New and poorly known Alticinae (Coleoptera: Chrysomelidae) from New Guinea and islands of Southeast Asia

LEV N. MEDVEDEV

Abstract

One new genus and 17 new species of the chrysomelid subfamily Alticinae are described: *Neorthella rufofulva* **n. gen.**, **n. sp.** (Borneo), *Acrocrypta doeberli* **n. sp.** (Borneo), *Chabria convexissima* **n. sp.**, *C. iriana* **n. sp.**, *C. papuana* **n. sp.**, *C. riedeli* **n. sp.** (all New Guinea), *Ivalia ornata* **n. sp.** (Borneo), *Sphaeroderma septempunctatum* **n. sp.** (Borneo), *S. ovatomaculatum* **n. sp.** (Bali), *Sutrea antennata* **n. sp.** (Borneo), *S. kolibaci* **n. sp.**, *S. nigricornis* **n. sp.**, *S. nigripes* **n. sp.**, *S. quadripustulata* n. sp., *S. weigeli* **n. sp.** (all New Guinea), *S. riedeli* **n. sp.** (Maluku), and *Orthaltica riedeli* **n. sp.** (New Guinea). New synonym: *Chabria media* Weise, 1913 = *C. angulicornis* Clark, 1865. A key to the New Guinean species of the genus *Sutrea* Baly is given.

K e y w o r d s : Chrysomelidae, Alticinae, New Guinea, Oriental region, new taxa, new synonymy.

Zusammenfassung

Eine neue Gattung und 17 neue Arten der Chrysomeliden-Subfamilie Alticinae werden beschrieben: Neorthella rufofulva n. gen., n. sp. (Borneo), Acrocrypta doeberli n. sp. (Borneo), Chabria convexissima n. sp., C. iriana n. sp., C. papuana n. sp., C. riedeli n. sp. (alle Neuguinea), Ivalia ornata n. sp. (Borneo), Sphaeroderma septempunctatum n. sp. (Borneo), S. ovatomaculatum n. sp. (Bali), Sutrea antennata n. sp. (Borneo), S. kolibaci n. sp., S. nigricornis n. sp., S. nigripes n. sp., S. quadripustulata n. sp., S. weigeli n. sp. (alle Neuguinea), S. riedeli n. sp. (Maluku), und Orthaltica riedeli n. sp. (Neuguinea). Neues Synonym: Chabria media Weise, 1913 = C. angulicornis Clark, 1865. Ein Bestimmungsschlüssel für die Arten von Sutrea Baly von Neuguinea wird gegeben.

Contents

1	Introduction	
2	Taxonomy	
	2.1 Genus Neorthella n. gen.	
	2.2 Genus Acrocrypta Baly, 1862	
	2.3 Genus Chabria Jacoby, 1887	
	2.4 Genus Ivalia Jacoby, 1887	
	2.5 Genus Sphaeroderma Stephens, 1831	
	2.6 Genus Sutrea Baly, 1876	
	2.7 Genus Orthaltica Crotch, 1873	
3	References	

1 Introduction

Alticinae of the Oriental region and from New Guinea are still insufficiently studied. Intensive collecting in these areas during the last years resulted in the descriptions of numerous new species and genera.

The present paper is mostly based on materials from the Staatliches Museum für Naturkunde in Stuttgart. As a result of this investigation, one genus and 17 species are described as new to science. In addition, notes are given on a few poorly known species, and a key for the New Guinean species of the genus *Sutrea* is provided. LM NMEG SMNS

Acronyms of depositories

Collection of L. MEDVEDEV, Moscow, Russia Naturkundemuseum, Erfurt, Germany Staatliches Museum für Naturkunde, Stuttgart, Germany

$A\,c\,k\,n\,o\,w\,l\,e\,d\,g\,e\,m\,e\,n\,t\,s$

I am grateful to Dr. WOLFGANG SCHAWALLER (SMNS) and Dr. MATTHIAS HARTMANN (NMEG) for the possibility to study the material under their care. Special thanks are extended to J. REIBNITZ (SMNS) who prepared the photographs of the present paper by using a Leica DFC 480 digital camera on a Leica MZ16 APO microscope. I also thank the referees for their comments and advice.

2 Taxonomy

2.1 Genus Neorthella n. gen.

Type species: Neorthella rufofulva n. sp.

Etymology

The name refers to the similarity to the genus *Neorthana* L. Medvedev, 1996.

Description

Body ovate, strongly convex. Clypeus triangular, prolonged between antennal insertions as a narrow sharp ridge, delimited laterally by longitudinal grooves for the basal segments of the antennae; interantennal space narrow, vertex triangular, prolonged anteriorly in a narrow sharp ridge connecting with clypeus ridge; wide and deep excavations between vertex and inner margin of eves, frontal tubercles absent (Fig. 1). Prothorax convex, without any impressions, with basal lobe and thickened anterior angles, bearing a pore. Elytra with regular rows of punctures, confused behind the middle, but punctures mostly not impressed, appearing as dark dots; humeral tubercles weak, basal convexity absent. Anterior coxal cavities open, prosternum wide. Metasternum relatively short. Abdominal sternite 1 with two long and sharp ridges in the middle. Tibiae with flattened and slightly concave upperside, spurs short. Tarsi long, segment 1 of hind tarsus thin, as long as half of tibia, segment 3 distinctly bilobed. Claws appendiculate.

Diagnosis

This new genus resembles *Neorthana* L. Medvedev, 1996. It differs in the shape of clypeus and vertex, the narrow interantennal space, the sculpture of prothorax and elytra and the open anterior coxal cavities. It is apparently very similar to *Lanka* Maulik, 1926, but differs in the absence of frontal tubercles and the different shape of vertex and clypeus.

Neorthella rufofulva **n. sp.** (Figs. 1, 2, 14, 33)

Holotype (3): Borneo, Sabah, Batu Punggul Resort, 24.VI.–1.VII.1996, leg. J. KODADA (SMNS).

Etymology

The species name refers to the colouration of the body.

Description

Red fulvous; antennae black with 3 basal segments fulvous and 2 apical segments white; subhumeral spot and a transverse, poorly delimited band in the middle of the elytra black (Fig. 14).

Head shining, impunctate, grooved areas microsculptured. Antennae reaching to the middle of the elytra, proportions of segments 12-6-7-8-8-8-9-9-9-7-9, preapical segments about twice as long as wide. Prothorax 1.8 times as wide as long, lateral margins from base to pore straight, surface shining and impunctate. Scutellum small, triangular. Elytra 1.2 times as long as wide, surface shining, rows of punctures not quite regular, scutellar row long, about one third of elytral length. Segment 1 of fore and mid tarsi distinctly widened. Aedeagus see Fig. 2. Body length 3.5 mm.

2.2 Genus Acrocrypta Baly, 1862

Acrocrypta doeberli n. sp. (Figs. 15, 30)

Holotype (♂): Borneo, Sabah, Kinabalu N. P., Sayap, 1000 m, 28.XI.1996, leg. D. GRIMM (SMNS).

Etymology

The name of the new species is dedicated to MANFRED DÖBERL (Abensberg), a well known specialist on Alticinae, who revised this genus.

Description

Fulvous; antennae black with 3 basal and 2 apical segments fulvous; elytra with basal margin (wider on humeral area), anterior third of suture and narrow transverse band in the middle (not reaching suture) black (Figs. 15, 30).

Body ovate, moderately convex. Head impunctate, shining. Frontal tubercles flat, transverse, quadrangular, delimited posteriorly by a straight, slightly impressed line. Antennae reaching to the anterior third of the elytra, proportions of segments 8-3-4-6-6-5-5-5-5-7, preapical segments about 2.5 times as long as wide. Prothorax twice as wide as long, widest behind the middle, lateral margins slightly rounded, anterior angles not produced, with a distinct pore, surface shining and impunctate. Scutellum triangular with rounded apex. Elytra 1.2 times as long as wide, finely (especially on apical slope) and densely punctate. Segment 1 of anterior tarsi not widened. Aedeagus (lost during preparation) thin, stick-like, with truncate apex. Body length 4.0 mm.

Diagnosis

The new species belongs to a group with spotted elytra (see DöBERL 2001). Having a black anterior part of the suture, it is similar to *A. medvedevi* Döberl, 2001, but it clearly differs in its elytral pattern (Fig. 15).



Figs. 1–13. Alticinae, head (1), aedeagus, ventral and lateral (= 1) views (2–8), spermatheca (9–13). – 1. *Neorthella rufofulva* n. gen., n. sp. 2. *Neorthella rufofulva* n. sp. 3. *Chabria iriana* n. sp. 4. *Chabria angulicornis* Clark. 5. *Sutrea nigricornis* n. sp. 6. *Sutrea antennata* n. sp. 7. *Sutrea weigeli* n. sp. 8. *Sutrea marginipennis* Jacoby. 9. *Chabria riedeli* n. sp. 10. *Sphaeroderma septempunctatum* n. sp. 11. *Sutrea riedeli* n. sp. 12. *Sutrea punctipennis* Weise 13. *Sutrea marginipennis* Jacoby. – Scales: 0.2 mm.



Figs. 14–25. Alticinae, pattern of right elytron. – 14. Neorthella rufofulva n. sp. 15. Acrocrypta doeberli n. sp. 16. Ivalia ornata n. sp. 17. Sphaeroderma septempunctatum n. sp. 18. Sphaeroderma ovatomaculatum n. sp. 19. Sutrea kolibaci n. sp. 20–21. Sutrea nigricornis n. sp. 22. Sutrea quadripustulata n. sp. 23. Sutrea antennata n. sp. 24. Sutrea weigeli n. sp. 25. Sutrea riedeli n. sp.

2.3 Genus Chabria Jacoby, 1887

Chabria angulicornis (Clark, 1865) (Fig. 4)

Argopus angulicornis Clark, 1865 *Dimax media* Weise, 1913. *Chabria media* (Weise, 1913) (**n. syn.**).

Material examined

Borneo, Sabah, Batu Punggul Resort, 24.VI.–1.VII.1996, leg. J. KODADA, 1 \checkmark (SMNS). – NW Borneo, Sarawak, Belaga, 15.III.1990, leg. A. RIEDEL, 1 \checkmark (SMNS). – Malaysia, Pahang Prov., Kuala Lipis, 9.VII.2004, leg. M. GAISER, 1 \bigcirc (SMNS). – Malaysia, Jahor, Endau-Rompin, Pulau Jasin, 50–400 m, 19.III.1998, leg. L. DEMBICKÝ & P. PACHOLÁTKO, 1 \bigcirc (SMNS). – Malaya, 1 \bigcirc (LM). – Singapore, 1898, leg. L. BIRO, 1 \checkmark , 1 \bigcirc (LM). – Malaysia, Benom Mts., 15 km E Kampong Dong, 700 m, 1.IV.1998, leg. L. DEMBICKÝ & P. PACHOLÁTKO, 1 \bigcirc (LM). – S Thailand, Satun Prov., Thale Ban (6°45'N 100°09'E), 200 m, 8.–13.IV.1997, leg. J. KOLIBÁČ, 1 \checkmark (LM). – N Palawan, Bacuit, XII.1913, leg. G. ROETTCHER, $2 \Im \Im$, $1 \Leftrightarrow$ (LM). – Palawan, Port Barton, 150 m, 14.–18.XII.1990, leg. Bolm, $1 \Im$ (LM). – First record for Thailand.

Remark

Chabria media (Weise, 1913) is a new synonym of *C. angulicornis* (Clark, 1865). *C. angulicornis* was described from Borneo and Singapore, *C. media* from Palawan. Both nominal species are morphologically identical in colouration and in shape and structure of the aedeagus which has two wide unsclerotized stripes on its underside, divided by a narrow central stripe (Fig. 4).

Chabria convexissima n. sp. (Fig. 26)

H o l o t y p e (\Im): New Guinea, Irian Jaya, Anggi, Tetaho Iranmeba, 1500–1700 m, 25.III.1993, leg. A. RIEDEL (SMNS).

Etymology The species name refers to the very convex body.

Description

Dark violaceous; antennae piceous with 2 apical segments pale flavous; underside and legs mostly black.

Head densely microsculptured (except flat and shining frontal tubercles), clypeus and vertex without longitudinal impression. Antennae reaching to the base of the elytra, proportions of segments 6-3-7-5-4-4-5-5-6-7-10, preapical segments about 1.5 times as long as wide. Prothorax twice as wide as long, basal margin strongly arcuate, lateral margins slightly rounded, with a large pore before the middle and a small one at the hind angles, anterior angles triangularly rounded, hind angles obtuse; surface impunctate, densely microsculptured, with a sharp groove from anterior pore to anterior margin, dividing a rather large triangular area behind the anterior angles; there is also a very weak impression more or less parallel to the lateral margin. Scutellum triangular, microsculptured. Elytra very strongly convex, with maximal convexity in the middle, 0.95 times as long as wide and 1.35 times as long as high, surface very densely microsculptured; apical slope almost vertical, impressed along suture, apices attenuate. Hind tibiae with long spurs. Body length 4.0 mm.

Diagnosis

This new species differs from all known metallic coloured species in its unusually convex elytra, in the densely microsculptured upperside, and in the unusual sculpture of the prothorax.

Chabria iriana **n. sp.** (Figs. 3, 28)

H o l o t y p e (\vec{c}): New Guinea, Irian Jaya, Anggi, Tetaho Iranmeba, 1500–1700 m, 25.III.1993, leg. A. RIEDEL (SMNS).

P a r a t y p e s : Same data as holotype, 2 ex. (SMNS, LM). – New Guinea, Irian Jaya, Jayawijaya, Djuremna, 1900–2100 m, 9.–11.IX.1992, leg. A. RIEDEL, 3 ex. (2 SMNS; 1 LM). – Papua New Guinea, Morobe, Finschhafen, Sattelberg, 100–800 m, 18.X.1992, leg. A. RIEDEL, 1 ex. (SMNS).

Etymology

The species name is derived from Irian (Jaya).

Description

Bluish black, underside mostly black; antennae pale fulvous.

Head impunctate, interantennal space wide, with longitudinal groove, frons with a rounded groove, frontal tubercles indistinct. Antennae reaching to the humeral tubercle, proportions of segments 9-4-5-4-3-5-5-6-5-8, preapical segments about 1.5 times as long as wide. Prothorax twice as wide as long, basal margin strongly arcuate, lateral margins and hind angles rounded, surface moderately convex, impunctate, densely microsculptured, with lateral callus in anterior half. Scutellum triangular, microsculptured. Elytra 1.15 times as long as wide, widest behind the middle, surface convex, densely punctate. Wings present, but relatively short. Spur of hind tibia thin and long. Aedeagus see Fig. 3. Body length 2.9–3.3 mm.

Diagnosis

This new species is similar to *C. nigroviolacea* L. Medvedev, 2008 from Celebes, but it clearly differs in having the antennae pale fulvous and the prothorax with distinct lateral callus.

Chabria papuana **n. sp.** (Fig. 27)

H o l o t y p e (\mathcal{Q}): Papua New Guinea, Morobe, Finschhafen, Sattelberg, 100–800 m, 18.X.1992, leg. A. RIEDEL (SMNS).

Etymology The species name is derived from Papua (New Guinea).

Description

Dark bronze; antennae black with 4 basal segments fulvous and apical segment piceous; legs dark fulvous with piceous hind femora.

Head impunctate, shining, with a very distinct longitudinal impression from clypeus to vertex, frontal tubercles indistinct. Antennae reaching to the base of the elytra, proportions of segments 10-4-5-4-3-4-5-4-5-5-8, preapical segments about as long as wide, segments 6–11 distinctly thickened. Prothorax twice as wide as long, basal margin strongly arcuate, lateral margins rounded, with a large pore in the middle, anterior angles acute, hind angles obtuse, with pore and bristle, surface moderately convex, shining, with sparse minute punctures and lateral callus, wide anteriorly and disappearing near middle; there is also another impressed line, more or less parallel to lateral margin. Scutellum triangular, shining. Elytra 1.2 times as long as wide, widest in the middle, finely punctate. Spur of hind tibia thin and long. Body length 3.6 mm.

Diagnosis

This new species clearly differs from *C. iriana* in the colouration of the antennae, different shape and sculpture of the prothorax and finely punctate elytra.

Chabria riedeli **n. sp.** (Figs. 9, 29)

H o l o t y p e (\mathcal{Q}): New Guinea, Irian Jaya, Jayawijaya, Djuremna, 1900–2100 m, 9.–11.IX.1992, leg. A. RIEDEL (SMNS).

Etymology

The name of this species is dedicated to its collector, Dr. ALEXANDER RIEDEL (Karlsruhe).

Description

Piceous to black with weak metallic blue luster; antennae with segments 1–4 fulvous, 5–8 piceous, 9–11 pale flavous; underside piceous, legs fulvous.

Head shining, very finely and sparsely punctate, interantennal space as wide as length of basal antennal segment, longitudinally concave, frontal tubercles absent, vertex excavated near eyes. Antennae reaching to the humeral area of the elytra, proportions of segments 11-6-5-4-4-5-5-5-6-8, preapical segments as wide as long. Prothorax twice as wide as long, basal margin strongly arcuate, lateral margins practically not divided from hind margin, with a large pore placed in the middle, anterior angles obtuse, surface shining, very finely and sparsely punctate, with narrow elevated lateral callus, sharply delimited from main surface. Scutellum triangular, smooth and shining. Elytra 1.1 times as long as wide, strongly convex, shining, with fine and moderately dense confused punctures. Wings present. Anterior coxal cavities open. Anterior process of the first abdominal sternite with two ridges. Third segment of tarsi as wide as or slightly wider than preceding one, slightly emarginated at apex, but not bilobed. Spermatheca see Fig. 9. Body length 2.5 mm.

Diagnosis

This new species is similar to *C. iriana* n. sp. It differs in the colouration of the upperside, tricoloured antennae and a different shape of the lateral callus on the prothorax.

2.4 Genus Ivalia Jacoby, 1887

Ivalia ornata **n. sp.** (Figs. 16, 31)

Holotype (\bigcirc): Borneo, Sabah, Crocker Range N.P., Rafflesia Centre, 13.–14.VI.1996, leg. J. KODADA (SMNS).

Etymology

The species name refers to the specific elytral pattern.

Description

Head and prothorax red fulvous; antennae piceous with basal segments and apical segment reddish fulvous; elytra fulvous with piceous margins (wider on anterior half of lateral margins), and oblique piceous band in anterior third, poorly delimited posteriorly (Fig. 16); all punctures on fulvous background look dark; underside and legs piceous, tibiae and tarsi more or less fulvous.

Body ovate, 1.4 times as long as wide. Head impunctate, shining, frontal tubercles indistinct, interantennal space very wide. Antennae reaching to the base of the elytra, proportions of segments 7-3-4-3-4-5-5-5-5-7, preapical segments 2.5 times as long as wide. Prothorax 2.35 times as wide as long, widest at base, lateral margins barely arcuate, with a distinct pore in anterior third, surface shining and nearly impunctate. Scutellum very small, triangular. Elytra 1.1 times as long as wide, strongly convex, with narrow apices, surface shining and impunctate, but with transparent dark and confused dots on fulvous background. Wings absent. Metasternum saddle-like elevated. First abdominal sternite with sharp ridge, widened anteriorly and almost reaching to the hind margin. Body length 2.3 mm.

Diagnosis

This is the first species of the genus *Ivalia* found on islands south of Thailand (KIMOTO 2001). It clearly differs from all continental species in unusual elytral pattern (oblique dark band just behind the base, Fig. 16).

2.5 Genus Sphaeroderma Stephens, 1831

Sphaeroderma ovatomaculatum n. sp. (Figs. 18, 32)

Holotype (Q): Indonesia, Bali, Danau Buyan, 1300 m, 19.–21.II.1994, leg. Bolm (SMNS).

Etymology

The species name refers to the shape of the elytral spot.

Description

Fulvous; 5 apical antennal segments and a rather large elongate ovate spot on each elytron black (Fig. 18).

Body ovate, 1.5 times as long as wide. Head impunctate, frontal tubercles transverse, delimited posteriorly by an almost straight impression. Antennae reaching to the anterior third of the elytra, proportions of segments 10-5-3-4-5-5-5-6-6-6-8, preapical segments about 1.5 times as long as wide. Prothorax 1.75 times as wide as long, lateral margins rounded, anterior angles not angulate, surface very finely and sparsely punctate. Scutellum triangular, with fine microsculpture. Elytra 1.05 times as long as wide, with fine dense punctures, arranged in 5 rather regular rows laterally. Segment 3 of anterior tarsi twice as wide as segment 1. Body length 2.8 mm.

Diagnosis

This new species is similar to *S. nigromaculatum* Jacoby, 1896 from Sumatra, which, however has the prothorax and the legs black. It differs from *S. bisbipunctatum* L. Medvedev, 2008, from Borneo in other elytral pattern and colouration of the antennae. In the key given in the revision of *Sphaeroderma* from the Oriental islands (MEDVEDEV 2008) the new species might be placed just after item 27.

Sphaeroderma septempunctatum **n. sp.** (Figs. 10, 17)

H o l o t y p e (Q): Borneo, Sabah, Mt. Kinabalu, 28.V.1999, leg. Z. SMRZ (LM).

Etymology

The species name refers to the number of the elytral spots.

Description

Red fulvous; antennal segments 4–9 black, 1–3 and 10–11 fulvous; scutellum black; elytra with a large common pear-like sutural spot at base, humeral area, a transverse band (interrupted on suture) in the middle, and a smaller band on apical slope black (Fig. 17); breast, base of abdomen, apical half of tibiae and tarsi black.

Body ovate. Head impunctate, frontal tubercles transverse, delimited posteriorly by a straight impressed line. Antennae reaching to the humeral area of the elytra, proportions of segments 15-6-8-8-9-9-9-8-8-7-10, segments 5–10 slightly thickened, preapical segments about 1.5 times as long as wide. Prothorax 1.85 times as wide as long, lateral margins rounded, anterior angles obtusely angulate, with a pore, anterior margin barely concave, surface shining, impunctate. Scutellum triangular, impunctate. Elytra 1.15 times as long as wide, without distinct humeral tubercle, surface shining, finely and densely confusedly punctate. Segment 3 of anterior tarsi relatively narrow, about 1.5 times as wide as segment 1. Spermatheca see Fig. 10. Body length 4.2 mm.

Diagnosis

The new species is similar to *S. sabahense* L. Medvedev, 2008, but it is twice as large, with distinctly different elytral pattern, distinct frontal tubercles, fulvous vertex, and antennae (in part), underside and legs black.

2.6 Genus Sutrea Baly, 1876

This rather small genus consists of 33 species (and 7 newly described in this paper), distributed on islands of Southeast Asia, Australia and especially on New Guinea (19 species and 6 newly described in this paper). The

original description of the genus is very short, many specific characters not being included (BALY 1876). As a result, *Sutrea* was placed near *Hemipyxis* Dejean, 1837 by CHEN (1936) and SEENO & WILCOX (1982), but, indeed, *Sutrea* differs very sharply from both. Additional generic characters are added here: frontal tubercles cuneiform, touching each other and produced in part to a relatively narrow interantennal space; tarsal segment 3 practically not emarginate at apex (as in *Sphaeroderma*-like genera), or barely emarginated. The nearest relatives of *Sutrea* are probably *Chabria* Jacoby, 1887 and *Sphaeroderma*-like genera.

Sutrea antennata **n. sp.** (Figs. 6, 23)

H o l o t y p e (\eth): Borneo, Sabah, Crocker range, 1650 m, Gunung Emas, 4.VI.2003, leg. J. Šťastný (LM, received from J. BEZDĚK).

Etymology

The species name refers to the specific antennal colouration.

Description

Red fulvous; antennae with segments 1–4 fulvous (segment 4 darkened in part), 5–9 black, 10–11 pale fulvous; elytra black with ovate spot behind humerus and similar spot at apex fulvous (Fig. 23); tibiae and tarsi piceous to black.

Body elongate. Head impunctate, frontal tubercles cuneiform, not sharply divided from each other, interantennal space narrow, convex, but not ridged. Antennae almost reaching to the middle of the elytra, proportions of segments 9-5-7-9-9-8-8-8-8-10, preapical segments about 3 times as long as wide. Prothorax 2.5 times as wide as long, widest before the middle, barely arcuate laterally, angulate in anterior fifth, with a pore, hind margin with weak and wide basal lobe, surface shining and impunctate. Scutellum triangular, with minute punctures, apex rounded. Elytra 1.4 times as long as wide, less shining than prothorax, nearly impunctate. Segment 1 of fore and mid tarsi triangular, distinctly widened. Aedeagus see Fig. 6. Body length 7.0 mm.

Diagnosis

This new species is similar to *S. taeniata* Weise, 1917. It differs in its elytral pattern and the colouration of the legs (see couplet 19 in the key below).

Sutrea chevrolati (Guérin, 1830)

This species was insufficiently described. WEISE (1908) proposed that *S. hexaspilota* Baly, 1876 is identical with *S. chevrolati* Guérin, because "both descriptions were based

on a single specimen from Dore". Furthermore, he assigned a specimen (with fulvous prothorax with black central stripe) to this species, using the name ab. *vitticollis* for it. This is strange because *S. hexaspilota* has an entirely fulvous prothorax, and *S. chevrolati* has a fulvous prothorax with a few smoky and poorly delimited small spots. Possibly *S. hexaspilota* and *S. chevrolati* are really identical, but ab. *vitticollis*, having a black central stripe, surely must belong to a different group of species, but this problem cannot be solved currently.

Neither the presumed synonymy nor the ab. *vitticollis* were included in the catalogue on Alticinae of HEIKERTINGER & CSIKI (1940), whereas other species described by WEISE on the same page of his paper have been considered.

Sutrea kolibaci **n. sp.** (Figs. 19, 36)

Holotype (\mathcal{Q}): New Guinea centr., Baliem Tal, 1700 m, III.1992, leg. J. KOLIBÁČ (SMNS).

Etymology

The name of this species is dedicated to its collector, Dr. JIŘÍ KOLIBÁČ (Brno).

Description

Head piceous with dark fulvous clypeus; antennae black with 3 basal segments piceous and apical segment fulvous; prothorax and scutellum piceous; elytra fulvous with transverse band just before the middle, another band behind the middle and apex piceous (Figs. 19, 36); underside and legs piceous.

Body elongate. Head impunctate, frontal tubercles triangular, poorly delimited posteriorly and divided from each other by an impressed line, interantennal space narrow, convex, but not ridged. Antennae reaching to the anterior third of the elytra, proportions of segments 10-4-6-9-9-9-8-8-8-8-10, preapical segments about 3 times as long as wide. Prothorax 1.7 times as wide as long, widest in the middle, slightly arcuate laterally, anterior angles thickened, with a pore, but not produced laterally, hind margin with very weak basal lobe, surface shining, very finely and sparsely punctate. Scutellum triangular, with minute punctures, apex rounded. Elytra 1.5 times as long as wide, less shining than prothorax, impunctate. Segment 1 of fore and mid tarsi triangular, distinctly widened. Body length 7.0 mm.

Diagnosis

The new species is similar to *S. triplagiata* Jacoby, 1904. It differs in the elytral pattern and the colouration of the legs (see couplet 5 in the key below).

Sutrea nigricornis **n. sp.** (Figs. 5, 20–21, 38)

H o l o t y p e (\vec{c}): New Guinea, Irian Jaya, Anggi, Tetaho Iranmeba, 1500–1700 m, 25.III.1993, leg. A. RIEDEL (SMNS).

P a r a t y p e s : Same data as holotype, $2 \Im \Im$ (SMNS, LM). – New Guinea, Irian Jaya, Jayawijaya, Diuremna, 1900–2100 m, 9.–11.IX.1992, leg. A. RIEDEL, $1 \Im$ (SMNS). – New Guinea, Irian Jaya, Jayawijaya, Nalca, 1900–2100 m, 8.IX.1992, leg. A. RIEDEL, $1 \Im$ (LM).

Etymology

The species name refers to the black colour of the antennae.

Description

Black; prothorax pale flavous; elytra pale flavous with basal and preapical black bands (Figs. 20, 38); occasionally the black area is enlarged, i.e. the elytra appearing black with fulvous pattern (Fig. 21).

Body elongate ovate. Head impunctate, with round groove on vertex, frontal tubercles cuneiform, divided from each other with impressed line, poorly delimited posteriorly, interantennal space narrow and ridged. Antennae reaching the middle of the elvtra, proportions of segments 7-3-6-6-7-7-7-7-8, preapical segments about 3.0-3.5 times as long as wide. Prothorax twice as wide as long, widest before the middle, lateral margins arcuate. anterior angles broadly rounded, with a pore, basal margin straight, surface shining and impunctate. Scutellum triangular with rounded apex, finely punctate. Elytra 1.35 times as long as wide, shining, very finely and sparsely punctate, without basal convexity and ridge near lateral margin before apex. Segment 1 of fore and mid tarsi practically not widened in ♂. Aedeagus (Fig. 5) moderately wide, strongly narrowed to apex, with a small tooth on each side in the apical third and a longitudinal impression in the apical third of the underside. Body length 4.8-5.5 mm.

Diagnosis

This new species clearly differs from all species with bicoloured elytra (except *S. quadripustulata* n. sp.) in having antennae and legs entirely black. From *S. quadripustulata* it differs in the long preapical antennal segments, the rounded anterior angles of the prothorax and the different elytral pattern (see couplet 12 in the key below).

Sutrea nigripes **n. sp.** (Fig. 39)

Holotype (Q): Papua New Guinea, Warigo, 9.XI.1965, leg. H. PYKA (SMNS).

Paratype: New Guinea centr., Baliem Tal, 1700 m, III.1992, leg. J. KOLIBÁČ, 1 \bigcirc (LM).

Etymology

The species name refers to the black colour of the legs.



Figs. 26–33. Alticinae, holotypes. – 26. Chabria convexissima n. sp. 27. C. papuana n. sp. 28. C. iriana n. sp. 29. C. riedeli n. sp. 30. Acrocrypta doeberli n. sp. 31. Ivalia ornata n. sp. 32. Sphaeroderma ovatomaculatum n. sp. 33. Neorthella rufofulva n. sp. – Scale: 2 mm.



Figs. 34–39. Sutrea spp., holotypes. – 34. S. riedeli n. sp. 35. S. weigeli n. sp. 36. S. kolibaci n. sp. 37. S. quadripustulata n. sp. 38. S. nigricornis n. sp. 39. S. nigripes n. sp. – Scale: 2 mm.

Description

Fulvous; scutellum and elytra metallic green; metasternum, abdomen and legs black.

Body elongate ovate. Head impunctate (except a few punctures near eyes), frontal tubercles cuneiform, divided by a deep impressed line, interantennal space narrow, ridge-like. Antennae reaching to the middle of the elytra, proportions of segments 8-4-7-8-9-9-9-8-7-7-10, preapical segments about twice as long as wide. Prothorax 1.7 times as wide as long, widest before the middle, lateral margins slightly arcuate, anterior angles distinct, produced, with a pore, basal margin straight, surface shining, impunctate. Scutellum triangular, with minute punctures, apex rounded. Elytra 1.4 times as long as wide, shining, indistinctly punctate, with a high basal convexity and a weak longitudinal elevation before the apical slope near to the lateral margin. Body length 6.5–6.8 mm.

Diagnosis

The new species is very similar to *S. violaceipennis* Jacoby, 1885 and *S. punctipennis* Weise, 1908. It differs from both in the colouration of elytra and legs and the high basal elevation of the elytra (see couplets 2 and 3 in the key below).

Sutrea quadripustulata **n. sp.** (Figs. 22, 37)

Holotype (\Im): New Guinea, Irian Jaya, Wamena E, Habbema lake, Pendok Yabogaima, 3200 m, 4°7'S 138°43'E, 21.I.1999, leg. A. WEIGEL (NMEG).

P a r a t y p e : New Guinea, Irian Jaya, Wamena W, Tailarek, 4°3'S 138°44'E, 2300 m, 22.I.1999, leg. A. WEIGEL, $1 \bigcirc (LM)$.

Etymology

The species name refers to the four spots on the elytra.

Description

Black; prothorax pale flavous; each elytron with 2 very large fulvous spots, its lateral margin very narrowly black (Figs. 22, 37).

Body elongate ovate. Head impunctate, vertex with a longitudinal impression, frontal tubercles cuneiform, divided from each other by a shallow impression, poorly delimited posteriorly, interantennal space narrow and ridged. Antennae reaching to the middle of the elytra, proportions of segments 7-3-7-6-6-6-6-6-5-5-7, preapical segments about twice as long as wide. Prothorax twice as wide as long, widest in the middle, lateral margins arcuate, anterior angles distinct, slightly produced, with a pore, basal margin straight, surface shining and impunctate. Scutellum triangular with rounded apex, impunctate. Elytra 1.6 times as long as wide, shining, very finely punctate, without basal convexity, with a weak longitudinal



Fig. 40. Orthaltica riedeli n. sp., holotype. - Scale: 1 mm.

elevation along lateral margin from humerus to apical slope. Body length 5.8–7.0 mm.

Diagnosis

This new species is similar to *S. nigricornis* n. sp. It differs in its completely different elytral pattern, the short preapical antennal segments, and the distinct and moderately produced anterior angles of the prothorax (see also couplet 12 in the key below).

Sutrea riedeli **n. sp.** (Figs. 11, 25, 34)

Holotype (\Im): Maluku, Island Halmahera Ibu, Desa Nanas, Gunung Gamkonora, 100–1000 m, 27.XI.1999, leg. A. RIEDEL (SMNS).

Etymology

The name of this species is dedicated to its collector, Dr. ALEXANDER RIEDEL (Karlsruhe).

Description

Fulvous; antennae black with segments 1–3 dark fulvous and 9–11 fulvous; elytra with a basal band (triangularly widened towards suture) and a wide preapical band piceous (Figs. 25, 34); metasternum piceous laterally.

Body elongate. Head impunctate, frontal tubercles cuneiform, poorly delimited posteriorly and delimited in part from each other by an impressed line, interantennal space flat. Antennae reaching to the middle of the elytra, proportions of segments 9-5-9-11-10-10-9-8-8-7-8, preapical segments about 2.5 times as long as wide. Prothorax twice as wide as long, widest before base, almost straight laterally, anterior angles thickened, with a pore, not produced angularly, basal margin straight, surface shining, with very fine and sparse, almost indistinct punctures. Scutellum triangular with rounded apex, impunctate. Elytra 1.4 times as long as wide, densely and distinctly punctate (except on apical slopes, where the punctures are strongly diminished). Spermatheca see Fig. 11. Body length 7.0 mm.

Diagnosis

This is the first species of the genus *Sutrea* described from Halmahera island. Only *S. taeniata* Weise, 1917 from New Guinea and *S. antennata* n. sp. from Borneo are similar. The new species differs from both in the fulvous legs and antennal segments 9–11, and in the different elytral pattern.

Sutrea weigeli **n. sp.** (Figs. 7, 24, 35)

H o l o t y p e (\mathcal{C}): New Guinea, Irian Jaya, Asori, 60 km E Kwadewa, Camp near Wapoga River, 2°49'S 136°28'E, 10.I.1999, leg. A. WEIGEL (NMEG).

P a r a t y p e : New Guinea, Irian Jaya, Nabire, 70 km W Yamorlake, Gariau, 3°43'S 134°56'E, 1.III.1998, leg. A. WEIGEL, $1 \stackrel{\circ}{\supset} (LM)$.

Etymology

The name of this species is dedicated to its collector, ANDREAS WEIGEL (Wernburg).

Description

Black; antennae fulvous with slightly darkened apical segments; prothorax pale fulvous with a central black stripe which is strongly narrowed in the basal part; elytra with two round spots in a transverse row before the middle and an ovate spot on apical slope pale fulvous (Figs. 24, 35); legs fulvous with black hind femora.

Body elongate ovate. Head impunctate, frontal tubercles cuneiform, divided by a deep impression, interantennal space convex, not ridged. Antennae reaching to the middle of the elytra, proportions of segments 8-4-7-6-7-8-8-7-7-7-8, preapical segments about 4 times as long as wide. Prothorax 1.9 times as wide as long, widest in the middle, lateral margins arcuate, anterior angles distinct, thickened, with a pore, basal margin slightly arcuate, without basal lobe, surface shining, impunctate. Scutellum short triangular with rounded apex, impunctate. Elytra 1.25 times as long as wide, shining, very finely punctate, without basal convexity and lateral ridge on apical slope. Segment 1 of fore and mid tarsi moderately widened. Aedeagus (Fig. 7) very thin, about 10 times as long as wide. Body length 5.0–5.5 mm.

Diagnosis

This new species is similar to *S. collaris* Jacoby, 1885. It differs in its elytral pattern, the colouration of the legs and its smaller size (see couplet 25 in the key below).

Key to the New Guinean species of Sutrea

1	Elytra metallic green, blue or violaceous blue, head, anten-
	Lipparaida without matallia colour (Fig. 25, 28)
2	Leas black (Fig 30) Elytra metallic green indistinctly
4	nunctate with traces of elevation on anical slope. Anterior
	angles of protheray produced Body length 6.5 mm
	angles of produced. – Body length 0.5 min.
	Lags more or less fulvous. Elutra metallic blue or viola
_	Legs more of less furvous. Efficient for our of viola-
2	Less falses and high for an black. Electro secolo s
3	Legs furvous, only find femora black. Efficial usually with a
	sharp longhuumar huge on apical slope hear lateral margin,
	S wielgeeinennig loophy 1995
	Logs fulvous with block hind femore and blockish tersi and
_	anions of tibing. Elytra with weak longitudinal alovation on
	apices of tiolae. Efficia with weak longitudinal elevation of
	Spermathece see Fig. 12 S nunctingunis Weise 1008
4	Prothoray black or niceous (Fig. 36) – Antennae black with
7	fulvous anical segment. Head legs and underside black or
	niceous
_	Prothorax fulvous (Figs 37 38) occasionally with black
	central strine (Fig. 35)
5	Elytra fulvous with a transverse band at base an elongate spot
•	below middle, the apex and posterior portion of suture black.
	Body length 5.0–7.0 mm
_	Elytra fulvous with a band just before the middle, another
	band behind the middle and the apex piceous (Figs. 19, 36).
	Body length 6.0 mm
6	Prothorax entirely fulvous (Figs. 37, 38)7
_	Prothorax fulvous with a black central stripe (Fig. 35) or a
	few darkened poorly delimited spots22
7	Elytra entirely black or with the anterior third fulvous, or with
	lateral margin less dark Head and antennae fulvous, apical
	antennal segments slightly darkened, breast fulvous
-	Elytra fulvous with black pattern or black with fulvous spots
~	and/or bands
8	Elytra finely rugose or wrinkled, of leathery appearance,
	impunctate, more or less fulvous laterally. – Legs fulvous
	with piceous hind temora, abdomen piceous. Body length
	5.5-4.0 mm
_	Elytra not wrinkled, snining
9	Lateral margin of elytra wide and reflexed, there is a weak
	hind famora, abdomen black Elytra vory minutaly puretete
	Pody longth 4.0 mm. Acdongue and Fig. 9, anormethan
	buy length 4.0 mm. Acceagus see rig. 8, spermatneca see

Fig. 13.....S. marginipennis Jacoby, 1904.

- Elytra with narrow, not reflexed lateral margin and without lateral elevation.
 10

- 11 Head, antennae and legs entirely black (Figs. 37, 38)...... 12
- Antennae and legs entirely or in part fulvous.
 13

- Elytra black with fulvous spots and/or bands......14

- Antennae fulvous or with apical segments a little darker. 16
- 16 Elytra with a narrow transverse band in the middle and a small round spot at the apex. Fore and mid legs fulvous, hind legs and underside black. – Body length 5.2 mm.
 S. balyi Jacoby, 1885
- Elytra with two round spots before the middle and a transverse band behind the middle fulvous. Legs fulvous with piceous or black hind femora.
- Underside fulvous. Median lobe of the last abdominal sternite of the ♂ without a deep excavation. Body length 5.2–5.3 mm. [see below under *S. chevrolati*].....
- **19** Elytra with a single transverse fulvous spot before the middle (sometimes touching the suture and appearing as a transverse band). Legs fulvous with piceous hind femora, underside piceous. Body length 4.2–5.2 mm.

Elytra with a more differentiated pattern......20

- Elytra with a large and wide spot in the middle, apices fulvous. Legs fulvous with black hind femora (except basally), underside fulvous. Body length 5–6 mm.

- 24 Elytra with a narrow transverse band in the middle and a round spot before the apex fulvous. Fore and middle legs fulvous, hind legs black. Body length 5.8–6.3 mm.
 S. collaris Jacoby, 1885
- Elytra with two round spots in a transverse row in the middle and a transverse spot before the apex fulvous (Figs. 24, 35). Legs fulvous with black hind femora. Body length 5.0–5.5 mm. Aedeagus very narrow (Fig. 7).... S. weigeli n. sp.

2.7 Genus Orthaltica Crotch, 1873

Orthaltica riedeli n. sp. (Fig. 40)

H o l o t y p e (\mathcal{C}): New Guinea, Irian Jaya, Jayawijaya, Bommeba, 30.VIII.–1.IX.1992, ca. 1750 m, leg. A. RIEDEL (SMNS).

P a r a t y p e : New Guinea, Irian Jaya, Anggi, Tetaho Iranmeba, 1500–1700 m, 25.III.1993, leg. A. Riedel, 1 $\stackrel{\circ}{\to}$ (LM).

Etymology

The name of this species is dedicated to its collector, Dr. ALEXANDER RIEDEL (Karlsruhe).

Description

Fulvous; head and prothorax reddish fulvous; 5 apical antennal segments piceous to black; elytra and underside black.

Head impunctate (except 6 setiferous punctures), shining, without impressions, frontal sutures forming an angle of about 80–90°, interantennal space narrow, with sharp ridge. Antennal tubercles absent, eyes big and convex, vertex with two rows of setiferous punctures, anterior row with 2 punctures, posterior one with 4 punctures. Antennae almost reaching to the middle of the elytra, the 5 apical segments thickened, proportions of segments 10-8-6-6-6-6-6-6-6-6-10, preapical segments about 1.5 times as long as wide. Prothorax 1.5 times as wide as long, cordiform, not serrate laterally and without any teeth, anterior angles oblique, ending with a setiferous pore, basal transverse impression deep and punctate, disk with strong and moderately dense punctures. Elytra 1.5 times as long as wide, with distinct humeral tubercle and very weak basal convexity, covered with erect sparse hairs, rows of punctures distinct towards apex, interspaces narrow, flat and shining. Body length of 3 1.7 mm, of 9 1.8 mm.

Diagnosis

This is the first species of *Orthaltica* found in New Guinea. It is near *O. laticollis* (Scherer, 1971), but much larger, with head and prothorax reddish fulvous, and its body elongate.

3 References

- BALY, J. S. (1876): Descriptions of new genera and species of Halticinae. – Transactions of the entomological Society of London 1876: 433–449.
- CHEN, S. H. (1936): Genera of Oriental Halticinae. Sinensia 7: 625–667.
- DÖBERL, M. (2001): Beitrag zur Kenntnis der Gattung Acrocrypta Baly, 1862 (Coleoptera: Chrysomelidae: Halticinae).
 Russian entomological Journal 10: 17–27.
- HEIKERTINGER, F. & CSIKI, E. (1940): Chrysomelidae, Halticinae. – In: JUNK, W. & SCHENKLING, S. (eds.): Coleopterorum Catalogus 25, partes 166 et 169: 635 pp.
- KIMOTO, S. (2001): Checklist of Chrysomelidae of South East Asia, South of Thailand and West of Irian Jaya of Indonesia, IX. Alticinae – Bulletin of the Institute of comparative Studies of international Cultures and Societies 28: 153–249.
- MEDVEDEV, L. N. (2008): To the knowledge of the genus Sphaeroderma Stephens, 1831 from the Oriental region. – Entomologica basiliensia 30: 277–303.
- SEENO, T. N. & WILCOX, J. A. (1982): Leaf beetle genera (Coleoptera: Chrysomelidae). Entomography 1: 1–221.
- WEISE, J. (1908): Chrysomelidae. Nova Guinea 5 (2): 311-349.

Author's address:

Dr. LEV N. MEDVEDEV, Severtsov Institute for Problems of Ecology and Evolution, Leninsky Prospect 33, Moscow 119071, Russia; e-mail: lev.n.medvedev@mail.ru

Manuscript received: 14.IV.2009, accepted: 2.VIII.2009.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Stuttgarter Beiträge Naturkunde Serie A [Biologie]

Jahr/Year: 2010

Band/Volume: NS_3_A

Autor(en)/Author(s): Medvedev Lev N.

Artikel/Article: <u>New and poorly known Alticinae (Coleoptera: Chrysomelidae) from New Guinea</u> and islands of Southeast Asia 291-304