

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

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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.

Key words: 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.

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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.

Acronyms of depositories

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

Acknowledgements

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 eyes, 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 (♂): 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 12-6-7-8-8-8-9-9-7-9, 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.

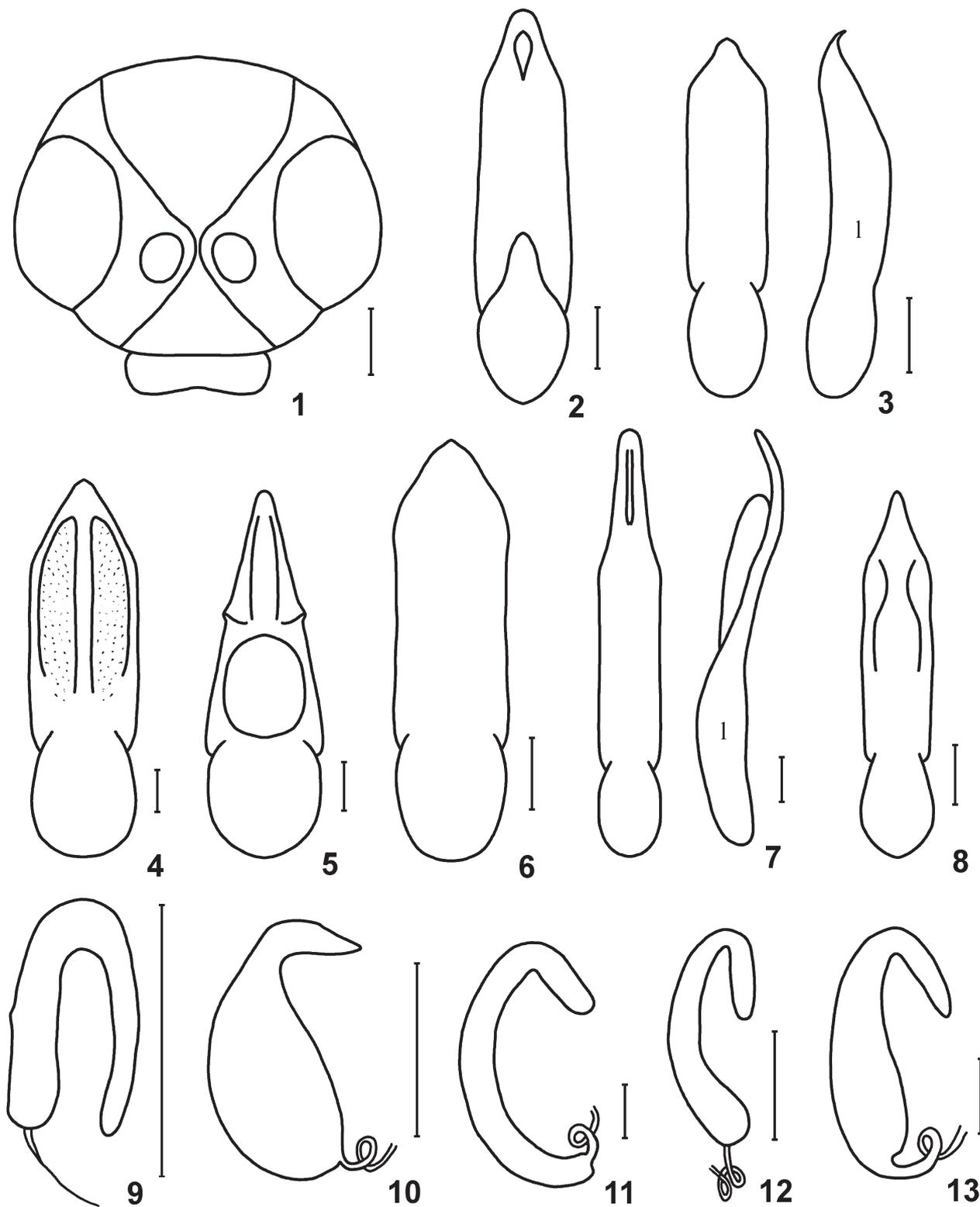
Description

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).

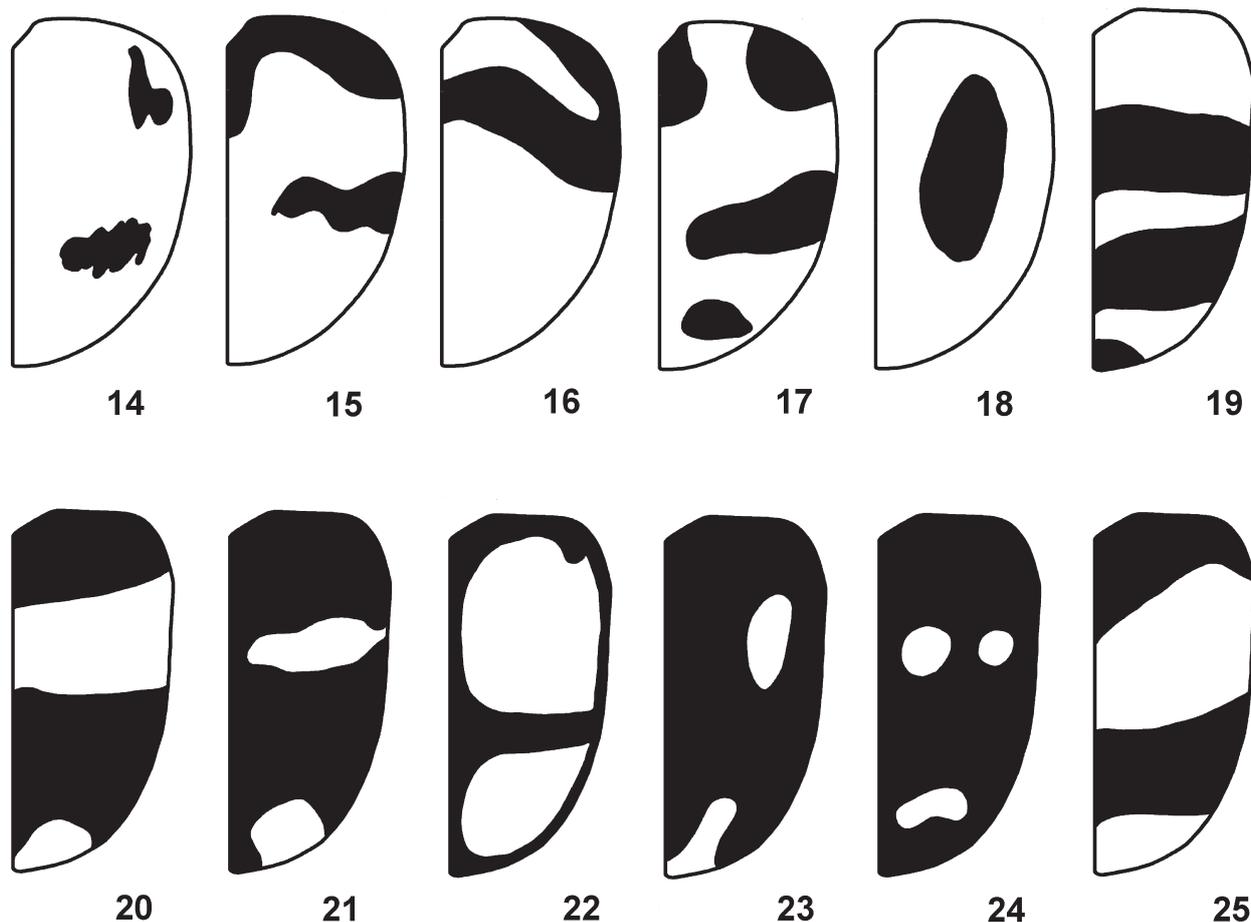
Body ovate, moderately convex. Head impunctate, shining. Frontal tubercles flat, transverse, quadrangular, delimited posteriorly by a straight, slightly impressed line. Antennae reaching to the anterior third of the elytra, proportions of segments 8-3-4-6-6-5-5-5-5-7, preapical segments about 2.5 times 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 (=l) 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 ♂ (SMNS). – NW Borneo, Sarawak, Belaga, 15.III.1990, leg. A. RIEDEL, 1 ♂ (SMNS). – Malaysia, Pahang Prov., Kuala Lipis, 9.VII.2004, leg. M. GAISER, 1 ♀ (SMNS). – Malaysia, Jahor, Endau-Rompin, Pulau Jasin, 50–400 m, 19.III.1998, leg. L. DEMBICKÝ & P. PACHOLÁTKO, 1 ♀ (SMNS). – Malaya, 1 ♀ (LM). – Singapore, 1898, leg. L. BIRO, 1 ♂, 1 ♀ (LM). – Malaysia, Benom Mts., 15 km E Kampong Dong, 700 m, 1.IV.1998, leg. L. DEMBICKÝ & P. PACHOLÁTKO, 1 ♀ (LM). – S Thailand, Satun Prov., Thale Ban (6°45'N 100°09'E), 200 m, 8.–13.IV.1997, leg. J. KOLIBÁČ, 1 ♂ (LM). – N Palawan, Bacuit,

XII.1913, leg. G. ROETTCHE, 2 ♂♂, 1 ♀ (LM). – Palawan, Port Barton, 150 m, 14.–18.XII.1990, leg. BOLM, 1 ♂ (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)

Holotype (♀): 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 (♂): 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 tuber-

cles indistinct. Antennae reaching to the humeral tubercle, proportions of segments 9-4-5-4-3-5-5-5-6-5-8, 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 (♀): 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 (♀): 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 11-6-5-4-4-4-5-5-5-6-8, 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)

H o l o t y p e (♀): 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)

H o l o t y p e (♀): 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 10-5-3-4-5-5-5-6-6-8, 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 (♀): 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 emarginate. 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 (♂): 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 (♀): 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 10-4-6-9-9-9-8-8-8-10, 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)

Holotype (♂): New Guinea, Irian Jaya, Anggi, Tetaho Iranmeba, 1500–1700 m, 25.III.1993, leg. A. RIEDEL (SMNS).

Paratypes: Same data as holotype, 2 ♀♀ (SMNS, LM). – New Guinea, Irian Jaya, Jayawijaya, Diuremna, 1900–2100 m, 9.–11.IX.1992, leg. A. RIEDEL, 1 ♀ (SMNS). – New Guinea, Irian Jaya, Jayawijaya, Nalca, 1900–2100 m, 8.IX.1992, leg. A. RIEDEL, 1 ♀ (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 elytra, proportions of segments 7-3-6-6-7-7-7-7-7-8, 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.

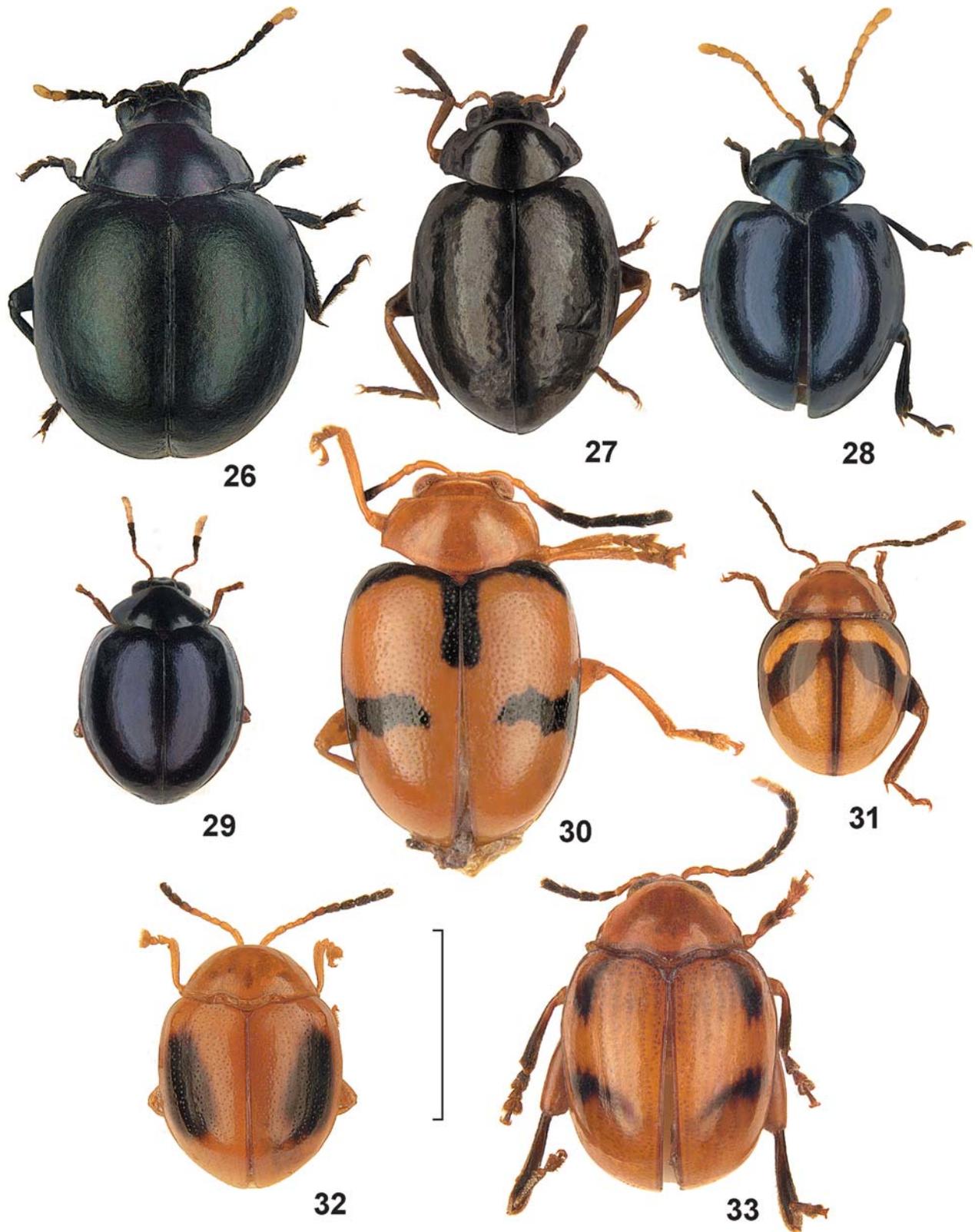
(Fig. 39)

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

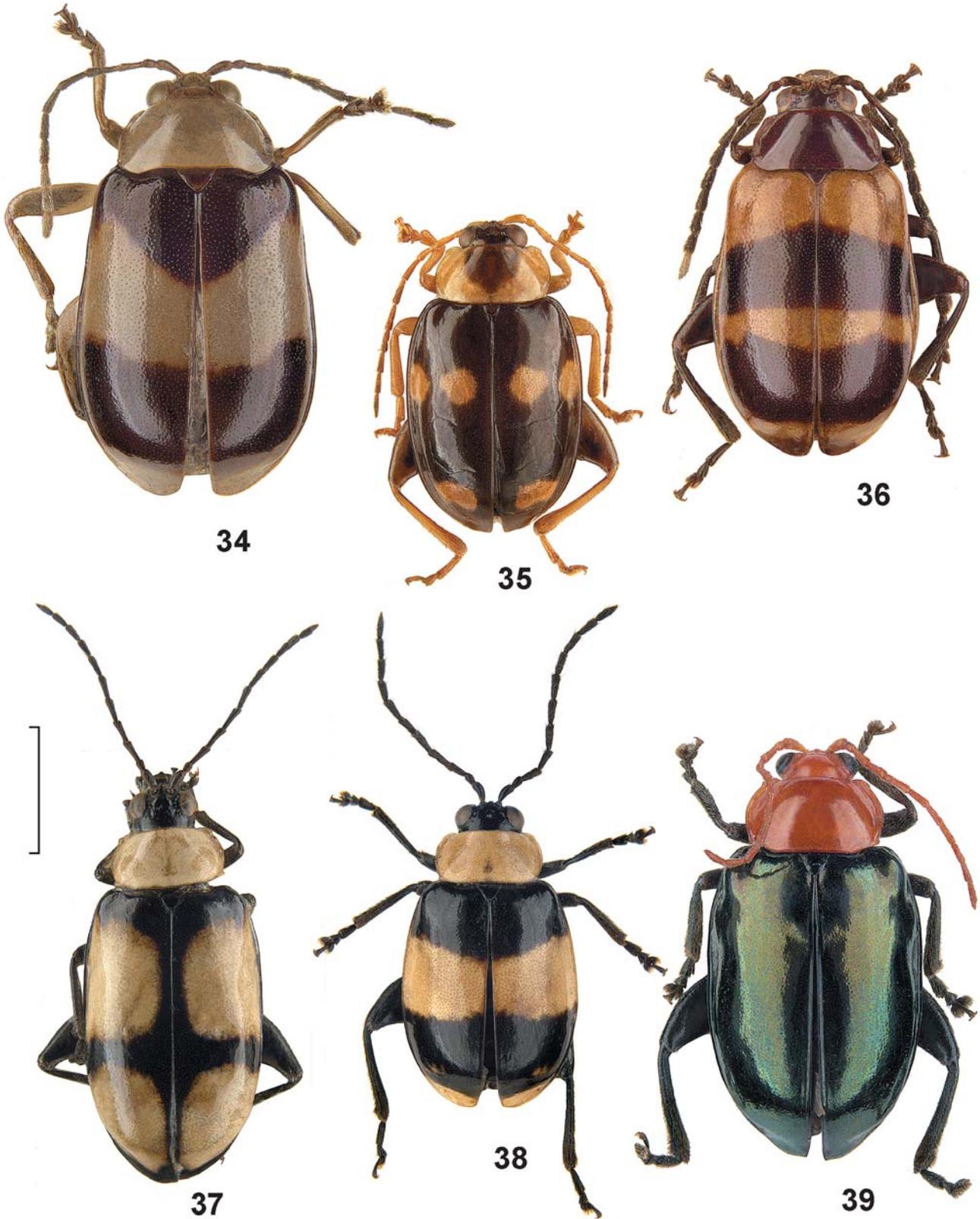
Paratype: New Guinea centr., Baliem Tal, 1700 m, III.1992, leg. J. KOLIBÁČ, 1 ♀ (LM).

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 (♀): 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).

Paratype: New Guinea, Irian Jaya, Wamena W, Tailarek, 4°3'S 138°44'E, 2300 m, 22.I.1999, leg. A. WEIGEL, 1 ♀ (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 (♀): 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)

Holotype (♂): 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).

Paratype: New Guinea, Irian Jaya, Nabire, 70 km W Yamorlake, Gariau, 3°43'S 134°56'E, 1.III.1998, leg. A. WEIGEL, 1 ♂ (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 8-4-7-6-7-8-8-7-7-8, 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, antennae and prothorax fulvous (Fig. 39). 2
 - Upperside without metallic colour (Figs. 35–38). 4
- 2 Legs black (Fig. 39). Elytra metallic green, indistinctly punctate, with traces of elevation on apical slope. Anterior angles of prothorax produced. – Body length 6.5 mm. *S. nigripes* n. sp.
 - Legs more or less fulvous. Elytra metallic blue or violaceous. Anterior angles of prothorax rounded. 3
- 3 Legs fulvous, only hind femora black. Elytra usually with a sharp longitudinal ridge on apical slope near lateral margin, delimited by impressions. Body length 5.7–6.3 mm. *S. violaceipennis* Jacoby, 1885
 - Legs fulvous with black hind femora and blackish tarsi and apices of tibiae. Elytra with weak longitudinal elevation on apical slope, punctuation stronger. Body length 4.6–4.8 mm. – Spermatheca see Fig. 12. *S. punctipennis* Weise, 1908
- 4 Prothorax black or piceous (Fig. 36). – Antennae black with fulvous apical segment. Head, legs and underside black or piceous. 5
 - Prothorax fulvous (Figs. 37, 38), occasionally with black central stripe (Fig. 35). 6
- 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. *S. triplagiata* Jacoby, 1904
 - 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. *S. kolibaci* n. sp.
- 6 Prothorax entirely fulvous (Figs. 37, 38). 7
 - Prothorax fulvous with a black central stripe (Fig. 35) or a few darkened poorly delimited spots. 22
- 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. 8
 - Elytra fulvous with black pattern or black with fulvous spots and/or bands. 11
- 8 Elytra finely rugose or wrinkled, of leathery appearance, impunctate, more or less fulvous laterally. – Legs fulvous with piceous hind femora, abdomen piceous. Body length 3.5–4.0 mm. *S. semirugosa* Jacoby, 1904
 - Elytra not wrinkled, shining. 9
- 9 Lateral margin of elytra wide and reflexed; there is a weak elevation from humerus to apex. – Legs fulvous with black hind femora, abdomen black. Elytra very minutely punctate. Body length 4.0 mm. Aedeagus see Fig. 8, spermatheca see Fig. 13. *S. marginipennis* Jacoby, 1904.

- Elytra with narrow, not reflexed lateral margin and without lateral elevation. **10**
- 10** Elytra black with fulvous anterior third or entirely black, finely punctate. Legs fulvous with black apices of hind femora. Abdomen fulvous. Body length 5.8 mm.
..... *S. dimidiatipennis* Jacoby, 1885
- Elytra entirely black, impunctate. Legs entirely fulvous. Abdomen fulvous, piceous laterally. Body length 4.0 mm.
..... *S. laevipennis* Jacoby, 1904
- 11** Head, antennae and legs entirely black (Figs. 37, 38). **12**
- Antennae and legs entirely or in part fulvous. **13**
- 12** Elytra fulvous with wide basal and postmedian bands black (Figs. 20, 38), the black colour often enlarged so that the elytra appear as black with fulvous pattern (Fig. 21). Preapical antennal segments 3.0–3.5 times as long as wide. Anterior angles of prothorax rounded. Body length 4.8–5.5 mm. – Aedeagus see Fig. 5. *S. nigricornis* n. sp.
- Elytra black with two very large fulvous spots (Fig. 22, 37). Preapical antennal segments twice as long as wide. Anterior angles of prothorax distinct and produced. Body length 5.8–7.0 mm. *S. quadripustulata* n. sp.
- 13** Elytra fulvous with basal band and large spot behind, middle area black. – Legs fulvous with apices of hind femora black, underside fulvous with black prosternum. Head and antennae pale flavous, only the 4 apical antennal segments reddish piceous. Antennae reaching only a little behind the humerus. Body length 4.0 mm. *S. brevicornis* Weise, 1917
- Elytra black with fulvous spots and/or bands. **14**
- 14** Head black. **15**
- Head fulvous. **18**
- 15** Antennae black with 4 basal segments fulvous. – Elytra with pre- and postmedian bands and apices fulvous. Legs fulvous with black hind femora, underside dark brown. Body length 4.2–5.2 mm. *S. albofasciata* Baly, 1876
- 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. **17**
- 17** Underside black. Median lobe of the last abdominal sternite of the ♂ with a long triangular and deep excavation over the entire length of that segment. Body length 4.7 mm.
..... *S. sexmaculata* Jacoby, 1894
- 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*].
..... *S. hexaspilota* Baly, 1876
- 18** Antennae fulvous with the segments 5–9 black. – Elytra with an oblique band from humerus to middle of suture. Legs fulvous with apices of hind femora black, underside fulvous. Body length 6.3–7.5 mm. *S. taeniata* Weise, 1917
- Antennae fulvous, at most with darkened apical segments. ... **19**
- 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.
..... *S. bipustulata* Baly, 1876
- Elytra with a more differentiated pattern. **20**
- 20** Body length 7.4–8.4 mm. – Elytra with pre- and postmedian bands and fulvous apices. Legs fulvous with black apices of hind femora, underside fulvous. *S. elegans* Baly, 1876
- Body length at most 6 mm. **21**
- 21** Elytra with fulvous pre- and postmedian bands. Legs dark fulvous, underside piceous. Body length 3.5–4.2 mm.
..... *S. wallacei* Baly, 1876
- 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.
..... *S. flavofasciata* Jacoby, 1898
- 22** Prothorax with a few smoky and poorly delimited spots. Head and elytra black, the latter with two round spots in a transverse row in the middle and a reniform spot before the apex fulvous. Antennae, underside and legs fulvous, hind femora darkened. – Body length 5.0 mm. [Possibly identical with *S. hexaspilota* Baly, 1876]. *S. chevrolati* Guérin, 1830
- Prothorax with a black central stripe which is strongly narrowed in the basal part. Antennae fulvous, at most with darkened apical segments. Elytra black with fulvous spots or bands. **23**
- 23** Vertex and labrum black, clypeus and frontal tubercles pale flavous. – Elytra with a narrow transverse band in the middle and a round spot before the apex fulvous. Legs fulvous with black hind femora. Body length 4.2–5.3 mm.
..... *S. impressa* Jacoby, 1894
- Head entirely black. **24**
- 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 (♂): 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 ♀ (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 10-8-6-6-6-6-6-6-6-10, 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 ♂ 1.7 mm, of ♀ 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.

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