra mostly with transverse or worm-like convexities. Spermatheca C-like, globular at one end (Fig. 24). Aedeagus with triangular apex (Fig. 8). Upperside green or elytra with feeble red-cupreous sheen. Length of male 4.9–5.5 mm, of female 6.2–6.6 mm. ***C. subtuberculata* sp.nov.**
- 29(28) Species from Panay and Sibuyan. Elytra of female with acute tubercles everywhere except for sutural area and apical slope. Spermatheca consists of 2 parts (Fig. 25). Upperside green. Length of female 5.7–6.0 mm. Male has punctuate elytra with rugosity on sides, aedeagus – Fig. 9 (see also point 33). ***C. tuberculipennis* L. Medvedev** [female]
- 30(21) Elytra entirely or for the most part distinctly punctuate.
- 31(32) Body metallic blue, rarely with feeble violaceous or green sheen. Vertex with strong punctures and usually with distinct longitudinal groove. Apex of aedeagus rounded, lacking distinct apical tip (Fig. 10). Spermatheca thin, consists of two part (Fig. 26). Length of body 4.0–5.5 mm. Species from Mindoro and Leyte. ***C. parrotti* sp.nov.**
- 32(31) Body bright metallic green, sometimes more or less cupreous. Aedeagus and spermatheca different.
- 33(34) Species from Panay and Sibuyan. Elytra more or less rugose on sides. Aedeagus long and narrow, about 4 times as long as wide, thin and feebly curved in lateral view (Fig. 9). Length of body 4.5–4.9 mm. Female – see point 29. ***C. tuberculipennis* L. Medvedev** [male]
- 34(33) Aedeagus of male more short and broad, usually widened to apex.
- 35(38) Elytra of both sexes with more or less strong punctures on sides, but without worm-like rugosities.
- 36(37) Apex of aedeagus truncate with short tip (Fig. 11). Spermatheca – Fig. 27. Upperside metallic green. Length of body 4.3–5.8 mm. ***C. macgregori* sp.nov.**
- 37(36) Apex of aedeagus triangular with short tip, in lateral view this tip distinctly curved upwards (Fig. 12). Spermatheca – Fig. 28. Upperside reddish-cupreous or green. Length of body 4.4–5.8 mm. ***C. krausei* L. Medvedev**
- 38(35) Sides of elytra with worm-like rugosities. Upperside greenish-cupreous or cupreous with green margins. Aedeagus with triangular apex ending in acute tip, which is not curved upwards in lateral view (Fig. 13). Spermatheca of possible female – Fig. 29. Length of body 5.5–6.2 mm. ***C. mindanaica* L. Medvedev**



Figs 1–8. Aedeagus: 1, *C. laysi* sp.nov.; 2, *C. weisei* sp.nov.; 3, *C. basilana* sp.nov.; 4, *C. negrosana* sp.nov.; 5, *C. icterica* Weise, type; 6, *C. philippinensis* Baly, type; 7, *C. purpurata* sp.nov.; 8, *C. subtuberculata* sp.nov.

Descriptions of new species

Colaspoides laysi sp.nov.

Material examined. Holotype (male): Mindanao, S. Cotabato Prov., Manobo Tasaday Forest Reserve, Mt. Tasaday, 3.II–10.III. 1991, leg. P. Lays (LM). Paratypes: same locality, 1 male, 1 female (LM); – Mindanao, Dapitan, leg. Baker, 2 males, 5 females (USNM, 1 ex. – LM); – Island of Basilan, leg. Baker, 4 males, 1 female (USNM); – Island Sibuyan, leg. Baker, 5 females (USNM); – Negros, Cuernos Mts., leg. Baker, 1 male (UNM); – Mindanao, Zamboanga, leg. Baker, 4 males (USNM, 1 ex. – LM); – Philippine Island, leg. Benesh, 1 male (USNM).

Description. Fulvous, elytra a little paler than prothorax, apical antennal segments slightly darkened.

Body elongate ovate. Head finely and sparsely punctate, not grooved near eyes. Antennae thin, preapical segments about 3 times as long as wide. Prothorax 1.8 times as wide as long, densely punctate, interspaces flat and mostly larger than punctures. Elytra 1.35 times as long as wide, densely but not rugosely punctate, with 1–2 irregular rows near suture on apical slope. Pygidium with broad and shallow central groove reduced before base, no trace of ridge below. Propleurae impunctate in anterior part, but with distinct punctures basally. Abdominal sternites 4 and 5 indistinctly and very finely serrate on sides, sternite 5 of female broadly emarginated at apex (Fig. 32). Anterior femora slightly thickened, with microscopic, almost indistinguishable tooth beneath, segment 1 of anterior tarsi widened in male. Aedeagus – Fig. 1, spermatheca – Fig. 15. Aedeagus is very similar to, if not the same as *C. laosensis* Kimoto et Gressitt, 1982 from Laos, Thailand and Assam.

Length of body 4.0–5.7 mm.

Derivatio nominis. The species is named after its collector, Dr. Pascal Lays.

Differential diagnosis. See key to species.

Colaspoides weisei sp.nov.

Material examined. Holotype (male): Philippines, Island of Basilan, leg. Baker (USNM). Paratypes: same locality, 2 males (USNM, LM); – Zamboanga, Mindanao, leg. Baker, 1 male, 6 females (USNM, 2 ex. – LM).

Description. Entirely fulvous.

Body elongate ovate. Head moderately lustrous, without distinct microsculpture, clypeus punctate, frons and vertex impunctate. Antennae thin, preapical segments about 3–3.5 times as long as wide. Prothorax 1.9 times as wide as long, side rounded and narrowly explanate, surface rather lustrous, finely punctate, with very thin, sometimes scarcely visible microsculpture. Elytra 1.3 times as long as wide, with moderately strong punctures and very fine microsculpture, interspaces flat and mostly larger than punctures. Groove of pygidium parallel-sided, lacking ridge below. Propleurae impunctate, finely microsculptured. Abdominal segments 4 and 5 not serrate on sides. Anterior femora with microscopic tooth or angulation. Segment 1 of anterior tarsus of male moderately widened. Aedeagus (Fig. 2) broad, about twice as long as wide, with impression on underside near apex. Spermatheca – Fig. 16.

Length of male 3.7–3.9 mm, of female 3.9–4.4 mm.

Derivatio nominis. The species is dedicated to the memory of Julius Weise, an eminent Chrysomelid specialist.

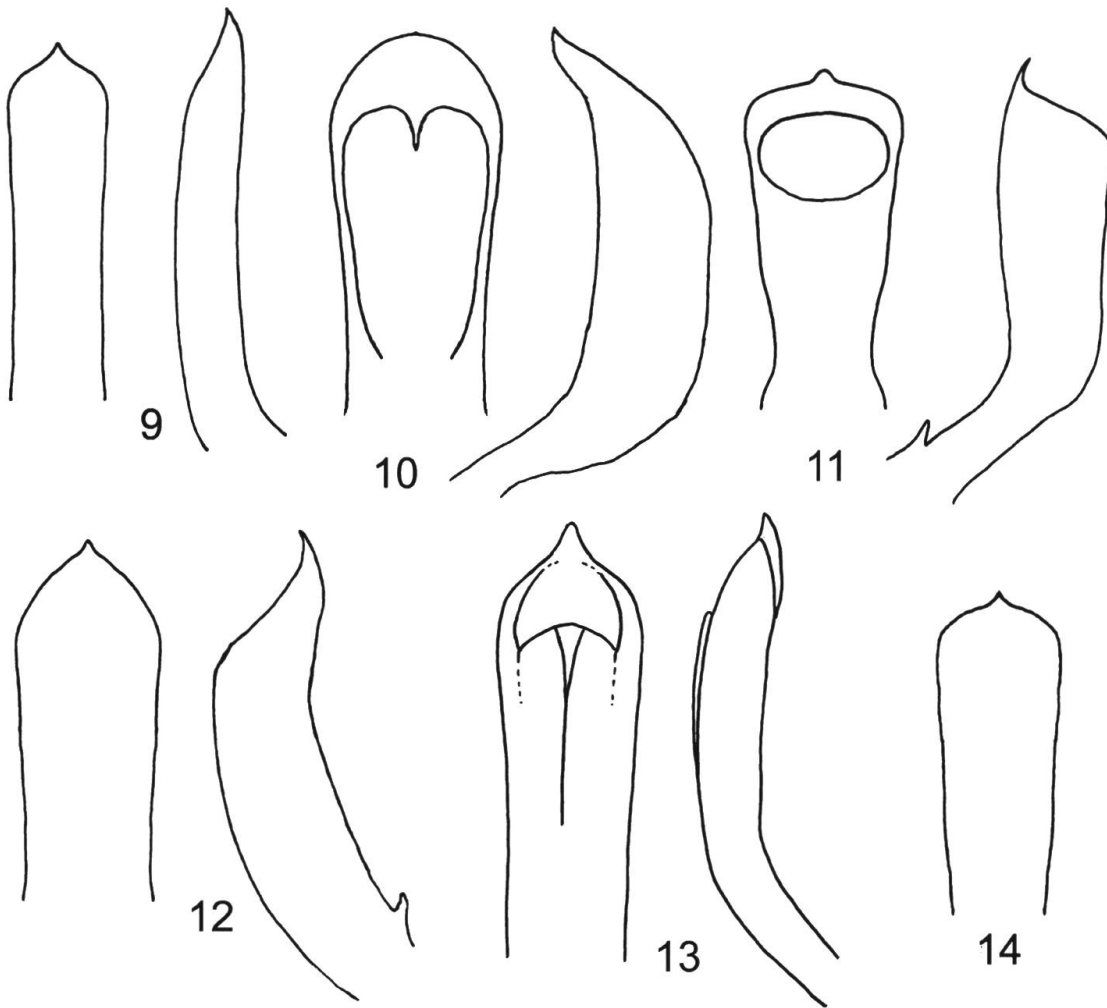
Differential diagnosis. See key to species.

Colaspoides basilana sp.nov.

Material examined. Holotype (male): Philippines, Island of Basilan, leg. Baker (LM).

Description. Entirely fulvous.

Body elongate ovate. Head lustrous, practically impunctate. Antennae thin, preapical segments about 3–3.5 times as long as wide. Prothorax 1.8 times as wide as



Figs 9–14. Aedeagus: 9, *C. tuberculipennis* L. Medvedev; 10, *C. parrotti* sp.nov.; 11, *C. macgregori* sp.nov.; 12, *C. krausei* L. Medvedev; 13, *C. mindanaica* L. Medvedev; 14, *Aulacia nigella* Weise, type.

long, side margins arcuate, not explanate, surface lustrous and impunctate. Elytra 1.2 times as long as wide, with moderately strong punctures and flat interspaces. Groove of pygidium deep, parallel-sided, without ridge along bottom. Propleurae impunctate, lustrous, with extremely thin microsculpture and practically straight anterior margin. Abdominal segments 4 and 5 not serrate at sides. Anterior femora with very distinct triangular tooth. Segment 1 of anterior tarsus moderately widened. Aedeagus (Fig. 3) narrow, about 5 times as long as wide, with acute spear-like apex, strongly curved in lateral view.

Length of body 3.0 mm.

Differential diagnosis. See key to species.

***Colaspoides negrosana* sp.nov.**

Material examined. Holotype (male): Philippines, Negros or., Siquijor Is., leg. R. C. Mac Gregor (LM).

Description. Fulvous, apical antennal segment black.

Body elongate ovate. Head densely microsculptured and finely punctate on clypeus and vertex near eyes. Antennae thin, preapical segments about 3 times as long as wide. Prothorax 1.8 times as wide as long, sides rounded and comparatively broadly explanate (as wide as intermediate antennal segments), surface with dense microsculpture and punctures, interspaces comparable with, or a little larger than, diameter of punctures. Elytra 1.25 times as long as wide, densely, but not rugosely punctate, with extremely thin microsculpture. Groove of pygidium sharp, parallel-sided, without ridge along bottom. Propleurae impunctate, microsculptured. Abdominal segments 4 and 5 not serrate at sides. Anterior femora with short, but very distinct tooth. Segment 1 of anterior tarsus strongly widened. Aedeagus (Fig. 4) narrow, about 5 times as long as wide, feebly curved in lateral view.

Length of body 4.0 mm.

Differential diagnosis. See key to species.

***Colaspoides icterica* Weise 1922**

Material examined. Philippines, Luzon, Mt. Makiling, leg. Baker, type series (NRS – 5 ex., USNM – 5 ex.); – Luzon, Bataan Prov., Limay, leg. McGregor, 1 male.

Redescription. Entirely fulvous but females occasionally with upperside dark fulvous to almost piceous.

Head lustrous, clypeus and frons sparsely punctate, vertex practically impunctate. Preapical antennal segments about 3 times as long as wide. Prothorax 2.2 times as wide as long, side margins moderately explanate, distinctly punctate and finely microsculptured. Elytra 1.4 times as long as wide, densely punctate, without microsculpture, females with feeble lateral ridge. Groove of pygidium parallel-sided, without ridge along bottom. Propleurae impunctate. Abdominal segments 4 and 5 not serrate on sides. Anterior femora with very short tooth. Segment 1 of anterior tarsus of male distinctly widened. Aedeagus (Fig. 5) narrow, about 4 times as long as wide, underside with impression before apex and central ridge in middle part. Spermatheca (Fig. 17) consists of 2 parts, narrow part widened at apex.

Length of male 3.7–4.0 mm, of female 3.9–4.7 mm.

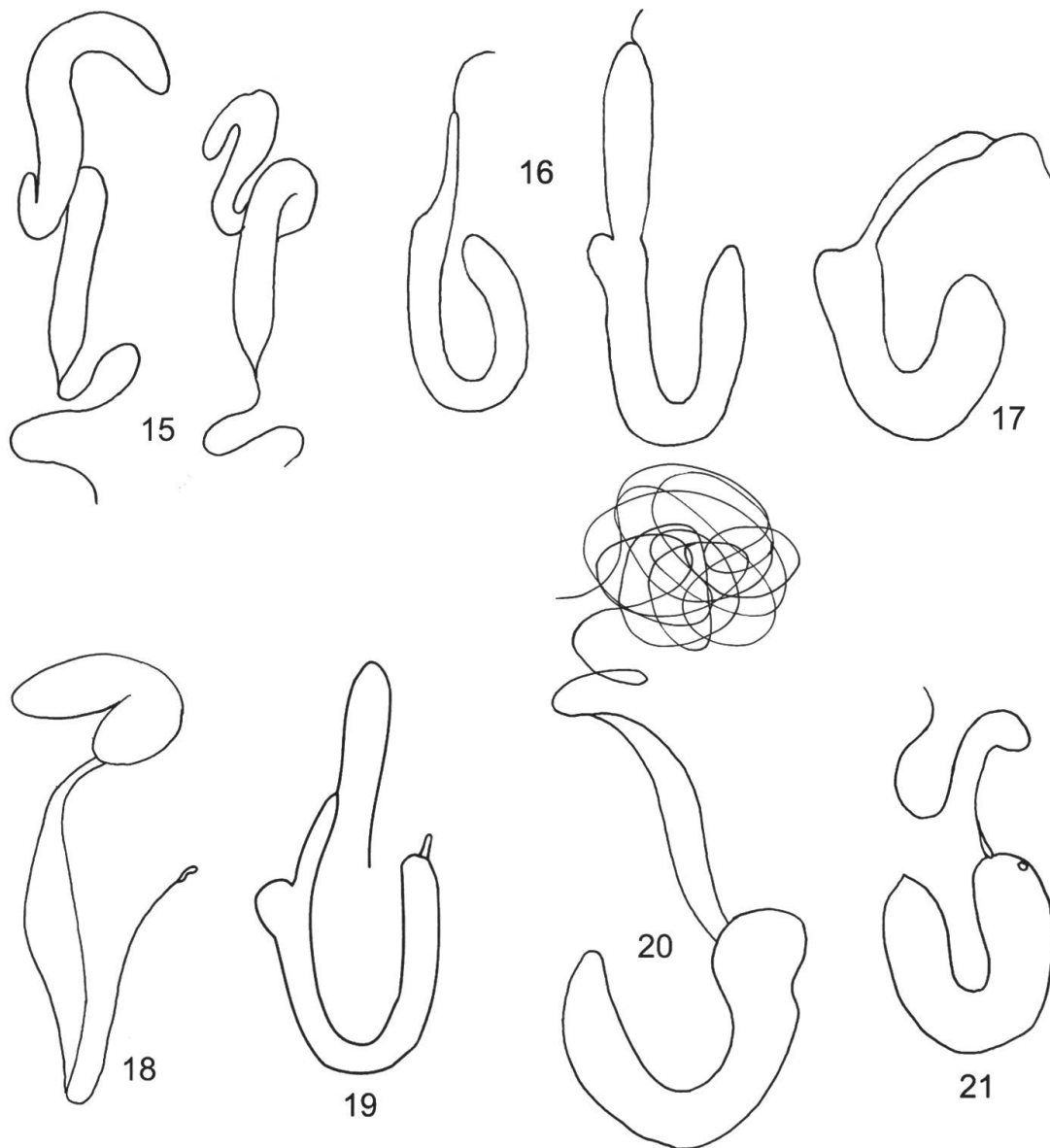
Differential diagnosis. See key to species.

***Colaspoides mindorensis* sp.nov.**

Material examined. Holotype (female): Philippine Islands, Mindoro, Mt. Calavite, leg. W. Schultze (LM).

Description. Fulvous prothorax and scutellum; elytral margins and sutural stripe disappear beyond centre, piceous with very feeble metallic sheen; underside piceous.

Body elongate ovate. Head sparsely and finely punctate, not grooved near eyes. Antennae thin, preapical segments about 3 times as long as wide. Prothorax 1.6 times as



Figs 15–21. Spermatheca: 15, *C. laysi* sp.nov.; 16, *C. weisei* sp.nov.; 17, *C. icterica* Weise, type; 18, *C. mindorensis* sp.nov.; 19, *C. bakeri* sp.nov.; 20, *C. philippinensis* Baly; 21, *C. sculpturata* sp.nov.

wide as long, densely punctate, interspaces flat and mostly a little larger than punctures. Elytra 1.35 times as long as wide, densely, but not rugosely punctate, with more or less regular rows in apical part and feeble lateral ridge starting from humerus. Pygidium with broad and shallow central groove reduced in basal half and not ridged along bottom. Propleurae with sparse but very distinct punctures. Abdominal sternites 4 and 5 not serrate on sides, sternite 5 broadly concave on hind margin (Fig. 31). All femora not toothed. Spermatheca – Fig. 18.

Length of body 4.6 mm.

Differential diagnosis. See key to species.

***Colaspoides bakeri* sp.nov.**

Material examined. Holotype (female): Negros, Cuernos Mts., leg. Baker (USNM). Paratypes: same locality, 3 females (USNM, 1 ex. – LM).

Description. Black or pitchy-black with very feeble bluish sheen, more distinct on prothorax; antennae fulvous with darkened apical segments, sometimes head, legs and apex of abdomen fulvous or red-fulvous. In one paratype elytra reddish fulvous.

Body elongate ovate. Head very finely and sparsely punctate, more distinct on clypeus, not grooved near eyes. Antennae thin, preapical segments about 3 times as long as wide. Prothorax 1.9 times as wide as long, distinctly punctate, interspaces flat and mostly larger than punctures. Elytra 1.35 times as long as wide, densely punctate, with sharp ridge from humerus to apical slope and a few feeble ridges. Pygidium with shallow central groove not ridged at bottom. Propleurae impunctate. Abdominal sternites 4 and 5 not serrate at sides, sternite 5 arcuate on hind margin, lacking incisure. Fore-femora with large, acute tooth. Spermatheca – Fig. 19.

Length of body 4.3–4.6 mm.

Derivatio nominis. The species is dedicated to Dr. Baker, a well-known investigator of Philippine Coleoptera.

Differential diagnosis. Very near to *C. mindorensis* sp.nov., differs mostly in large tooth on forelegs.

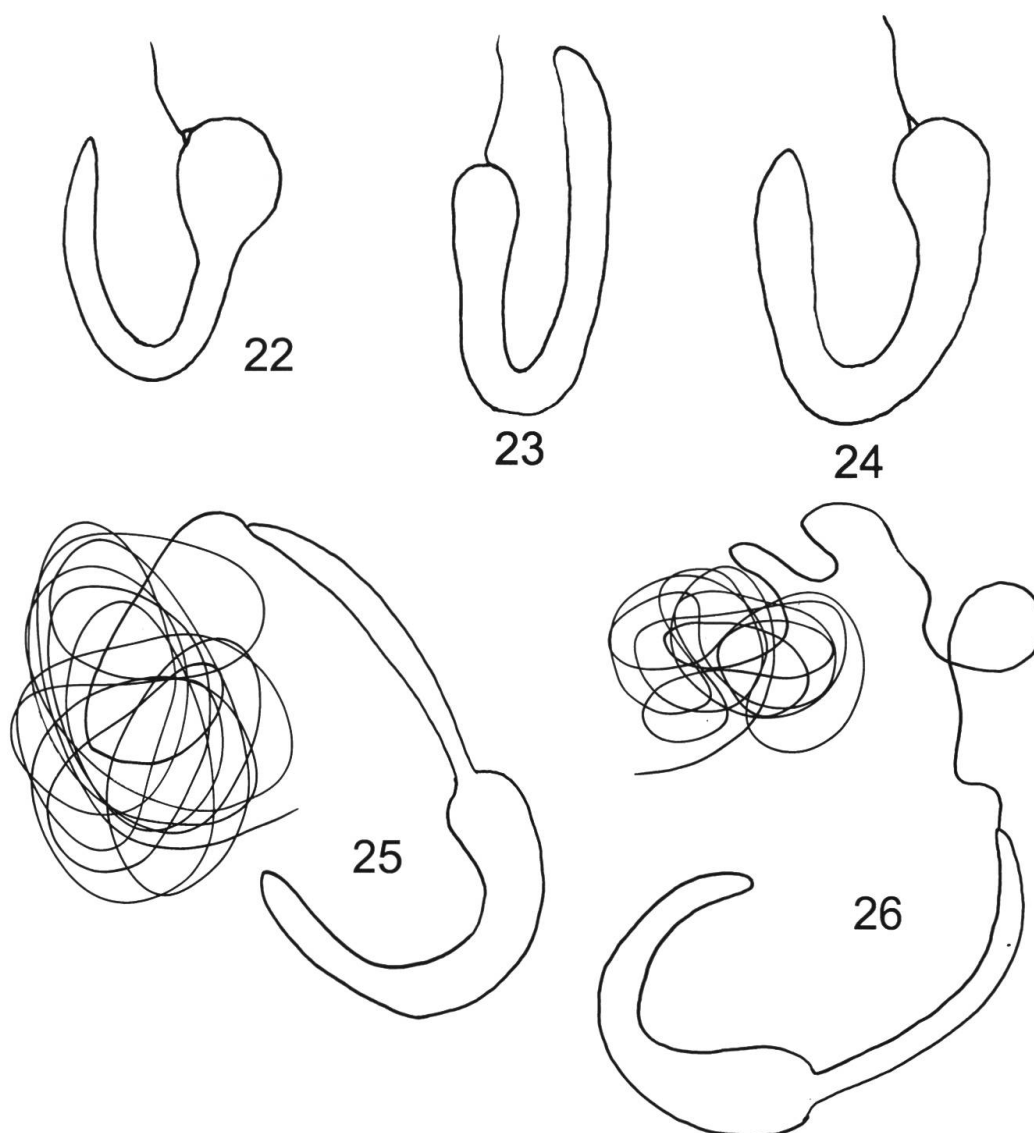
***Colaspoides rufiventris* sp.nov.**

Material examined. Holotype (female): Island Samar, leg. Baker (LM).

Description. Metallic green, anterior margin of clypeus and labrum reddish fulvous, antennae black with 5 basal segments fulvous, underside and legs reddish fulvous with metathorax darker.

Body elongate ovate. Head not grooved near eyes, frons and vertex very finely and sparsely punctate, clypeus more strongly punctate. Antennae with 5 apical segments slightly thickened, about 2.0–2.2 times as long as wide. Prothorax 1.7 times as wide as long, broadest near middle, finely punctate, interspaces much larger than punctures. Elytra 1.2 times as long as wide, densely but not rugosely punctate, interspaces flat and mostly large than punctures. Pygidium with shallow central groove, not ridged along bottom. Propleurae impunctate. Abdominal sternites 4 and 5 feebly serrate on sides, sternite 5 with almost straight hind margin. Femora not toothed. Length of body 5.0 mm.

Differential diagnosis. Near *C. philippinensis* Baly, 1867, but more finely punctate with underside and legs not metallic.



Figs 22–26. Spermatheca: 22, *C. purpurata* sp.nov.; 23, *C. sp. A*; 24, *C. subtuberculata* sp.nov.; 25, *C. tuberculipennis* L. Medvedev; 26, *C. parrotti* sp.nov.

***Colaspoides philippinensis* Baly 1867**

Colaspoides phalerata Weise, 1922 **syn.nov.**

Material examined. Luzon, numerous localities, about 260 specimens, including type series of *C. phalerata* Weise, 1922: Mt. Makiling, 2 males (NRS), 3 males, 5 females (USNM); was recorded also from Bohol (1 ex.) and Panaon (1 ex.) (MEDVEDEV 2003), and Palawan (MEDVEDEV 1995), but these data need confirmation. Indication for Leyte (MEDVEDEV 1995) belongs to *C. parrotti* sp.nov.

Remark. *C. phalerata* differs from *C. philippinensis* only in more sparse punctures on head and prothorax but has the same structure of aedeagus and practically the same form of spermatheca (Fig. 30) and might be united with *C. philippinensis*.

***Colaspoides sculpturata* sp.nov.**

Material examined. Holotype (female): Philippines, Mindanao, South Cotabato Prov., Manobo Tasaday Forest Reserve, Mt. Tasaday, 1000–1100 m, 30. V.–18. VI. 1994, secondary vegetation, edge of primary forest, leg. Pascal Lays (LM).

Description. Bright metallic green, partly with cupreous reflection.

Body elongate ovate. Head roughly punctuate, interspaces of punctures microsculptured and mostly convex, vertex with deep longitudinal groove. Antennae thin, segments 3–10 about 4 times as long as wide. Prothorax 1.8 times as wide as long, strongly and very densely punctuate, interspaces narrow, smaller than punctures, convex or costate, but not microsculptured. Elytra 1.35 times as long as wide, without punctures except a row along side margin and a short row on apical slope along suture; the whole surface is covered with tubercles forming 6–7 more or less regular rows; interspaces of tubercles smooth and lustrous. Propleurae strongly punctuate. Prosternum strongly punctuate and pubescent, elevated at centre. Pygidium with deep central groove widened to base but not ridged along bottom. Abdominal sternites 4 and 5 serrate on sides, sternite 5 with trapeziform incisure on hind margin having small protuberance in middle (Fig. 36). All femora not toothed. Spermatheca C-like, thick (Fig. 21).

Length of body 7.0 mm.

Differential diagnosis. See key to species.

***Colaspoides purpurata* sp.nov.**

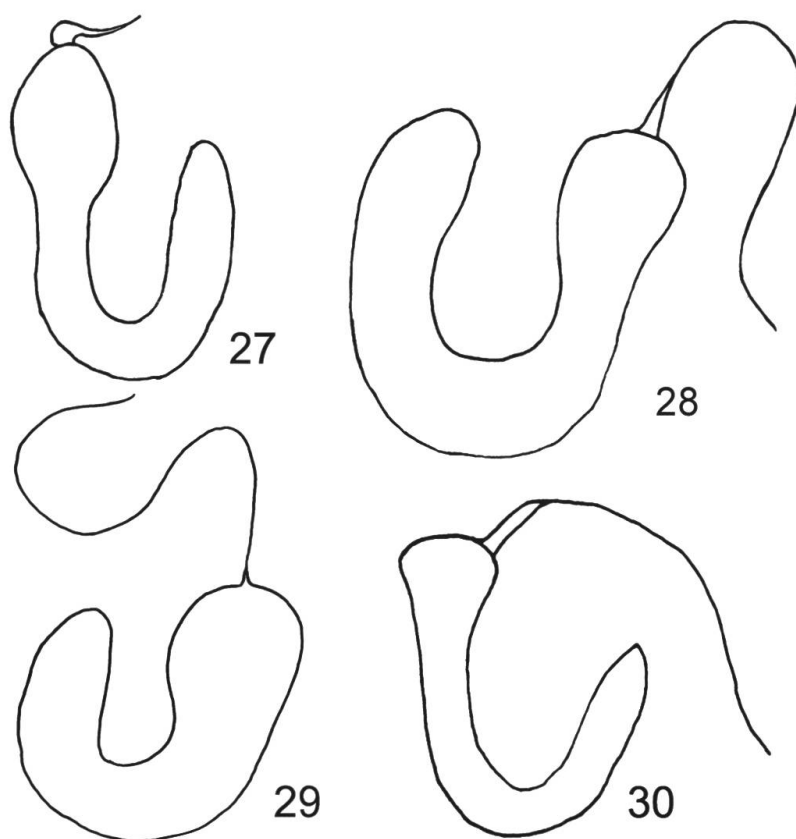
Material examined. Holotype (female): Mindanao, Zamboanga, leg. W. Schulze (LM).

Paratypes: Mindanao, Zamboanga, leg. Baker, 2 females (USNM); – Island of Basilan, leg. Baker, 2 males, 1 female (USNM, 1 ex. – LM).

Description. Female: Head and upperside purple or red-cupreous, prothorax and elytra narrowly margined with green, underside and legs metallic green, antennae black with metallic sheen, segments 2–4 more or less fulvous at apex. Upperside of male green or partly red-cupreous.

Body ovate. Head strongly punctuate, interspaces without microsculpture, vertex with deep longitudinal groove. Antennae thin, segments 3–10 about 4 times as long as wide. Prothorax 1.9 times as wide as long, roughly punctuate, interspaces flat or convex, more or less comparable with size of punctures. Elytra 1.3 times as long as wide, all surfaces are covered with tubercles, their interspaces very narrow; there is also a row of punctures along the side margin and an interrupted row along suture. Propleurae and prosternum strongly punctuate, but latter not pubescent and not elevated at centre. Central groove of pygidium not ridged below. Abdominal sternite 5 strongly serrate on sides, with very small incisure on hind margin. All femora not toothed. Aedeagus narrowly rounded at apex (Fig. 7). Spermatheca C-like, bulbous on one side (Fig. 22).

Length of male 4.8–5.0 mm, of female 6.2–7.1 mm.



Figs 27–30. Spermatheca: 27, *C. macgregori* sp.nov.; 28, *C. krausei* L. Medvedev; 29, ?*C. mindanaica* L. Medvedev; 30, *C. phalerata* Weise, type.

Differential diagnosis. Very near to *C. sculpturata* sp.nov., differs in colour of upperside, feeble incisure on hind margin of apical abdominal sternite and form of spermatheca.

Colaspoides sp. A

Material examined. Mindanao, Dapitan, 1 female.

Colaspoides subtuberculata sp.nov.

Material examined. Holotype (male): Mindanao, Surigao, leg. Baker (USNM). Paratypes: same locality, 5 males, 3 females (USNM, 1 ex. – LM); – Mindanao, Ilugan, leg. Baker, 3 males, 2 females (USNM, 1 ex. – LM); – Mindanao, Dapitan, leg. Baker, 1 male (USNM); – Mindanao, Butuan, leg. Baker, 1 male (USNM).

Description. Metallic green, antennae black with 3 basal segments reddish.

Body ovate. Head, especially vertex sparsely punctuate, without microsculpture, vertex with longitudinal groove. Antennae thin, segments 9–10 about 4 times as long as wide. Prothorax 1.9 times as wide as long, with strong and moderately dense punctures, lustrous, with interspaces flat and mostly much larger than punctures. Elytra 1.3 times as long as wide, with 1–2 rows of punctures along suture, 2 or 3 regular rows on apical slope, a row of punctures along side margin and sometimes a few punctures at base; remainder of surface with transverse or worm-like convexities, more strongly developed in female. Central groove of pygidium not ridged below. Propleurae and prosternum strongly punctuate. Abdominal sternite 4 not serrate, sternite 5 distinctly serrate on sides, with straight hind margin in both sexes. All femora not toothed. Segment 1 of anterior and mid tarsi distinctly widened in male. Aedeagus (Fig. 8) with small and obtuse apical tip, in lateral view strongly curved, with extreme apex bent upwards. Spermatheca C-like, distinctly subglobose at one end (Fig. 24).

Length of male 4.9–5.5 mm, of female 6.0–6.4 mm.

Differential diagnosis. See key to species.

Colaspoides tuberculipennis L. Medvedev, 1988

Material examined. Paratype (female): Panay, Culasi, leg. Mac Gregor (LM); – Negros, Cuernos Mts, leg. Baker, 2 females (USNM); – Island Sibuyan, leg. Baker, 20 males, 7 females (USNM, 2 ex. – LM).

Redescription. Antennae nitidiform, preapical segments about 4–5 times as long as wide. Pygidium with deep central groove, widened to base but without central ridge. Abdominal segment 4 slightly serrate on sides, segment 5 distinctly toothed on sides, with rounded, not incised hind margin (Fig. 35). Spermatheca (Fig. 24) very distinctly consists of two parts and is practically the same as in *C. philippinensis* Baly.

Males have densely punctate elytra with more or less convex or even rugose interspaces, especially at the sides. Aedeagus comparatively narrow, about 4 times as long as wide, with short and obtuse apical tip, feebly curved in lateral view (Fig. 9).

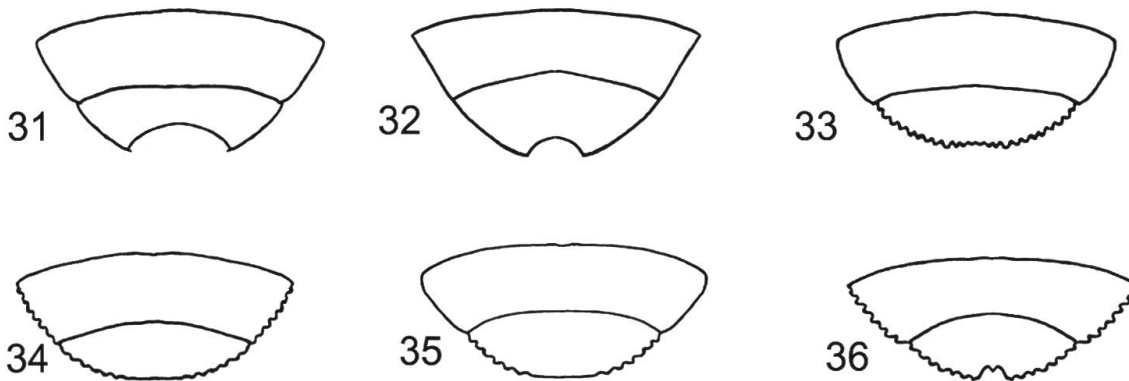
Length of male 4.3–4.9 mm, of female 5.7–6.0 mm.

Differential diagnosis. See key to species.

Colaspoides parrotti sp.nov.

Material examined. Holotype (male): Philippines, Oriental Mindoro, Mansalay, 28.VI.1971, leg. R. E. Parrott (LM). Paratypes: same locality, 4 males, 12 females (LM); – Philippines, Occidental Mindoro, Manbueros, 15.VI.1971, leg. R. E. Parrott, 4 males, 10 females (LM); – Philippines, West Mindoro, Annay river valley, 25 km SE Santa Cruz (12 57'N, 120 56'E), 17.VI.2000, leg. M. Dembický, 9 ex. (NHMB, 1 ex. – LM), – Philippines, Leyte, Visayas State Colledge of Agriculture N Baybay, cultivated land, 0–100 m, 20.II–13.III.1991, leg. Schawaller, 2 males, 1 female (SMNS).

Description. Blue, green-blue or violaceous blue, labrum fulvous or piceous, antennae piceous or black with fulvous basal segments, abdomen black with feeble metallic sheen, last sternite often fulvous or piceous.



Figs 31–36. Last abdominal sternites of females: 31, *C. mindorensis* sp.nov.; 32, *C. laysi* sp.nov.; 33, *C. mindanaica* L. Medvedev; 34, *C. parrotti* sp.nov.; 35, *C. tuberculipennis* L. Medvedev; 36, *C. sculpturata* sp.nov.

Body elongate ovate. Head lustrous, strongly punctate, vertex with longitudinal groove. Antennae thin, segments 3–10 about 4 times as long as wide. Prothorax 1.9 times as long as wide, strongly but not densely punctate, interspaces flat and mostly larger than punctures. Elytra 1.35 times as long as wide, strongly punctate, males usually without rugosities on sides, females with rugosities and often with small tubercles on sides. Pygidium with sharply delimited central groove widened in basal third but without ridge below. Propleurae punctate. Abdominal sternites 4 and 5 very feebly serrate on sides, sternite 5 with rounded, not incised, apex (Fig. 34). All femora without tooth. Segment 1 of anterior and mid-tarsi widened. Aedeagus (Fig. 10) with practically rounded apex, without distinct apical tip. Spermatheca (Fig. 26) thin, consists of two parts and is practically the same as in *C. philippinensis* and *C. tuberculipennis*.

Length of male 4.0–4.5 mm, of female 4.4–5.5 mm.

Derivatio nominis. The species is dedicated to its collector, Dr. R. E. Parrott.

Differential diagnosis. See key to species.

Colaspoides macgregori sp.nov.

Material examined. Holotype (male): Mindanao, Davao Pr., Mati, IV.1927, leg. R. C. McGregor (USNM). Paratypes: same locality, IV–V.1927, leg. R. C. McGregor, 24 ex. (USNM, 4 ex. – LM); – Mindanao, V.1911, C. V. Piper collection, 1 male (USNM).

Description. Metallic green with black antennae and tarsi, antennal segments 1–4 more or less red on apices.

Body elongate ovate. Head not densely punctuate, with short groove on vertex. Antennae thin, preapical segments about 4 times as long as wide. Prothorax 1.8 times as wide as long, with large, not dense punctures, interspaces flat, larger than diameter of punctures. Elytra 1.25 times as long as wide, with large and moderately dense punctures, but without rugosities on sides in both sexes; interspaces mostly larger than punctures, flat. Pygidium with deep central groove not ridged below. Propleurae punctuate. Abdominal sternite 4 not serrate on sides, next sternite distinctly serrate on sides, with almost straight hind margin. All femora not toothed. Aedeagus (Fig. 11) widened to apex, which is subtruncate with short apical tip. Spermatheca – Fig. 27.

Length of body 4.3–5.8 mm.

Derivatio nominis. The species is named in honour of its collector, Mr. R. C. McGregor.

Differential diagnosis. Near *C. mindanaica* L. Medvedev, 1988 and *C. krausei* L. Medvedev, 1988; differs from both in form of aedeagus and from the first species also in elytra not rugose.

***Colaspoides mindanaica* L. Medvedev, 1988**

Material examined. 3 paratypes (2 males, 1 female): Mindanao, Zamboanga, leg. W. Schultze (LM); – Mindanao, 25 km NW of Zamboanga, camp Susana, 800 m, 28–30.IV.1996, leg. Bolm, 1 female (NHMB). Possible females: Mindanao, Kolambugan, leg. Baker, 2 ex. (USNM); – Mindanao, Dapitan, leg. Baker, 3 ex. (USNM, 1 ex. – LM).

Redescription. Antennae nitidiform, preapical segments about 4 times as long as wide. Pygidium with deep central groove very feebly widened to base, not ridged below. Abdominal segment 4 not serrate on sides, segment 5 feebly toothed on sides, with obtuse; not incised hind margin (Fig. 33). Spermatheca of possible female C-like, globose on one end before ductus (Fig. 29).

Length of body 5.5–6.2 mm.

Remark. A few females which possibly belong to this species, having the same coloration, differ however in rather feebly rugose lateral part of elytra.

***Colaspoides krausei* L. Medvedev, 1988**

Material examined. 1 paratype, male: Panay, Antique Culasi, leg. W. Schultze (LM); – Biliran Island, leg. Baker, 6 males, 3 females (USNM, 2 ex. – LM); – Bohol, Bilar, IX.1923, leg. Mac Gregor, 2 females (USNM); – Negros oriental, Siquijor Island, leg. Mac Gregor, 1 female (USNM); – Mindanao, Ilugan, leg. Baker, 1 male (USNM); – Mindanao, Butuon, leg. Baker, 1 male (USNM).

Remarks. The type series from Panay has red-cupreous upperside; all specimens from other islands are metallic green. Nevertheless, they all have the same structure of aedeagus and spermatheca. The same structure of genitalia is also known in *C. subtuberculata* sp.nov., having rough sculpture of elytra.

***Aulacia nigella* (Weise 1922) comb.nov.**

Colaspoides nigella Weise, 1922

Material examined. Type series, 1 male, 1 female: Baguio, Benguet, leg. Baker (NRS); – same locality, 2 males, 2 females (USNM); – Luzon, Mt. Makiling, leg. Baker, 1 male (USNM); – Mindoro, San Jose, 1 male (LM).

Remarks. This species has all the characters of the genus *Aulacia* Baly, 1867: supraocular groove, elytra distinctly narrowed towards the rear, with acute apices, in females costate at sides. The species in question is very similar to *A. fulviceps* Baly, 1867 from Borneo, but has an aedeagus with feebly widened apex (Fig. 14), while in *A. fulviceps* the apical part of aedeagus is very strongly widened (see MEDVEDEV 2004).

Acknowledgements

I am grateful to Dr. M. Brancucci (Basel), Dr. Danielsson (Stockholm), Dr. A. Konstantinov (Washington), Dr. W. Schawaller (Stuttgart) for providing me with interesting material under their care.

References

- BALY J. (1867): *Phytophaga Malayana*. Trans. ent. Soc. London, Ser. 3, **4**: 1–300.
MEDVEDEV L. N. (1988): *New and poorly known leaf beetles (Chrysomelidae) from South Asia*. In: MEDVEDEV L. N. (edit.): *Fauna and ecology of insects in Vietnam*. Moscow, Nauka, pp 46–50.
MEDVEDEV L. N. (1995): *Chrysomelidae (Coleoptera) from Leyte Island, Philippine*. Stuttg. Beitr. Naturk., Ser.A, **No. 526**: 1–22.
MEDVEDEV L. N. (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. N. (2004): *Contribution to the knowledge of the genus Aulacia Baly 1867 (Coleoptera, Chrysomelidae, Eumolpinae)*. Annali Mus. Stor. Nat. **96**: 429–438.
WEISE J. (1922): *Chrysomeliden der Philippinen, III*. Philipp. J. Sci. **21(5)**: 423–490.

Author's address:

Prof. Lev N. Medvedev
Institute for Problems of Ecology and Evolution
Russian Academy of Sciences
Leninsky Prospect 33
Moscow 119071
RUSSIA
E-mail: lev.medvedev@sevin.ru

