# The species of *Bradymerus* Perroud (Coleoptera: Tenebrionidae) from New Guinea and the Moluccan Islands, with descriptions of 11 new species<sup>1</sup>

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#### Abstract

The species of the genus Bradymerus Perroud (Coleoptera: Tenebrionidae: Cnodalonini) from New Guinea and the Moluccan Islands are revised. The diagnostic characters are described and figured and a species key is provided for 35 (of 37) species from that area. – New species: B. albertisi n. sp., B. archboldi n. sp., B. beccarii n. sp., B. biroi n. sp., B. buergersi n. sp., B. cheesmanae n. sp., B. dahli n. sp., B. dohertyi n. sp., B. lorentzi n. sp., B. meyeri n. sp., B. neuhaussi n. sp. - New synonyms: B. celebensis Gebien, 1925 (B. acutigena Kulzer, 1951 n. syn.), B. laticollis Kulzer, 1951 (B. costulatus Kaszab, 1980 n. syn.), B. nigerrimus Gebien, 1922 (B. keyensis Kulzer, 1951 n. syn.), B. regularis Gebien, 1922 (B. buruensis Kulzer, 1951 n. syn.), B. wegneri Kaszab, 1964 (B. kulzeri Schawaller, 2006 n. syn.); Planibates Kaszab, 1939, with its type species B. papuanus (Kaszab, 1939) n. comb. is considered a junior synonym of Bradymerus Perroud, 1864. - Lectotypes are designated for B. helleri Gebien, 1922, B. integer Gebien, 1922, B. kuntzeni Gebien, 1922, B. principatus Gebien, 1922, B. seriatus Gebien, 1922 and B. rugipleuris Gebien, 1922.

Keywords: Coleoptera, Tenebrionidae, Cnodalonini, New Guinea, Moluccan Islands, new species, new synonyms, taxonomy, species key.

#### Zusammenfassung

Die Arten der Gattung Bradymerus Perroud (Coleoptera: Tenebrionidae: Cnodalonini) von Neu Guinea und den Molukken werden revidiert. Die diagnostischen Merkmale werden beschrieben und abgebildet, und ein Bestimmungsschlüssel für 35 (von 37) Arten der Region wird erstellt. – Neue Arten: B. albertisi n. sp., B. archboldi n. sp., B. beccarii n. sp., B. biroi n. sp., B. buergersi n. sp., B. cheesmanae n. sp., B. dahli n. sp., B. dohertyi n. sp., B. lorentzi n. sp., B. meyeri n. sp., B. neuhaussi n. sp. - Neue Synonyme: B. celebensis Gebien, 1925 (B. acutigena Kulzer, 1951 n. syn.), B. laticollis Kulzer, 1951 (B. costulatus Kaszab, 1980 n. syn.), B. nigerrimus Gebien, 1922 (B. keyensis Kulzer, 1951 n. syn.), B. regularis Gebien, 1922 (B. buruensis Kulzer, 1951 n. syn.), B. wegneri Kaszab, 1964 (B. kulzeri Schawaller, 2006 n. syn.); Planibates Kaszab, 1939 mit der Typusart B. papuanus (Kaszab, 1939) n. comb. wird als jüngeres Synonym von Bradymerus Perroud, 1864 betrachtet. - Lectotypen werden festgelegt für: B. helleri Gebien, 1922, B. integer Gebien, 1922, B. kuntzeni Gebien, 1922, B. principatus Gebien, 1922, B. seriatus Gebien, 1922, B. rugipleuris Gebien, 1922.

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#### **1** Introduction

This contribution is the continuation of the previous publication on the tenebrionid genus Bradymerus Perroud, 1864 (Schawaller 2006). In the latter paper, all species from the Oriental Region were revised, in the present contribution all species from New Guinea, the Moluccan Islands as well as from New Britain are treated (map see Fig. 1). Not included are the endemic species of the Pacific Islands Fiji and Samoa (KASZAB 1955), as well as from the

Solomon Islands (KASZAB 1980), Vanuatu (former New Hebrides) or Palau (Micronesia).

So far, species of Bradymerus from New Guinea and the Moluccan Islands have been published by GEBIEN (1922, 1925), KASZAB (1939, 1964) and KULZER (1951). During this study, five species turned out to be junior synonyms and 11 species are described herein as new, so now altogether 37 species are known from the area (only 35 species known to the author and included in the key). Distribution of two species of the Papuan fauna is extended to

<sup>1</sup> Contributions to Tenebrionidae, no. 108. – For no. 107 see: Stuttgarter Beiträge zur Naturkunde A, Neue Serie 6 (2013).

Queensland, the Solomon Islands and Samoa respectively (*B. crenatus*, *B. raucipennis*), two species are known also from Vanuatu (*B. lobicollis*, *B. solomonis*), and only two species occur also in Sulawesi (*B. celebensis*, *B. wegneri*).

The classification of the polymorphic genus *Bradymerus* within the tribe Cnodalonini as well as species characters were already discussed by SCHAWALLER (2006). Status and tribal assignment of the genus *Apteromerus* Blair, 1928 with the species *A. convexus* (Fairmaire, 1849) and *A. leopoldi* Gebien, 1935 from the Pacific Islands and New Guinea are still unclear. KASZAB (1955) considered *Apteromerus* Blair, 1928 together with *Scotoderus* Perroud, 1864 as closest relatives of *Bradymerus* Perroud, 1864. The species of *Scotoderus* were revised by KASZAB (1973).

Acronyms of depositories

- CAPE Collection ANDREAS PÜTZ, Eisenhüttenstadt
- CASH Collection ANDRÉ SKALE, Hof/Saale
- CAWW Collection ANDREAS WEIGEL, Wernburg
- CKAO Collection Dr. KIYOSHI ANDO, Osaka
- CRGT Collection Dr. ROLAND GRIMM, Neuenbürg
- CSBC Collection STANISLAV BEČVÁŘ, České Budějovice
- BMNH The Natural History Museum, London (MAX BARCLAY)
- HNHM Hungarian Natural History Museum, Budapest (Dr. Ottó Merkl)
- MNB Museum für Naturkunde, Berlin (Bernd Jäger, Dr. Manfred Uhlig)
- MTD Museum für Tierkunde, Dresden (OLAF JÄGER)
- NHMB Naturhistorisches Museum, Basel (Dr. Eva Sprecher, Dr. Michel Brancucci †)
- NME Naturkundemuseum, Erfurt (MATTHIAS HARTMANN)
- NMP National Museum (Department of Entomology), Prague (Dr. Jiří HÁJEK)
- SMNS Staatliches Museum für Naturkunde, Stuttgart
- ZMAN Zoölogisch Museum, Amsterdam (collection transferred to Leiden) (Dr. BEN BRUGGE)
- ZSM Zoologische Staatssammlung, München (Dr. MARTIN BAEHR, Dr. MICHAEL BALKE)

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#### 2 The previously known Papuan and Moluccan species of *Bradymerus*

#### Bradymerus batjanensis Gebien, 1925

Diagnostic characters: GEBIEN (1925: 554) described this species to be similar to *B. raucipennis*, with somewhat different dorsal structure of pronotum and

elytra, and somewhat different structure of the genae. Unfortunately, no figure is given in the original description.

R e m a r k s : Type material was not studied because it is missing in NHMB (FREY collection).

Distribution: Bacan (= Batjan) Island near Halmahera (type locality) (Moluccan Islands).

#### Bradymerus celebensis Gebien, 1925

Bradymerus acutigena Kulzer, 1951 n. syn.

Studied type material: Buru, station 6, 21.–24. IV.1921, leg. L. J. TOXOPEUS, holotype of *B. acutigena* ZMAN (damaged specimen, prothorax and head missing, sex unknown). – S Sulawesi (labelled as Celebes), coll. SCHAUFUSS,  $\Im$  lectotype of *B. celebensis* MNB.

Examined material: Same data as holotype,  $1 \stackrel{?}{\lhd}$  ZMAN (compared with holotype of *B. acutigena* by KASZAB in 1977).

Diagnostic characters: For description and figures see Schawaller (2006) under *B. celebensis*.

S y n o n y m y : Unfortunately, the holotype of *B. acutigena* is quite damaged, but fortunately another male nontype specimen with same data was compared with the holotype by KASZAB in 1977. When comparing these specimens with the lectotype of *B. celebensis* (see SCHAWALLER 2006), no specific differences could be found. Thus, *B. acutigena* Kulzer, 1951 is considered a junior synonym of *B. celebensis* Gebien, 1925.

Distribution: Sulawesi (type locality of *B. cele*bensis), Buru (type locality of *B. acutigena*) (Moluccan Islands).

#### Bradymerus crassimargo Kulzer, 1951 (Fig. 14)

Studied type material: Buru, Wai Eno to Wai Temoen, 700–1000 m, 3.II.1922, leg. L. J. TOXOPEUS,  $\bigcirc$  holotype ZMAN (left elytra missing).

Diagnostic characters: Dorsal view see Fig. 14, dorsal side blackish without metallic shine, body length 10.0 mm. Genae not broader than eyes, frons with weak supraorbital furrows but without distinct supraorbital keels. Last 4 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc flat, with rough and partly confluent punctation; pronotum before base with distinct transverse impression. Elytra with punctural rows without striae, punctures deeply impressed, intervals convex, intervals 1–4, 6, 8 with a row of small granules, intervals 5, 7 keeled. Tibiae externally without distinct keels; modifications of male tibiae unknown (only female available). Aedeagus unknown.

R e m a r k s: Unfortunately, males are unknown, but because this species seems related to B. *papuanus*, the

male anterior tibiae very probably also have a distinct internal tooth before the middle.

Distribution: Buru (type locality) (Moluccan Islands).

#### Bradymerus crenatus (Pascoe, 1870) (Figs. 16, 40)

Isostira crenata Pascoe, 1870. Bradymerus granaticollis Fairmaire, 1883 syn.

Examined material: New Britain (labelled as Neubritannien), Ratum, leg. F. DAHL, 4 ex. MNB (B. granaticollis det. GEBIEN). - New Britain (labelled as Bismarck Archipel), Ratum, 1896-1897, leg. F. DAHL, 1 ex. MNB. - Halmahera, Wangonira, 28.III.1995, leg. W. LORENZ, 2 ex. CRGT. - Seram, Air Basar, 6 km E Wahei, 5.XI.1998, leg. S. BILÝ, 1 ex. NMP. - Seram, Solea, 12 km SE Wahai, 17.I.-6.II.1997, leg. S. BILÝ, 2 ex. SMNS, 1 ex. HNHM. - Seram, 35 km E Pasahari, 24.-30.X.1998, leg. J. HORÁK, 6 ex. ZSM, 2 ex. SMNS, 1 ex. CRGT. - Mangole Island (W Moluccan Islands), VII.-XII.1977, leg. V. & G. WEGENER, 2 ex. NHMB. - West Papua, Raja Ampat Prov., Salawati Island, Kalobo, 24.-28.I.2004, leg. A. SKALE, 1 ex. CRGT. - West Papua, Manokwari Prov., Ransiki, Mayuby, 26.-30.IX.1990, leg. A. RIE-DEL, 5 ex. SMNS. - West Papua, Manokwari Prov., Gunung Meja, 200 m, 19.IV.1993, leg. A. RIEDEL, 1 ex. SMNS. - West Papua, Cyclops Mts., Sabron, camp 2, 2000 ft., VII.1936, leg. L.E. CHEESMAN, 1 ex. BMNH. - West Papua, Jayapura, Sentani, Cyclops Mts., 400 m, 19.-21.IX.1990, leg. A. RIEDEL, 3 ex. SMNS. - West Papua, Jayapura, Sentani, Cyclops Mts., 300-450 m, 31.X.1992, leg. A. RIEDEL, 7 ex. SMNS. - West Papua, Biak Island, Sepse, 3.X.1990, leg. A. RIEDEL, 2 ex. SMNS. - West Papua, Biak Island, Adadikam, XII.2006, leg. O. Mehl, 1 ex. HNHM. -West Papua, Sorong, Dusun Meibo, 100-150 m, 19.I.2001, leg. A. RIEDEL, 1 ex. SMNS. - West Papua, Fakfak, 2 km E airstrip, 16.-18. VII. 1996, leg. P. SCHÜLE & P. STÜBEN, 1 ex. SMNS. - West Papua, Nabire to Mapia, Unipo, 24. VII. 1996, leg. P. SCHÜLE & P. STÜBEN, 3 ex. SMNS. - West Papua, Sorong, 29.IX.-6.X.1992, leg. B. BALÁZS, 1 ex. HNHM. - West Papua, Japen (labelled as Yapen) Island, Serui, 28.XII.2006 -9.I.2007, leg. S. BILÝ, 1 ex. NMP. – West Papua, 130 km SE Kaimana, Omba (= Yamor) river, 10-20 km from coast, 9.-11.II.2011, leg. A. SKALE, 1 ex. CASH. - West Papua, road 10 km NE Kaimana, 40 m, 1.II.2011, leg. A. SKALE, 2 ex. CASH. – Papua New Guinea, Kapala, Madang, 650–1500 m, no further data, 2 ex. HNHM. – Papua New Guinea, Kokoda, 1200 ft., VIII.-X.1933, leg. L.E. CHEESMAN, 6 ex. BMNH. - Papua New Guinea, Morobe Prov., Kaiapit, XII.1978, leg. W. G. ULLRICH, 1 ex. CKAO. - Papua New Guinea, Karimui, III.1974, leg. J. SEDLACEK, 5 ex. HNHM. - Papua New Guinea, Mt. Missim, II.1974, leg. J. SEDLACEK, 2 ex. HNHM. - Papua New Guinea, Bulolo, 700 m, II.1974, leg. J. SEDLACEK, 1 ex. HNHM.

Diagnostic characters: Dorsal view see Fig. 16, dorsal side blackish without metallic shine, body length 6.3–8.0 mm. Genae distinctly broader than eyes, frons with distinct supraorbital furrows and with distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc convex, with rough and confluent punctation, before base with a small medial impunctate field, between punctures with granules; pronotum medially with distinct longitudinal impression. Elytra with punctural rows without striae, punctures deeply impressed, intervals distinctly convex and regular with complete high keels, keels slightly sinuate. Tibiae externally with distinct keels; male tibiae without modifications. Aedeagus see Fig. 40.

Distribution: Halmahera, Seram, Bacan (= Batjan), Banda, Mangole (all Moluccan Islands); New Guinea, New Britain, Duke of York Island (type locality of *B. granaticollis*); Queensland (type locality of *B. crenatus*); Solomon Islands, Samoa.

#### Bradymerus doleschalli Kaszab, 1964 (Figs. 4, 50)

Studied type material: Amboina, 1859, leg. L. DOLE-SCHALL,  $\delta$  holotype and 1 paratype HNHM.

Examined material: Amboina, XI.1923, leg. C.J. BROOKS, 1 ex. BMNH. – Amboina, Laihatu, Soya, 11.–12.X.1998, leg. J. HORÁK, 2 ex. ZSM. – Ambon, VIII.1999, 1 ex. CKAO. – Seram, Air Basar, 6 km E Wahei, 5.XI.1998, leg. S. BILÝ, 1 ex. NMP. – Seram, 12 km SE Wahai, Solea, 17.I.–6.II.1997, leg. S. BILÝ, 6 ex. CSBC, 5 ex. ZSM, 3 ex. SMNS. – Seram, 12 km SE Wahai, Solea, 16.–21.X.1998, leg. J. HORÁK, 4 ex. ZSM. – Seram, X.–XI.1909, leg. W. STALKER, 1 ex. BMNH.

D i a g n o s t i c ch a r a c t e r s : Dorsal view see Fig. 4, dorsal side blackish without metallic shine, body length 9.5–11.0 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 5 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc flat, with rough and partly confluent punctation, before base punctures more separate, between punctures with granules; pronotum before base with shallow transverse impression. Elytra with punctural rows without striae, punctures deeply impressed, intervals 1–2 distinctly convex and with a row of feeble granules, intervals 3–8 with complete keels. Tibiae externally without distinct keels; anterior male tibiae internally with longitudinal stripe of densely set light setae. Aedeagus see Fig. 50.

Distribution: Amboina island (= Ambon) (type locality), Seram.

# Bradymerus helleri Gebien, 1922 (Fig. 5)

Studied type material: Papua New Guinea, Kaiser-Wilhelms-Land, Astrolabe Bay, Bongu, without date,  $1 \circle$ syntype MTD, here designated as lectotype.

Examined material: Papua New Guinea, Misima (labelled Missima) Island, 250 m, 20.IX.1982, leg. J. Sedlacek, 1  $\bigcirc$  HNHM.

D i a g n o s t i c ch a r a c t e r s : Dorsal view see Fig. 5, dorsal side blackish without metallic shine, body length 10.8–12.5 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 5 antennomeres forming a club. Anterior corners of pronotum protruding, lateral margin with feeble crenulation, pronotal disc flat, with dense but not confluent punctation, before base punctures more separate, between punctures with a few granules; pronotum before base with shallow transverse impression. Elytra with punctural rows without striae, punctures deeply impressed, intervals distinctly convex and regular with a row of distinct granules. Tibiae externally without distinct keels; modifications of male tibiae unknown (only females available). Aedeagus unknown.

R e m a r k s : The newly collected female from Misima Island has the dorsal tubercles somewhat smaller than in the female lectotype, all other characters coincide.

Distribution: New Guinea (type locality Bongu) including Misima Island (Louisiade Archipelago).

# Bradymerus integer Gebien, 1922 (Figs. 20, 42)

Studied type material: Dammer Island, without date,  $1 \bigcirc$  syntype NHMB, here designated as lectotype.

Examined material: Dammer (labelled as Damma) Island, without date, leg. J. J. WALKER, 1 ex. BMNH, 1 ex. SMNS. - Dammer Island, 3 ex. MNB. - Timor Island, Dilli, 2500 ft., leg. W. DOHERTY, 2 ex. BMNH. - Timor Island, Faku Lés, leg. W. DOHERTY, 2 ex. BMNH. - Adonara Island E Flores, leg. W. DOHERTY, 2 ex. BMNH. - Alor Island, Pura, leg. W. DOHERTY, 1 ex. BMNH. - Tanimbar (labelled as Tenimber) Island, Jandema, leg. W. DOHERTY, 2 ex. BMNH. - Buru Island, Ilat, leg. W. Do-HERTY, 3 ex. BMNH. - Admirality Islands, leg. S. ROCHOLL, 1 ex. HNHM. - Bacan Island, valley 3 km S Labuha, 40 m, 13.I.2006, leg. A. SKALE, 3 ex. NME, 1 ex. CRGT. - S Halmahera, 2-3 km N Dolik, 18.–20.I.2006, leg. A. SKALE, 1 ex. SMNS. – West Papua, Nusi Island near Biak Island, 12.VIII.1996, leg. P. SCHÜLE & P. STÜBEN, 1 ex. SMNS. - West Papua, Raja Ampat Prov., Batanta Island, Wallebet, 18.-21.I.2004, leg. A. SKALE, 1 ex. CRGT. -Papua New Guinea, Stephansort, Astrolabe Bay, 1900, leg. L. BIRÓ, 2 ex. HNHM. - Papua New Guinea, Morobe Prov., Sattelberg, Huon Golf, 1899, leg. S. BIRÓ, 1 ex. HNHM. - Papua New Guinea, Berlinhafen, Seleo, 1896, leg. L. BIRÓ, 1 ex. HNHM.

Diagnostic characters: Dorsal view see Fig. 20, dorsal side blackish without metallic shine, body length 6.0–6.5 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc convex, with rough and confluent punctation, between punctures with a few granules; pronotum medially with distinct longitudinal impression. Elytra with punctural rows without striae, punctures deeply impressed, intervals distinctly convex and regular with complete keels, keels slightly sinuate. Tibiae externally without distinct keels; male tibiae without modifications. Aedeagus see Fig. 42.

R e m a r k s: This species is quite similar in external characters and also in the aedeagus to the widespread *B. clathratus* Schaufuss, 1887 (SCHAWALLER 2006: figs. 16, 87), but in *B. integer* the pronotal punctation is rougher and the elytral keels are distinctly higher.

Distribution: Dammer Island NE Timor (type locality), Timor, Adonara, Alor, Buru, Bacan, Halmahera, Admirality Islands, New Guinea including Batanta Island.

#### Bradymerus kuntzeni Gebien, 1922 (Fig. 19)

Studied type material: Papua New Guinea (labelled as D. N. Guinea), Mäanderberg, 670 m, 19.–31.VII.1913, leg. J. BÜRGERS, 1  $\bigcirc$  syntype MNB, here designated as lectotype. – Papua New Guinea (labelled as D. N. Guinea), Mäanderberg, 670 m, 21.–30.VIII.1913, leg. J. BÜRGERS, 1  $\bigcirc$  paralectotype MNB.

Examined material: West Papua, Manokwari Prov., Mokwam (Siyoubrig), 1400–1800 m, 24.–28.II.2007, leg. A. WEIGEL,  $1 \bigcirc CRGT$ . – West Papua, Manokwari Prov., 18 km NW Ransiki, Anggi Gida, Kampung Itkau, 1890 m, 4.III.2007, leg. A. WEIGEL,  $1 \bigcirc SMNS$ .

Diagnostic characters: Dorsal view see Fig. 19, dorsal side blackish without metallic shine, body length 7.5–8.5 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 5 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc convex, with dense and partly confluent punctation, before base punctures more separate, between punctures with a few fine granules; pronotum before base with shallow transverse impression. Elytra with punctural rows without striae, punctures deeply impressed, all intervals distinctly convex and regular with a row of distinct granules. Tibiae externally without distinct keels; modifications of male tibiae unknown (only females available). Aedeagus unknown.

D i s t r i b u t i o n : New Guinea (type locality Mäanderberg).

# Bradymerus laticollis Kulzer, 1951 (Figs. 17, 43)

Bradymerus costulatus Kaszab, 1980 n. syn.

Studied type material: Buru, station 9, 20.VI.– 10.VII.1921, leg. L.J. TOXOPEUS, ♂ holotype of *B. laticollis* ZMAN. – Buru, station 9, 26.IV.–10.VII.1921, leg. L.J. TOXOPEUS, 9 paratypes of *B. laticollis* ZMAN. – Buru, station 9,



Fig. 1. The investigated area with records of *Bradymerus*: New Guinea including small adjacent islands (Biak, Japen, Waigeo, Salawati, Batanta), New Britain, and the Moluccan Islands (Halmahera, Bacan, Seram, Ambon, Damar, Aru, Kai, Mangole).

20.VI.–10.VII.1921, leg. L. J. TOXOPEUS, 1 paratype of *B. laticollis* (sex not examined) NHMB.

Examined material: West Papua, Biak Island, Korim, Wouna, 21.–22.IV.1993, leg. A. RIEDEL, 1 ex. SMNS. – West Papua, Testega, 1100–1200 m, 11.IV.1993, leg. A. RIEDEL, 1 ex. SMNS. – Papua New Guinea, Karimui, III.1974, leg. J. SED-LACEK, 1 ex. HNHM.

Diagnostic characters: Dorsal view see Fig. 17, dorsal side blackish without metallic shine, body length 7.0-8.5 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc convex, with rough and confluent punctation, between punctures without granules; pronotum medially with longitudinal impression. Elytra with punctural rows without striae, punctures deeply impressed, intervals distinctly convex and regular with complete keels, keels slightly sinuate. Tibiae externally with distinct keels; male posterior tibiae internally with a fine longitudinal stripe of densely set light setae, male posterior femora ventrally with a small patch of densely set light setae. Aedeagus see Fig. 43.

Synonymy: The description of *B. costulatus* by KASZAB (1980) including the detailed figure shows no specific differences to type material of *B. laticollis*, thus *B. costulatus* Kaszab, 1980 is considered a junior synonym of *B. laticollis* Kulzer, 1951.

Distribution: Buru (type locality of *B. laticollis*) (Moluccan Islands), New Guinea (type locality Wau of *B. costulatus*) including Biak Island, New Britain, Rennell Islands.

# Bradymerus lobicollis Gebien, 1922 (Fig. 29)

E x a m i n e d m a t e r i a l : Vanuatu (labelled as New Hebrides), Espiritu Santo (labelled as Santo), VIII.–IX.1929, leg. L. E. CHEESMAN, 2 ex. BMNH, 1  $\bigcirc$  SMNS.

Diagnostic characters: Dorsal view see Fig. 29, dorsal side blackish without metallic shine, body length 5.8 mm. Genae slightly broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum extremely protruding, lateral margin with feeble crenulation, pronotal disc convex, with rough and confluent punctation, before base punctures more separate, between punctures with high and laterally keeled granules; pronotum before base with shallow transverse impression and medially and on each side with distinct longitudinal impression. Elytra with punctural rows without striae, punctures normally impressed, intervals 1, 2 with distinct elongate granules, intervals 3-8 with distinctly elongate granules partly forming keels. Tibiae externally each with 3 keels; modifications of male tibiae unknown (only female available). Aedeagus unknown.

R e m a r k s : The three-keeled tibia is a synapomorphic character occurring also in some species from New Guinea (*B. albertisi* n. sp., *B. cheesmanae* n. sp., *B. meyeri* n. sp.) and from Sulawesi (*B. sprecherae* Schawaller, 2006). – Type material was not studied because it is missing in NHMB (FREY collection).

D i s t r i b u t i o n : New Guinea (type locality Friedrich Wilhelmshafen, now Madang), Vanuatu (former New Hebrides).



**Figs. 2–7.** *Bradymerus* spp., dorsal views. – **2**. *B. buergersi* n. sp.,  $\Diamond$  holotype SMNS. **3**. *B. dahli* n. sp.,  $\Diamond$  holotype MNB. **4**. *B. doleschalli*,  $\Diamond$  holotype HNHM. **5**. *B. helleri*,  $\Diamond$  lectotype MTD. **6**. *B. macrogonus*,  $\Diamond$  holotype MTD. **7**. *B. neuhaussi* n. sp.,  $\Diamond$  paratype SMNS. – Scale: 2 mm.



**Figs. 8–14.** *Bradymerus* spp., dorsal views. – **8**. *B. plicicollis*, ♂ non-type SMNS. **9**. *B. nigerrimus*, ♂ non-type SMNS. **10**. *B. principatus*, ♂ non-type SMNS. **11**. *B. rugipleuris*, ♂ non-type SMNS. **12**. *B. novaeguineense*, ♀ holotype HNHM. **13**. *B. sculptilis*, ♂ non-type SMNS. **14**. *B. crassimargo*, ♀ holotype ZMAN. – Scale: 2 mm.



**Figs. 15–20.** *Bradymerus* spp., dorsal views. – **15**. *B. cheesmanae* n. sp., ♂ holotype SMNS. **16**. *B. crenatus*, ♂ non-type SMNS. **17**. *B. laticollis*, ♂ non-type SMNS. **18**. *B. semiasperatus*, ♂ non-type NHMB. **19**. *B. kuntzeni*, ♀ lectotype MNB. **20**. *B. integer*, ♂ non-type SMNS. – Scale: 2 mm.



**Figs. 21–26.** *Bradymerus* spp., dorsal views. – **21**. *B. papuanus*, ♂ non-type SMNS. **22**. *B. raucipennis*, ♂ non-type SMNS. **23**. *B. regularis*, ♂ non-type SMNS. **24**. *B. dohertyi* n. sp., ♂ holotype SMNS. **25**. *B. toxopei*, ♂ non-type SMNS. **26**. *B. ternatensis*, ♀ holotype ZMAN. – Scale: 2 mm.



**Figs. 27–32.** *Bradymerus* spp., dorsal views. – **27**. *B. archboldi* n. sp., ♂ holotype HNHM. **28**. *B. lorentzi* n. sp., ♀ holotype HNHM. **29**. *B. lobicollis*, ♀ non-type SMNS. **30**. *B. beccarii* n. sp., ♂ holotype SMNS. **31**. *B. solomonis*, ♂ paratype HNHM. **32**. *B. albertisi* n. sp., ♂ holotype SMNS. – Scale: 2 mm.



**Figs. 33–34.** *Bradymerus* spp., dorsal views. – **33**. *B. biroi* n. sp., ♂ holotype SMNS. **34**. *B. meyeri* n. sp., ♀ holotype CRGT. – Scale: 2 mm.

# Bradymerus macrogonus Gebien, 1922 (Figs. 6, 51)

Studied type material: Papua New Guinea, Kaiser-Wilhelmsland, Torricelli Mts., 640 m, without date, leg. O. SCHLAGINHAUFEN, ♂ holotype MTD.

D i a g n o s t i c c h a r a c t e r s : Dorsal view see Fig. 6, dorsal side blackish without metallic shine, body length 12.3 mm. Genae broader than eyes, frons with distinct supraorbital furrows and with feeble supraorbital keels. Last 5 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with distinct crenulation, pronotal disc convex, with rough and confluent punctation, before base in the middle with a small impunctate field, between punctures with high granules; pronotum medially with longitudinal impression. Elytra with punctural rows without striae, punctures normally impressed, intervals convex and with a row of distinct elongate granules, in intervals 3, 5, 7, 8 granules higher and more confluent, nearly keeled. Tibiae externally with distinct keels; male tibiae without modifications. Aedeagus see Fig. 51.

R e m a r k s : *B. macrogonus* is quite similar to the widespread and common *B. principatus* concerning large body size, dorsal structure and shape of pronotum, as well as elytral structure (compare Figs. 6, 10), but differs by the genae distinctly broader than eyes, the antennae with the last 5 antennomeres forming a club, the tibiae with distinct

external keels, and the different aedeagus (Figs. 51, 56). See also under *B. buergersi* n. sp. and *B. neuhaussi* n. sp.

Distribution: New Guinea (type locality Torricelli Mts.).

#### Bradymerus nigerrimus Gebien, 1922 (Figs. 9, 54)

Bradymerus keyensis Kulzer, 1951 n. syn.

Studied type material: Papua New Guinea (labelled as D. N. Guinea), But II, 1910, leg. H. SCHOEDE, holotype of *B. ni-gerrimus* (sex not examined) MNB. – Key Islands,  $1 \text{ } \bigcirc$  paratype of *B. keyensis* NHMB.

E x a m i n e d m a t e r i a l : Papua New Guinea, Sorono, leg. L. M. D'ALBERTIS, 1 ex. NHMB (det. GEBIEN). – West Papua, Fakfak, 2 km E airstrip, 16.–18. VII.1996, leg. P. SCHÜLE & P. STÜBEN, 1 ex. SMNS. – West Papua, Waigeo Island, Yembekaki, 180 m, 20.–23.I.2001, leg. A. RIEDEL, 2 ex. SMNS. – West Papua, Nabire Distr., Mt. Botak near Kwatisore, 150 m, VIII.1998, leg. M. WENDESI, 1 ex. CRGT. – Key Islands, 1 ex. HNHM. – Key Islands, 10 km W Tual, Ohoidertawun, 17.–20.II.2011, leg. A. SKALE & A. WEIGEL, 6 ex. NME, 2 ex. CASH, 2 ex. CRGT, 2 ex. SMNS. – Aru Islands, Wokam Island, Samang, 15.II.2011, leg. A. WEIGEL, 1 ex. NME.

Diagnostic characters: Dorsal view see Fig. 9, dorsal side blackish without metallic shine, body length 9.5–12.8 mm. Genae not broader than eyes, frons with dis-



Figs. 35–58. Bradymerus spp., aedeagi. – 35. B. albertisi n. sp., ∂ holotype SMNS. 36. B. archboldi n. sp., ∂ holotype HNHM. 37. B. beccarii n. sp., ∂ holotype SMNS. 38. B. biroi n. sp., ∂ holotype SMNS. 39. B. cheesmanae n. sp., ∂ holotype SMNS. 40. B. crenatus, ∂ non-type SMNS. 41. B. dohertyi n. sp., ∂ holotype SMNS. 42. B. integer, ∂ non-type SMNS. 43. B. laticollis, ∂ holotype ZMAN. 44. B. papuanus, ∂ non-type SMNS. 45. B. raucipennis, ∂ non-type SMNS. 46. B. regularis, ∂ non-type SMNS. 47. B. toxopei, ∂ non-type SMNS. 48. B. solomonis, ∂ paratype HNHM. 49. B. buergersi n. sp., ∂ holotype SMNS. 50. B. doleschalli, ∂ holotype HNHM. 51. B. macrogonus, ∂ holotype MTD. 52. B. neuhaussi n. sp., ∂ holotype SMNS. 53. B. semiasperatus, ∂ non-type NHMB. 54. B. nigerrimus, ∂ non-type NHMB. 55. B. plicicollis, ∂ non-type SMNS. 56. B. principatus, ∂ non-type SMNS. 57. B. rugipleuris, ∂ non-type SMNS. 58. B. sculptilis, ∂ paratype NHMB. – Scale: 1 mm.

tinct supraorbital furrows but without distinct supraorbital keels. Last 5 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc flat, with dense and partly confluent punctation, before base punctures more separate, between punctures without granules; pronotum before base with shallow transverse impression. Elytra with punctural rows without striae, punctures deeply impressed, intervals 1–2 distinctly convex and with a row of feeble granules, intervals 3–8 with complete and slightly sinuate keels. Tibiae externally without distinct keels; anterior male tibiae internally with two narrow longitudinal stripes of densely set light setae. Aedeagus see Fig. 54.

S y n o n y m y : *B. keyensis* Kulzer, 1951 is considered as junior synonym of *B. nigerrimus* Gebien, 1922 because the reexamined type material of both taxa shows no distinct specific differences. KULZER (1951) separated them mainly by the shape of the antennomeres, which cannot be verified by the present author.

D i s t r i b u t i o n : New Guinea (type locality But of *B. nigerrimus*) including Waigeo Island, Key Islands (type locality of *B. keyensis*), Aru Islands.

# Bradymerus novaeguineense Kaszab, 1939 (Fig. 12)

Studied type material: Papua New Guinea, Friedrich Wilhelmshafen, 1901, leg. L. Biró,  $\bigcirc$  holotype HNHM.

Diagnostic characters: Dorsal view see Fig. 12, dorsal side blackish without metallic shine, head, pronotum and elytra with short light setae, body length 9.8 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 5 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc convex, with dense but not confluent punctation, between punctures without granules; pronotum before base with shallow transverse impression. Elytra with punctural rows without striae, punctures deeply impressed, all intervals distinctly convex and without granules or keels. Tibiae externally without distinct keels; modifications of male tibiae unknown (only female available). Aedeagus unknown.

R e m a r k s : The generic assignment of this species is doubtful, because its general habitus has a somewhat intermediate position between *Bradymerus* and the related genus *Scotoderus* Perroud, 1864. However, the pronotum is without deep basal furrow which is a main characteristic of *Scotoderus* (KASZAB 1973). Unfortunately, the holotype is a female, and the aedeagi of the *Scotoderus* species are unknown, thus the aedeagi cannot be taken into consideration for generic assignment. D i s t r i b u t i o n : New Guinea (type locality Friedrich Wilhelmshafen, now Madang).

#### Bradymerus papuanus (Kaszab, 1939) n. comb. (Figs. 21, 44)

#### Planibates papuanus Kaszab, 1939.

Examined material: West Papua, Testega, Meydoudga, 1100–1350 m, 10.IV.1993, leg. A. RIEDEL, 3 ex. SMNS. – West Papua, Testega, 1100–1300 m, 30.III.–12.IV.1993, leg. A. RIEDEL, 4 ex. SMNS. – West Papua, 50 km S Nabire, Pusppenssat, 750 m, 31.XII.1997, leg. A. WEIGEL, 1 ex. CRGT.

Diagnostic characters: Dorsal view see Fig. 21, dorsal side blackish without metallic shine, body length 7.0-8.5 mm. Genae not broader than eyes, frons with weak supraorbital furrows but without distinct supraorbital keels. Last 4 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc flat, with dense but not confluent punctation, disc medially with longitudinal impunctate stripe, between punctures without granules; pronotum before base with distinct transverse impression. Elytra with punctural rows with striae, punctures normally impressed, internal intervals flat, external intervals convex, intervals sometimes with traces of small granules. Tibiae externally without distinct keels; male anterior tibiae with distinct internal tooth before the middle. Aedeagus see Fig. 44.

S y n o n y m y: KASZAB (1939) described the genus *Planibates*, based on the type species *P. papuanus* Kaszab, 1939. The modified anterior tibia in males was regarded by him as the main diagnostic character for *Planibates*. However, this character is not generic and occurs also in some species of *Bradymerus* (SCHAWALLER 2006). All other characters coincide. Thus, *Planibates* Kaszab, 1939 is considered a junior synonym of *Bradymerus* Perroud, 1864. *Planibates aeneus* Kaszab, 1980 and *P. fukiensis* Kaszab, 1954 were already transferred to *Bradymerus* by SCHAWALLER (2006). Probably, also the genus *Calabosca* Fairmaire, 1894 (type species *pedinoides* Fairmaire, 1893 from Indochina) is synonymous with *Bradymerus*.

Distribution: New Guinea (type locality Simbang).

# Bradymerus plicicollis (Fairmaire, 1896) (Figs. 8, 55)

#### Osdara plicicollis Fairmaire, 1896.

Examined material: Papua New Guinea (labelled as D. N. Guinea), Morobe Prov., Sattelberg, XII.1908, leg. R. NEU-HAUSS, 8 ex. MNB. – Papua New Guinea, Huon Golf, Sattelberg, 1899, leg. L. BIRÓ, 15 ex. HNHM. - Papua New Guinea (labelled as D.N.Guinea), Wareo, coll. HAUSER, 3 ex. MNB. - Papua New Guinea, Eastern Highlands Prov., Okapa, 5000 ft., 4.-15. II.1965, collector unknown, 1 ex. BMNH. - Papua New Guinea, Kiunga, 23.VII.-2.VIII.1969, leg. J. BALOGH, 2 ex. HNHM. -Papua New Guinea, Karimui, 1000 m, V.1969, leg. H. OHLMUS, 1 ex. HNHM. - Papua New Guinea, Karimui, III.1974, leg. J. SEDLACEK, 2 ex. HNHM. - Papua New Guinea, Morobe Prov., Gurakor, 16.IX.1979, leg. W. G. ULLRICH, 1 ex. HNHM. - Papua New Guinea, Morobe Prov., Aseki, 14,-16,II,1999, collector unknown, 10 ex. CKAO. - Papua New Guinea, Eastern Highlands Prov., Okapa, II.2003, collector unknown, 1 ex. CKAO. - Papua New Guinea, Western Highland Prov., Bayer Valley, Rokina, 1500 m, IV.1979, leg. W. G. ULLRICH, 3 ex. HNHM. - West Papua, Jayawijaya Prov., Bommela, 1750 m, 30.VIII.-1.IX.1992, leg. A. RIEDEL, 2 ex. SMNS. - West Papua, Jayawijaya Prov., Endoman, 900-1200 m, 29.IX.1993, leg. A. RIEDEL, 1 ex. SMNS. - West Papua, Wandammen Bay, Wasior, km 38, Sararti, 100-200 m, 7.-9.I.2001, leg. A. RIEDEL, 3 ex. SMNS. - West Papua, Japen, Mambo, 1000 m, 9. VIII. 1996, leg. A. RIEDEL, 2 ex. SMNS. - West Papua, Fakfak, 2 km E airstrip, 16.–18. VII. 1996, leg. P. SCHÜLE & P. STÜBEN, 5 ex. SMNS. - West Papua, Fakfak, Mambuni to Buni, 11. VII. 1996, leg. P. SCHÜLE & P. STÜBEN, 3 ex. SMNS. - West Papua, Nabire to Mapia, Unipo, 24.VII.1996, leg. P. SCHÜLE & P. STÜBEN, 2 ex. SMNS. - West Papua, Nabire, Unipo to Ebomani, 9.I.1997, leg. A. WEIGEL, 2 ex. NME. - West Papua, Testega, 1100-1200 m, 31.III.-12.IV.1993, leg. A. RIEDEL, 5 ex. SMNS. -West Papua, Manokwari Prov., Ransiki, Mayubi/Benyas, 27.-28. IX.1990, leg. A. RIEDEL, 2 ex. SMNS. - West Papua, Mokwam, Warmare, 300-1400 m, 19.IV.1993, leg. A. RIEDEL, 1 ex. SMNS. - West Papua, Paniai Prov., Mulia, Wuyuneeri, 1900-2200 m, 6.-7. VII.1994, leg. A. RIEDEL, 40 ex. SMNS. - West Papua, Paniai Prov., Epomani, Ugida, km 179, 1350-1400 m, 19.-20.I.1996, leg. A. RIEDEL, 1 ex. CRGT, 6 ex. BMNH, 6 ex. NHMB, 6 ex. NME. - West Papua, Baliem Valley, Kanggime, 1550 m, 3.-5. IX.1990, leg. M. BALKE & L. HENDRICH, 2 ex. CAPE.

Diagnostic characters: Dorsal view see Fig. 8, dorsal side blackish without metallic shine, body length 9.0-12.5 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 5 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with distinct crenulation, pronotal disc swollen, with dense but not confluent punctation, before base punctures more separate, between punctures with a few granules; pronotum before base with shallow transverse impression and medially and on each side with distinct longitudinal impression, so that the pronotal disc bears 4 humps. Elytra without punctural rows, but with stripes of small but distinct granules, intervals with large, elongate granules. Tibiae externally without distinct keels; male tibiae without modifications. Aedeagus see Fig. 55.

R e m a r k s: This species shows high infraspecific variability, mainly in the shape and dorsal structure of the pronotum, and long or round shape of the elytra. The late Dr. KASZAB tried to sort these different specimens to different taxa and even labelled the form with rounder elytra

in different collections as "*pseudoplicicollis*" (manuscript name), but the present author considers all as conspecific.

D i s t r i b u t i o n : New Guinea (type locality not specified).

# Bradymerus principatus Gebien, 1922 (Figs. 10, 56)

Studied type material: Papua New Guinea (labelled as N. Guinea), Friedrich Wilhelmshafen, 1 ♂ syntype NHMB, here designated as lectotype. – Papua New Guinea (labelled as D. N. Guinea), Etappenberg, XI.1912, Kaiserin Augustafluß Expedition, leg. J. BÜRGERS, 3 paralectotypes MNB. – Papua New Guinea, Lordberg, 8.XII.1912, Kaiserin Augustafluß Expedition, leg. J. BÜRGERS, 1 paralectotype MNB. – Papua New Guinea, Mäanderberg, 10.–20.VIII.1913, Kaiserin Augustafluß Expedition, leg. J. BÜRGERS, 1 paralectotype MNB. – Papua New Guinea (labelled as Nieuw Guinea), 15.–19.V.1907, leg. H.A. LORENTZ, 1 paralectotype ZMAN.

Examined material: Papua New Guinea, Morobe Prov., Sattelberg, Huon Golf, 1899, leg. L. BIRÓ, 1 ex. SMNS (duplicate from HNHM). - Papua New Guinea, Morobe Prov., Sattelberg, 2 ex. MNB. – Papua New Guinea, Kiunga, 23. VII.–2. VIII.1969, leg. J. BALOGH, 7 ex. HNHM. - Papua New Guinea, Mt. Missim, 600-1500 m, II.1974, leg. J. SEDLACEK, 1 ex. HNHM. - Papua New Guinea, Bulolo, II.1974, leg. J. SEDLACEK, 1 ex. HNHM. - Papua New Guinea, Asiki, 1000 m, II.1974, leg. J. SEDLACEK, 1 ex. HNHM. - West Papua, Paniai Prov., Sinak, 2000-2200 m, 14.-17.XII.1995, leg. A. RIEDEL, 2 ex. CRGT. - West Papua, Cyclops Mts., Mt. Lina, 3500 ft., III.1936, leg. L. E. CHEESMAN, 1 ex. BMNH. - West Papua, Jayapura, Sentani, Cyclops Mts., 300-1400 m, 10.VIII.1991, leg. A. Riedel, 3 ex. CSBC, 1 ex. SMNS. - West Papua, Fakfak, 2 km E airstrip, 16.-18.VII.1996, leg. P. SCHÜLE & P. STÜBEN, 2 ex. SMNS. - West Papua, Jayawijaya Prov., Membahan, 23.IX.1991, leg. A. RIEDEL, 1 ex. SMNS. - West Papua, Jayawijaya Prov., Endoman, 900-1200 m, 29.IX.1993, leg. A. RIEDEL, 3 ex. SMNS. - West Papua, Jayawijaya Prov., Borme, 1500-2000 m, 13.-17.VIII.1992, leg. A. RIEDEL, 3 ex. SMNS. - West Papua, Jayawijaya Prov., N Bime, 2000-2070 m, 21.IX.1993, leg. A. RIEDEL, 8 ex. SMNS. - West Papua, Jayawijaya Prov., Bime, 1600-1900 m, 22.IX.1993, leg. A. RIEDEL, 2 ex. SMNS. - West Papua, Meydoudga, 1200-1400 m, 5.IV.1993, leg. A. RIEDEL, 1 ex. SMNS. - West Papua, Anggi, Tetaho, Iranmeba, 1500–1700 m, 25.III.1993, leg. A. RIEDEL, 3 ex. SMNS. - West Papua, Anggi, Tetaho, Kosmena, 1400-1750 m, 26.-28.III.1993, leg. A. RIEDEL, 1 ex. SMNS. - West Papua, Iba, 1300 m, 7.-8.IV.1993, leg. A. RIEDEL, 2 ex. SMNS. - West Papua, Testega, 1100–1200 m, 30.III.–11.IV.1993, leg. A. RIEDEL, 11 ex. SMNS. - West Papua, Paniai, Wuyuneeri, 1900-2200 m, 6.-7. VII.1994, leg. A. RIEDEL, 7 ex. SMNS. - West Papua, Manokwari Prov., Mokwam, 1300-1600 m, 17.IV.1993, leg. A. RIEDEL, 1 ex. SMNS. - West Papua, Manokwari Prov., Mokwam (Siyoubrig), 1400-1800 m, 24.-28.II.2007, leg. A. WEIGEL, 1 ex. NME. - West Papua, Japen Island, Serui, N Ambeidiru, 1000 m, 5.VIII.1996, leg. P. Schüle & P. Stüben, 1 ex. SMNS.

Diagnostic characters: Dorsal view see Fig. 10, dorsal side blackish without metallic shine, body length 10.0–13.5 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with distinct crenulation, pronotal disc convex, with rough and confluent punctation, before base in the middle with a small impunctate field, between punctures with high granules; pronotum medially with longitudinal impression. Elytra with punctural rows without striae, punctures normally impressed, intervals convex and with a row of distinct elongate granules, in intervals 3, 5, 7, 8 these granules higher and more confluent, nearly keeled. Tibiae externally with distinct keels; male tibiae without modifications, male posterior femora ventrally with a patch of densely set light setae. Aedeagus see Fig. 56.

R e m a r k s : See also under *B. buergersi* n. sp., *B. macrogonus* and *B. neuhaussi* n. sp.

D i s t r i b u t i o n : New Guinea (type locality Friedrich Wilhelmshafen, now Madang), Japen Island.

# Bradymerus raucipennis Blackburn, 1892 (Figs. 22, 45)

#### Bradymerus seriatus Gebien, 1922 syn.

Studied type material: Papua New Guinea, Mt. Victoria, leg. W. DOHERTY, 1 syntype (sex not examined) of *B. seriatus* NHMB, here designated as lectotype. – Papua New Guinea, Kaiser Wilhelm Land, Stephansort, XII.1898, leg. S. ROHDE, 1 paralectotype of *B. seriatus* MNB. – West Papua (labelled as Holl. N. Guinea), Assewari, 7.VII.1910, leg. S. G. MOSZKOWSKI, 1 paralectotype of *B. seriatus* MNB (head and prothorax missing). – New Britain (labelled as Neu Pommern), 1909, 2 paralectotypes of *B. seriatus* MTD. – West Papua, Manokwari, 26.–29.V.1903, 2 paralectotypes of *B. seriatus* ZMAN (1 specimen labelled by KASZAB as lectotype, but designation not published).

Examined material: Australia, Queensland, Clump Point, 19.XII.1952, leg. J. SEDLACEK, 1 ex. HNHM. - Australia, Queensland, Coen, 12.III.1997, collector unknown, 1 ex. CRGT. - Halmahera, 7 km S Jailolo, 200 m, 26.-27.I.2006, leg. A. SKALE, 1 ex. CRGT. - Key Islands, 1 ex. MNB. - Papua New Guinea, Morobe Prov., Kaiapit, XII.1979, leg. W.G. ULLRICH, 1 ex. CKAO. - Papua New Guinea (labelled as D. N. Guinea), Komba Distr., leg. V. STICHEL, 3 ex. MNB. - Papua New Guinea, 50 km W Hoger, 1.II.1979, leg. J. SEDLACEK, 4 ex. HNHM. - Papua New Guinea, Mt. Missim, 1200 m, 1.II.1974, leg. J. SEDLACEK, 1 ex. HNHM. - Papua New Guinea, Milne Bay Prov., Alotau, 14.IX.1982, leg. J. SEDLACEK, 2 ex. HNHM. - West Papua, Manokwari Prov., Ransiki, Mayuby, 26.-30.IX.1990, leg. A. RIEDEL, 4 ex. SMNS. - West Papua, Testega, 1100-1300 m, 30.III.-2. IV.1993, leg. A. RIEDEL, 1 ex. SMNS. - West Papua, Testega, 1100-1200 m, 11.IV.1993, leg. A. RIEDEL, 1 ex. CRGT. - West Papua, Jayapura, Sentani, Cyclops Mts., 300 m, 19.-21.IX.1990, leg. A. RIEDEL, 1 ex. SMNS. - West Papua, Jayapura, Sentani, Cyclops Mts., 400 m, 13.IX.1990, leg. L. HENDRICH, 1 ex. SMNS. - West Papua, N Sentani, 300 m, III.1992, leg. J. Kolibáč, 3 ex. NHMB, 2 ex. SMNS. - West Papua, Japen (labelled as Yapen) Island, Serui, 28.XII.2006 -9.I.2007, leg. S. BILÝ, 5 ex. NMP. -West Papua, Japen Island, Mambo, 1000 m, 9.VIII.1996, leg. P. SCHÜLE & P. STÜBEN, 1 ex. SMNS. – West Papua, Japen (labelled as Yapen) Island, Serui, I.2007, leg. O. MEHL, 4 ex. HNHM. – West Papua, Biak Island, Mniber, XII.2006, leg. O. MEHL, 2 ex. HNHM. – West Papua, road 18 km NE Kaimana, 50–80 m, 21.– 25.II.2011, leg. A. SKALE, 2 ex. CASH. – West Papua, Raja Ampat Prov., Salawati Island, Kolobo, 24.–28.I.2004, leg. A. SKALE, 1 ex. CRGT. – West Papua, Raja Ampat Prov., Batanta Island, Wallebet, 21.I.2004, leg. A. SKALE, 1 ex. CRGT. – West Papua, Fakfak, 2 km E airstrip, 16.–18.VII.1996, leg. P. SCHÜLE & P. STÜ-BEN, 2 ex. SMNS. – West Papua, Nabire to Mapia, Unipo, km 117, 24.VII.1996, leg. P. SCHÜLE & P. STÜBEN, 6 ex. SMNS. – West Papua, Nabire Distr., Wondiwoi Mts., Yeretua, 100 m, IX.1998, leg. M. BALKE, 1 ex. CRGT.

Diagnostic characters: Dorsalview see Fig. 22, dorsal side blackish without metallic shine, body length 6.0-7.3 mm. Genae distinctly broader than eyes, forming acute angles, frons with distinct supraorbital furrows and with weak supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc convex, with dense and partly confluent punctation, before base in the middle with a small impunctate field, between punctures with a few granules; pronotum medially with weak longitudinal impression. Elytra with fine punctural rows without striae, punctures normally impressed, all intervals distinctly convex and regular with a row of distinct granules. Tibiae externally without distinct keels, sometimes anterior tibiae with traces of keels; male tibiae without modifications. Aedeagus see Fig. 45.

Distribution: New Guinea (type locality Mt. Victoria of *B. seriatus*), Japen Island, Biak Island, Salawati Island, Batanta Island, Halmahera (Moluccan Islands), Key Islands, Queensland (Australia) (type locality of *B. raucipennis*).

# Bradymerus regularis Gebien, 1922 (Figs. 23, 46)

Bradymerus buruensis Kulzer, 1951 n. syn.

Studied type material: Buru, station 9, 20.VI.–10. VII.1921, leg. L. J. TOXOPEUS,  $\delta$  holotype of *B. buruensis* ZMAN. – Buru, station 9, V.1921, leg. L. J. TOXOPEUS, 1  $\delta$  paratype of *B. buruensis* ZMAN. – The holotype of *B. regularis* was not studied because it is missing in NHMB (FREY collection).

E x a m i n e d m a t e r i a l : Papua New Guinea, Arfak Mts., Siwi, 800 m, 4.V.1928, leg. E. MAYR, 1 ex. MNB (det. KASZAB). – Papua New Guinea, Karimui, III.1974, leg. J. SEDLACEK, 1 ex. HNHM. – West Papua, Testega, 1100–1200 m, 30.III.–12. IV.1993, leg. A. RIEDEL, 21 ex. SMNS. – West Papua, 50 km S Nabire, Pusspenssat, 30.XII.1996, leg. A. WEIGEL, 1 ex. CRGT. – Seram, Solea, 12 km SE Wahai, 17.I.–6.II.1997, leg. S. BILÝ, 4 ex. SMNS.

Diagnostic characters: Dorsal view see Fig. 23, dorsal side blackish without metallic shine, body length 6.5–8.0 mm. Genae distinctly broader than eyes, forming acute angles, frons with distinct supraorbital furrows and with distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc convex, with dense and partly confluent punctation, before base in the middle with a large impunctate field, between punctures with several granules; pronotum medially with weak longitudinal impression. Elytra with punctural rows without striae, punctures deeply impressed, intervals flat, intervals 1, 3, 5, 7 and 9 with a row of distinct elongate granules, posteriorly tubercles confluent and keeled. Tibiae externally with distinct keels; male tibiae without modifications. Aedeagus see Fig. 46.

S y n o n y m y: The reexamined type series of *B. buruensis* completely coincides with the description and figure of *B. regularis* by GEBIEN (1922). When describing *B. buruensis*, KULZER (1951) mentioned the similarity to *B. regularis* and separated the two species only by the shape of the high supraorbital keels and by the shape of the broad genae, but these tiny differences are not specific. Thus, *B. buruensis* Kulzer, 1951 is considered a junior synonym of *B. regularis* Gebien, 1922.

Distribution: New Guinea (type locality Mt. Victoria of *B. regularis*); Buru (type locality of *B. buruensis*), Seram (Moluccan Islands).

#### Bradymerus rugipleuris Gebien, 1922 (Figs. 11, 57)

Studied type material: Great Banda Island (S Seram),  $1 \Im$  syntype NHMB, here designated as lectotype.

Examined material: Bacan Island, valley 3 km S Labuha, 40 m, 13.I.2006, leg. A. WEIGEL, 1 ex. SMNS. – Morotai Island, W Daruba, Raja, 50–300 m, 16.–19.XI.1999, leg. A. RIE-DEL, 2 ex. SMNS. – NE Halmahera, 5 km E Labi Labi, 2.VI.1997, leg. M. HIERMEIER, 5 ex. CRGT. – NW Halmahera, 7 km S Jailolo, 200 m, 27.I.2006, leg. A. WEIGEL, 2 ex. NME.

Diagnostic characters: Dorsal view see Fig. 11, dorsal side blackish without metallic shine, body length 9.5–11.0 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 5 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc swollen, with dense and partly confluent punctation, before base punctures more separate, between punctures without granules; pronotum before base with shallow transverse impression and medially with shallow longitudinal impression. Elytra with punctural rows without striae, punctures deeply impressed, interval 1 flat, intervals 2-8 with complete keels. Tibiae externally without distinct keels; anterior male tibiae internally with two narrow longitudinal stripes of densely set light setae. Aedeagus see Fig. 57.

Distribution: Bacan (= Batjan) Island, Banda Island (type locality), Morotai, Halmahera (Moluccan Islands).

#### Bradymerus sculptilis Kulzer, 1951 (Figs. 13, 58)

Studied type material: Papua New Guinea, Bolan Mts.,  $1 \circ \beta$  paratype NHMB.

Examined material: Papua New Guinea (labelled as D. N. Guinea), Wareo, 12 ex. MNB. - Papua New Guinea, Bolan Mts., no further data, 3 ex. SMNS. - Papua New Guinea, Eastern Highlands Prov., Kainantu, Onerunka, VII.1981, leg. W.G. ULL-RICH, 1 ex. CKAO. - Papua New Guinea, Madang Distr., Finisterre Mts., 5550 ft., 30.X.-15.XI.1964, collector unknown, 3 ex. BMNH. - Papua New Guinea, Eastern Highlands Prov., Okapa, 5000 ft., 4.–15.II.1965, collector unknown, 1 ex. BMNH. – Papua New Guinea, Eastern Highlands Prov., Okapa, II.2003, collector unknown, 1 ex. CKAO. - Papua New Guinea, Southern Highland Prov., Tari to Koroba, Hake, 1700-2000 m, 14.V.1998, leg. A. RIEDEL, 2 ex. SMNS. - West Papua, Anggi, Iray, Gunung Disbehey, 1900-2100 m, 19.-20.III.1993, leg. A. RIEDEL, 2 ex. SMNS. - West Papua, Minyambou, 1500-1900 m, 13.-14.IV.1993, leg. A. RIEDEL, 5 ex. SMNS. - West Papua, Manokwari Prov., Mokwam, 1300-1600 m, 17.IV.1993, leg. A. RIEDEL, 1 ex. SMNS. -West Papua, Arfak Mts., Mokwam (Siyoubrig), 1400-1800 m, 24.-28.II.2007, leg. R. GERSTMEIER, 1 ex. CRGT. - West Papua, Manokwari Prov., Mokwam (Siyoubrig), 1400-1800 m, 24.-28. II.2007, leg. A. WEIGEL, 1 ex. NME.

Diagnostic characters: Dorsal view see Fig. 13, dorsal side blackish without metallic shine, body length 8.5-11.5 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with distinct crenulation, pronotal disc convex, with rough and confluent punctation, before base in the middle with a small impunctate field, between punctures without granules; pronotum medially with longitudinal impression. Elytra with punctural rows without striae, punctures deeply impressed, intervals convex and with keels, these keels slightly sinuate and sometimes interrupted, particularly on intervals 6, 8, 9. Tibiae externally with distinct keels; male tibiae without modifications, male posterior femora ventrally with a patch of densely set light setae. Aedeagus see Fig. 58.

Distribution: New Guinea (type locality Bolan Mts.).

# Bradymerus semiasperatus Fairmaire, 1883 (Figs. 18, 53)

Examined material: New Britain (labelled as Neupommern),  $1 \stackrel{\circ}{\circ} NHMB$  (det. GEBIEN). – Papua New Guinea (labelled as D. N. Guinea), Simpsonhafen, V.1909, leg. H. SCHOEDE,  $1 \stackrel{\circ}{\circ} MNB$  (det. GEBIEN).

Diagnostic characters: Dorsal view see Fig. 18, dorsal side blackish without metallic shine, head, pronotum and elytra with distinct densely set scales, body length 9.3-9.8 mm. Genae not broader than eves, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 5 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin without crenulation, pronotal disc swollen, with rough and partly confluent punctation, before base punctures more separate, between punctures with several granules; pronotum before base with shallow transverse impression and medially with distinct longitudinal impression. Elytra with punctural rows without striae, punctures deeply impressed, intervals distinctly convex and regular with a row of distinct granules. Tibiae externally without distinct keels; anterior male tibiae internally with longitudinal stripe of densely set light setae. Aedeagus see Fig. 53.

Distribution: New Guinea, New Britain (type locality).

#### Bradymerus solomonis Kaszab, 1980 (Figs. 31, 48)

Studied type material: Solomon Islands, Santa Isabel, Tatan Bay, 22.VIII.1963, leg. P. GREENSLADE,  $\vec{\bigcirc}$  holotype HNHM. – Solomon Islands, different data, 15 paratypes HNHM.

Examined material: Vanuatu (labelled as N. Hebrides), SW Efate Island, Porto Vila, 0–200 ft., 2.XII.1922, 1 ex. BMNH. – West Papua, Fakfak, 2 km E airstrip, 16.–18.VII.1996, leg. P. SCHÜLE & P. STÜBEN, 1 ex. SMNS. – West Papua, 10 km N Fakfak, Rankendag II, 9.VII.1996, leg. P. SCHÜLE & P. STÜBEN, 1 ex. SMNS. – West Papua, 60 km E Asori, Kwadewa Camp near Wapoga River, 10.I.1999, leg. A. WEIGEL, 1 ex. CRGT.

Diagnostic characters: Dorsal view see Fig. 31, dorsal side blackish without metallic shine, body length 5.5-6.0 mm. Genae not broader than eves, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with distinct crenulation, pronotal disc convex, with dense and confluent punctation, between punctures with a few distinct granules; pronotum medially with longitudinal impression. Elytra with punctural rows without striae, punctures normally impressed, intervals 1, 3, 5, 7 flat and with complete keels, keels feebly sinuate, intervals 2, 4, 6, 8 flat and with a row of small granules, in external intervals granules confluent and nearly keeled. Tibiae externally without distinct keels; male tibiae without modifications. Aedeagus see Fig. 48.

R e m a r k s: The reexamined type series of *B. solomonis* in HNHM (holotype and 15 paratypes) is somewhat variable in dorsal structure, but all specimens have the genae narrower than eyes, weak supraorbital keels, and convex pronotal disc. See also under *B. beccarii* n. sp. and *B. biroi* n. sp. Distribution: Solomon and Rennell Islands (type locality Santa Isabel), Vanuatu (former New Hebrides), New Guinea.

#### Bradymerus ternatensis Kulzer, 1951 (Fig. 26)

Studied type material: Ternate Island, leg. Kanne-GIETER,  $1 \bigcirc$  holotype ZMAN. – Same data as holotype,  $1 \bigcirc$  paratype ZMAN.

Examined material: Ternate Island, leg. W. Doherty,  $1 \Leftrightarrow BMNH$ .

Diagnostic characters: Dorsal view see Fig. 26, dorsal side blackish without metallic shine, body length 7.5–7.8 mm. Genae broader than eyes, frons with distinct supraorbital furrows and with distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc convex, with rough and confluent punctation, between punctures with granules; pronotum medially with distinct longitudinal impression. Elytra with punctural rows without striae, punctures deeply impressed, all intervals distinctly convex and with elongate granules, partly confluent and keeled. Tibiae externally without distinct keels; modifications of male tibiae unknown (only females available). Aedeagus unknown.

Distribution: Ternate (type locality) (Moluccan Islands W Halmahera).

#### Bradymerus toxopei Kulzer, 1951 (Figs. 25, 47)

Studied type material: Buru, station 5, IV.1921, leg. L. J. TOXOPEUS, ♂ holotype ZMAN. – Buru, station 9, IV.– IX.1921, leg. L. J. TOXOPEUS, 9 paratypes (sex not examined) ZMAN. – Buru, station 9, 13.VIII.1921, leg. L. J. TOXOPEUS, 1 paratype (sex not examined) NHMB.

Examined material: Bacan (labelled as Batjan), leg. W. DOHERTY, 1 ex. BMNH. – Sangir Island, Taroena, leg. W. DOHERTY, 1 ex. BMNH. – West Papua, Paniai Prov., Nabire, Pusppensaat, 200–500 m, 14.–15.VIII.1991, leg. A. RIEDEL, 4 ex. SMNS.

Diagnostic characters: Dorsal view see Fig. 25, dorsal side blackish without metallic shine, body length 7.5–8.5 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc flat, with dense and partly confluent punctation, punctures on disc more separate before base and medially, between punctures without granules; pronotum before base with shallow transverse impression and medially with feeble longitudinal impression. Elytra with punctural rows without striae, punctures 168

normally impressed, interval 1 convex and without keel, intervals 2–8 convex and with fine but complete keels. Tibiae externally at base with feeble keels; male posterior tibiae feebly clavate and internally with a line of densely set pale setae. Aedeagus see Fig. 47.

D i s t r i b u t i o n : Buru (type locality), Bacan (Moluccan Islands); Sangir (N of Sulawesi), New Guinea.

#### Bradymerus trobriandensis Gebien, 1922

Diagnostic characters: This species was stated by GEBIEN (1922) to be similar to *B. helleri*, but the genae are broader, the pronotal disc is more convex, and the elytral punctures are without granules. See GEBIEN (1922: pl. IX, fig. 7).

R e m a r k : Type material was not studied because it is missing in NHMB (FREY collection).

Distribution: Trobriand Island (SE New Guinea) (type locality).

#### Bradymerus wegneri Kaszab, 1964

#### Bradymerus kulzeri Schawaller, 2006 n. syn.

Studied type material: Amboina, 70 m, 14.VI.1961, leg. A. M. R. WEGNER,  $\mathcal{J}$  holotype of *B. wegneri* HNHM. – C Sulawesi, 20 km SE Tambarana, Camp Mauro, 11.–16.VII.1999, leg. L. BOLM,  $\mathcal{J}$  holotype of *B. kulzeri* SMNS.

Diagnostic characters: For description and figures see SCHAWALLER (2006) under *B. kulzeri* Schawaller, 2006

S y n o n y m y: During the revision of Oriental *Bradymerus* (SCHAWALLER 2006) taxa from other areas were not considered. After reexamination of the holotype of *B. wegneri* Kaszab, 1964 for the present revision of the Papuan Region, it turned out that *B. kulzeri* Schawaller, 2006 from Sulawesi is a junior synonym of *B. wegneri* Kaszab, 1964 – both holotypes show no specific differences.

Distribution: Amboina Island near Seram (type locality of *B. wegneri*) (Moluccan Islands), Sulawesi (type locality of *B. kulzeri*).

#### 3 Descriptions of new Papuan and Moluccan species of *Bradymerus*

# Bradymerus albertisi n. sp. (Figs. 32, 35)

Holotype (♂): Moluccan Islands, Seram, Solea, 12 km SE Wahai, 17.I.–6.II.1997, leg. S. BILÝ, SMNS. Paratypes: Same data as holotype, 4 ex. SMNS, 2 ex. NMP, 1 ex. NHMB. – Moluccan Islands, Seram, Air Basar, 6 km E Wahei, 5.XI.1998, leg. S. BILÝ, 1 ex. NMP. – Moluccan Islands, Seram, 35 km E Pasahari, 24.–30.X.1998, leg. O. MEHL, 1 ex. HNHM. – Moluccan Islands, Sula Archipelago, Mangole Island, VII.–XII.1977, leg. V. & G. WEGENER, 1 ex. NHMB.

E t y m o l o g y : Named in honour of LUIGI MARIA D'ALBERTIS (1841–1901), Genoa, an Italian naturalist and explorer, who steamed in 1876 some 940 kilometers up the Fly River in Papua New Guinea, collecting natural history specimens, preserved in the Natural History Museum in Genoa.

Description: Dorsal view see Fig. 32, dorsal side blackish without metallic shine, body length 3.8–4.8 mm. Genae broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum protruding, lateral margin with distinct crenulation, pronotal disc convex, with rough and confluent punctation, before base punctures more separate, between punctures partly with granules; pronotum medially with shallow longitudinal impression. Elytra with punctural rows without striae, punctures deeply impressed, interval 1 with a few small granules, intervals 2–8 with distinctly elongate granules partly forming keels, keel of interval 3 slightly prominent. Tibiae externally each with 3 keels; male tibiae without modifications. Aedeagus see Fig. 35.

D i a g n o s i s : B. albertisi n. sp. belongs to the small group of species with small body size and with tibiae externally with three keels (B. cheesmanae n. sp., B. lobicollis Gebien, 1922, B. meyeri n. sp.). However, in B. cheesmanae n. sp. (Fig. 15) the surface of the pronotum is quite uneven with three distinct humps, in B. meyeri n. sp. (Fig. 34) the pronotal disc is also but differently uneven, and in B. lobicollis (Fig. 29) the pronotum is even as in B. albertisi n. sp., but is distinctly longer and has extremely protruding anterior corners. The elytral dorsal structure in these species is not identical but similar to a certain extent by flatter internal intervals and keeled external intervals. See also under B. cheesmanae n. sp. and B. meyeri n. sp.

# Bradymerus archboldi n. sp. (Figs. 27, 36)

H o l o t y p e ( $\mathcal{C}$ ): Neu Guinea, Morobe Prov., Sattelberg, no further data, HNHM.

Paratype: Same data as holotype, 1 ex. SMNS.

Etymology: Named in honour of RICHARD ARCHBOLD (1907–1976), US-American sponsor of three biological expeditions to New Guinea 1933–1939 (with the zoologist AUSTIN L. RAND).

Description: Dorsal view see Fig. 27, dorsal side blackish without metallic shine, body length 5.8–6.0 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 5 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with crenulation, pronotal disc distinctly convex, with dense and confluent punctation, between punctures with a few feeble granules; pronotum before base with shallow transverse impression and medially with shallow longitudinal impression. Elytra with punctural rows without striae, punctures normally impressed, intervals 1, 3, 5, 7 flat and with complete keels, keels feebly sinuate, intervals 2, 4, 6 flat and without granules. Tibiae externally without distinct keels; male tibiae without modifications. Aedeagus see Fig. 36.

D i a g n o s i s : *B. archboldi* and *B. solomonis* Kaszab, 1980 (Fig. 31) share the small body size and the dorsal elytral pattern with the intervals 1, 3, 5, 7 with complete keels, but in *B. solomonis* the pronotum is distinctly flatter, has a distinct medial impression, and the aedeagi are different (compare Figs. 36, 48). See also under *B. lorentzi* n. sp. (also with distinct convex pronotum).

# Bradymerus beccarii n. sp. (Figs. 30, 37)

Holotype ( $\mathcal{J}$ ): West Papua, Meydoudga, 1200–1400 m, 5.IV.1993, leg. A. RIEDEL, SMNS.

Paratypes: West Papua, Wandammen Bay, Wondiwoi Mts., Wasior, 250–600 m, 4.I.2001, leg. A. RIEDEL,  $1 \bigcirc$  SMNS. – West Papua, Nabire, 54 km S Ilaga Road, Pusppenssat, IX.1991, leg. P. Hoyois, 2 ex. CRGT.

Etymology: Named in honour of ODOARDO BECCARI (1843–1920), Italian botanist and traveller, who visited besides Borneo and Sulawesi also New Guinea 1871–1876 (partly together with LUIGI MARIA D'ALBERTIS), and collected not only plants but also zoological specimens.

D e s c r i p t i o n : Dorsal view see Fig. 30, dorsal side blackish without metallic shine, body length 4.7–5.0 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with distinct crenulation, pronotal disc convex, with rough and confluent punctation, between punctures with a few higher granules; pronotum medially with impression. Elytra with punctural rows without striae, punctures deeply impressed, interval 1 flat and with a few very tiny granules, intervals 2, 4, 6 flat and without granules, intervals 3, 5, 7, 8 convex and with complete keels, keels feebly sinuate. Tibiae externally at base with feeble keels; male tibiae without modifications. Aedeagus see Fig. 37.

Diagnosis: *B. beccarii* is similar to *B. solomonis* Kaszab, 1980 by the small body size and the dorsal structure of pronotum and elytra (Fig. 31), but in the latter species the elytral punctural rows are smaller with the third

row with about 33 punctures (about 25 punctures in *beccarii* n. sp.), the flat elytral intervals 2, 4, 6 bear tiny granules (without any granules in *beccarii* n. sp.), and the aedeagus is different with longer basale and straight triangular apicale (compare Figs. 37, 48). *B. biroi* n. sp. (Figs. 33, 38) belongs to the same group of small species, but has the genae distinctly broader than the eyes and the distinct supraorbital keels, and the aedeagus is different.

# Bradymerus biroi n. sp. (Figs. 33, 38)

Holotype ( $\mathcal{J}$ ): West Papua, Jayapura, Sentani, Cyclops Mts., 300–500 m, 31.X.1992, leg. A. RIEDEL, SMNS.

Paratypes: Same data as holotype, 9 ex. SMNS. – West Papua, Jayawijaya Prov., Borme, 1000–1300 m, 13.–18. VIII.1992, leg. A. RIEDEL, 1 ex. SMNS. – Papua New Guinea, Morobe Prov., Lae, 4.–6.IX.1968, leg. J. BALOGH, 2 ex. HNHM. – New Britain (labelled as Neupommern), Mope, 7.XI.1936, leg. P. J. SCHNEIDER, 2 ex. HNHM.

E t y m o l o g y : Named in honour of LAJOS BIRÓ (1856–1931), Budapest, who from 1896 to 1902 collected mainly zoological material in New Guinea (mainly around the Astrolabe Bay) for the Hungarian National Museum (now Hungarian Natural History Museum), but valuable ethnographic objects and botanical specimens as well.

D e s c r i p t i o n : Dorsal view see Fig. 33, dorsal side blackish without metallic shine, body length 4.0–5.2 mm. Genae broader than eyes, frons with distinct supraorbital furrows and with distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with distinct crenulation, pronotal disc convex, with dense and confluent punctation, between punctures with some distinct granules; pronotum medially with impression. Elytra with punctural rows without striae, punctures deeply impressed, intervals 2, 4, 6 flat and at most with a few tiny granules, intervals 1, 3, 5, 7, 8 convex and with complete keels, keels feebly sinuate. Tibiae externally without distinct keels; male tibiae without modifications. Aedeagus see Fig. 38.

D i a g n o s i s : *Bradymerus biroi* n. sp. is very similar to *B. solomonis* Kaszab, 1980 concerning small body size, elytral dorsal structure and even aedeagus, but differs by genae broader than eyes, by higher supraorbital keels and mainly by distinctly flatter pronotum (compare Figs. 31, 33). See also under *B. beccarii* n. sp. (Figs. 30, 37).

R e m a r k s: The reexamined type series of *B. solomonis* in HNHM is large (holotype and 15 paratypes) and somewhat variable in dorsal structure, but all specimens have the genae narrower than eyes, weak supraorbital keels, and convex pronotal disc. As long as intermediate specimens are unknown, the above mentioned specimens from New Guinea and New Britain are considered to represent a different species.

#### Bradymerus buergersi n. sp. (Figs. 2, 49)

Holotype ( $\Im$ ): West Papua, Wandammen Bay, Wondiwoi Mts., Wasior, 300–850 m, 5.I.2001, leg. A. RIEDEL, SMNS.

P a r a t y p e s : West Papua, Fakfak, 2 km E airstrip, 16.–18. VII.1996, leg. P. SCHÜLE & P. STÜBEN, 1 ex. SMNS. – West Papua, Jayawijaya Prov., Borma, 1000–1300 m, 12.–18.VIII.1992, leg. A. RIEDEL, 1 ex. SMNS. – West Papua, Jayawijaya Prov., Endoman, 900–1200 m, 29.IX.1993, leg. A. RIEDEL, 2 ex. SMNS. – West Papua, 130 km SE Kaimana, Omba (= Yamor) River, 1020 m, 9.–11.II.2011, leg. A. WEIGEL, 4 ex. NME. – Papua New Guinea, Lae, XII.1977, leg. J. SEDLACEK, 6 ex. HNHM.

E t y m o l o g y : Named in honour of JOSEPH BURGERS (1881– 1954), physician of the German "Kaiserin Augusta Fluß Expedition" 1912–1913 to New Guinea, collecting zoological specimens for the Berlin Museum of Natural History.

Description: Dorsal view see Fig. 2, dorsal side blackish without metallic shine, body length 9.0-12.0 mm. Genae not broader than eyes, frons with distinct supraorbital furrows and with feeble supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with distinct crenulation, pronotal disc convex, with rough and confluent punctation, before base in the middle with a large impunctate field, with distinct lateral impressions, between punctures with high granules; pronotum medially with longitudinal impression. Elytra with punctural rows without striae, punctures deeply impressed, interval 1 flat and with a row of distinct granules, these sometimes confluent at base and confluently keeled in posterior third, intervals 2, 4 flat and without granules, interval 6 flat and posteriorly with a row of granules, intervals 3, 5, 7 with distinct complete keels. Tibiae externally with indistinct keels; male tibiae without modifications. Aedeagus see Fig. 49.

D i a g n o s i s : *B. buergersi* n. sp. belongs to the species group around the common *B. principatus*, and shares with this species the large body size, the 6-segmented antennal club, the genae not broader than eyes and the shape and rough dorsal punctation of the pronotum, but can easily be distinguished by the different aedeagus, by the larger impunctate field at the pronotal base and by the elytral structure with flat intervals 2, 4 without any granules and with intervals 3, 5, 7 with distinct and high keels (compare Figs. 2, 10). *B. macrogonus* (Figs. 6, 51) has the genae broader than eyes, a different elytral structure, and a different aedeagus. See also under *B. neuhaussi* n. sp. (Figs. 7, 52).

# Bradymerus cheesmanae n. sp. (Figs. 15, 39)

H o l o t y p e ( $\mathcal{C}$ ): West Papua, Japen Island, north coast, Tindaret, 100 m, 21.XII.2000, leg. A. RIEDEL, SMNS.

P a r a t y p e s : West Papua, Jayapura, Sentani, Cyclops Mts., 400–800 m, 7.VIII.1992, leg. A. RIEDEL, 1 ex. SMNS. – West

Papua, Javapura, Sentani, Cyclops Mts., 950-1450 m, 3.X.1992, leg. A. Riedel, 1 ex. SMNS. - West Papua, Javawijava Prov., Borme, 1000-1450 m, 12.-18.VIII.1992, leg. A. RIEDEL, 2 ex. SMNS. - West Papua, 50 km S Nabire, Pusppenssat, 730 m, 20.II.1998, leg. A. WEIGEL, 1 ex. CAWW. - West Papua, 50 km S Nabire, Flaga Road, Pusppenssat, 18.II.1998, leg. A. WEIGEL, 1 ex. CRGT. - West Papua, Sorong, Dusun Meibo, 100-150 m, 19.I.2001, leg. A. RIEDEL, 2 ex. SMNS. - West Papua, 18 km NE Kaimana, 50-80 m, 21.-25.II.2011, leg. A. WEIGEL, 2 ex. NME, 1 ex. CRGT. - West Papua, road 10 km NE Kaimana, 40 m, 1.II.2011, leg. A. SKALE, 2 ex. CASH. - West Papua, 50 km SE Kaimana, Triton Bay, Kamaka, 10-50 m, 2.-5.II.2011, leg. A. SKALE, 1 ex. NME. - West Papua (labelled as Dutch New Guinea), Waigeo, Mt. Nok, camp 2 (Buffelhorn), VI.1938, leg. L.E. CHEESMAN, 1 ex. BMNH. - Papua New Guinea, Morobe Prov., Bulolo, 900 m, 13.II.–13.III.1979, leg. J. SEDLACEK, 1 ex. HNHM. - Moluccan Islands, Morotai, W Daruba, Raja, 50-100 m, 18.XI.1999, leg. A. RIEDEL, 1 ex. SMNS.

E t y m o l o g y : Named in honour of LUCY EVELYN CHEESMAN (1881–1969), British entomologist and traveller, assisting as volunteer at the Natural History Museum, London, and collecting various insects on expeditions to the Marquesas and Galapagos Islands, as well as to New Guinea, the New Hebrides (now Vanuatu) and other Pacific Islands.

Description: Dorsal view see Fig. 15, dorsal side blackish without metallic shine, body length 5.2-7.0 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum protruding, lateral margin with distinct crenulation, pronotal disc convex, with rough and confluent punctation, before base punctures more separate, between punctures partly with high granules, so that the pronotal disc bears 1 hump behind the middle and 1 hump on each side; pronotum before base with shallow transverse impression. Elytra with punctural rows without striae, punctures deeply impressed, intervals 1, 2 with distinct elongate granules, intervals 3-8 with distinctly elongate granules partly forming keels. Tibiae externally with 3 keels; male tibiae without modifications. Aedeagus see Fig. 39.

Diagnosis: B. cheesmanae n. sp. is similar and related to B. lobicollis Gebien, 1922 (Fig. 29), both species share small body size, antenna with 6 antennomeres forming a club, elytral structure (compare (Figs. 15 and 29) and particularly the tibiae externally with three keels, an unusual character within the genus. Both species can be separated by the form of the pronotum (lateral margin with distinct crenulation and anterior corners shorter acute in B. cheesmanae n. sp., nearly smooth and anterior corners longer rounded in B. lobicollis), by the dorsal structure of the pronotum (with three high humps in *B. cheesmanae* n. sp., with three longitudinal impressions in B. lobicollis), and by the elytral structure (lateral margin with serriform tubercles in B. cheesmanae n. sp., nearly smooth in B. lobicollis). The aedeagus of B. lobicollis is unknown (only female available). See also under *B. albertisi* n. sp. and *B.* meyeri n. sp.

# Bradymerus dahli n. sp. (Fig. 3)

Holotype ( $\bigcirc$ ): Papua New Guinea, Etappenberg, 19.IX.– 8.X.1912, leg. S. Ledermann, MNB.

P a r a t y p e : West Papua, Jayapura, Sentani, Cyclops Mts., 500–1100 m, 28.XII.2007, leg. A. RIEDEL,  $1 \bigcirc$  SMNS.

E t y m o l o g y : Named in honour of KARL FRIEDRICH THEO-DOR DAHL (1856–1929), curator of the Zoological Museum in Berlin, and collector of Coleoptera during his zoological expedition 1896–1897 to New Britain and Papua New Guinea.

Description: Dorsal view see Fig. 3, dorsal side blackish without metallic shine, body length 12.0–12.3 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 5 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin nearly smooth without crenulation, pronotal disc flat, with fine and separate punctation, between punctures with a few granules; pronotum somewhat uneven and before base with shallow transverse impression. Elytra with punctural rows without striae, punctures deeply impressed, intervals distinctly convex and regular with a row of high granules. Tibiae externally without distinct keels; modifications of male tibiae unknown (only females available). Aedeagus unknown.

D i a g n o s i s : *B. dahli* n. sp. is similar to *B. helleri* Gebien, 1922 concerning large body size, shape of antennomeres and dorsal structure of elytra, but differs by the shape of the pronotum with longer protruding anterior corners, by flatter pronotal disc, and by distinctly larger and higher elytral granules (compare Figs. 3 and 5).

R e m a r k s: This large species is easy to recognize and this justifies its description on the basis of females. The similar and certainly related species *B. helleri* is also known only from two females, thus the aedeagi cannot be compared.

# Bradymerus dohertyi n. sp. (Figs. 24, 41)

Holotype (♂): West Papua, Fakfak, Mambuni to Buni, 11.VII.1996, leg. P. SCHÜLE & P. STÜBEN, SMNS.

P a r a t y p e s : Papua New Guinea, Karimui, 1000 m, II.1974, leg. J. SEDLACEK, 1 ex. HNHM. – West Papua, Raja Ampat Prov., Salawati Island, Kalobo, 24.–28.I.2004, leg. A. SKALE, 1 ex. CRGT.

Etymology: Named in honour of WILLIAM DOHERTY (1857–1901), American lepidopterologist, who collected not only butterflies in southeastern Asia including New Guinea and eastern Africa, but also many other insects, and even birds (for WALTER ROTHSCHILD).

Description: Dorsal view see Fig. 24, dorsal side blackish without metallic shine, body length 7.3–9.0 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 5 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation, pronotal disc convex, with dense but not confluent punctation, before base punctures more separate, between punctures with a few granules; pronotum before base with shallow transverse impression. Elytra with punctural rows without striae, punctures deeply impressed, intervals 1–4 flat and with a row of small and separate tubercles, intervals 5–8 with longitudinal confluent, almost keeled tubercles. Tibiae externally without distinct keels; male tibiae without modifications. Aedeagus see Fig. 41.

D i a g n o s i s : *B. dohertyi* n. sp. belongs to the group of species consisting of *B. doleschalli* (Fig. 4), *B. nigerrimus* (Fig. 9) and *B. rugipleuris* (Fig. 11) and can be recognized by the shining black surface, by the convex pronotum without any impressions, and by the elytra with the intervals 1–4 flat and with small and separate tubercles and with the intervals 5–8 with confluent, nearly keeled tubercles. In the other species, only the intervals 1 or 1–2 bear tubercles and the intervals 3–8 bear keels. Additionally, *B. rugipleuris* has the pronotum medially with a longitudinal impression.

#### Bradymerus lorentzi n. sp. (Fig. 28)

Holotype ( $\bigcirc$ ): Moluccan Islands, Seram, 35 km E Pasahari, Unit O, 24.–30.X.1998, leg. O. MEHL, HNHM.

Etymology: Named in honour of HENDRIKUS ALBERTUS LORENTZ (1871–1944), Dutch jurist and biologist, leader of two Netherland expeditions to New Guinea 1907–1910.

D e s c r i p t i o n : Dorsal view see Fig. 28, dorsal side blackish without metallic shine, body length 5.7 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 5 antennomeres forming a club. Anterior corners of pronotum protruding, lateral margin with crenulation, pronotal disc distinctly convex, with rough and confluent punctation, before base punctures more separate, between punctures without granules; pronotum before base with shallow transverse impression. Elytra with punctural rows without striae, punctures deeply impressed, interval 1 feebly convex and with a row of few and tiny granules, intervals 2–8 with complete, slightly sinuate keels. Tibiae externally with distinct keels; modifications of male tibiae unknown (only female available). Aedeagus unknown.

D i a g n o s i s : *B. lorentzi* n. sp. can be recognized by the small body size, the distinctly convex pronotum with rough confluent punctation but without medially longitudinal impression, the pronotum with long acute anterior corners, the elytra with similarly keeled intervals 2–8, and the tibiae with distinct external keel. No similar species is known in the studied area. *B. archboldi* n. sp. has also a small body size and a distinctly convex pronotum, but in this species the elytral dorsal pattern is different: only the intervals 1, 3, 5, and 7 have complete keels.

#### Bradymerus meyeri n. sp. (Fig. 34)

Holotype ( $\mathcal{Q}$ ): West Papua, Asori, 60 km E Kwadewa, Camp near Wapoga River, 10.I.1999, leg. A. WEIGEL, NME.

P a r a t y p e s : Papua New Guinea, New Britain, 30 km SW Kokopo, Arabam, 200 m, 21.II.–4.III.2000, leg. A. WEIGEL, 1  $\bigcirc$  CRGT, 1  $\bigcirc$  SMNS.

E t y m o l o g y : Named in honour of ADOLF BERNHARD MEYER (1840–1911), German zoologist and anthropologist, and director (1874–1906) of the Natural History Museum in Dresden. MEYER travelled in 1870 to Sulawesi and the Philippines, and in 1872 to New Guinea, where he collected ethnographic objects as well as zoological specimens.

Description: Dorsal view see Fig. 34, dorsal side blackish without metallic shine, body length 4.0 mm. Genae not broader than eyes, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum protruding, lateral margin with distinct crenulation, pronotal disc convex, with rough and confluent punctation, before base punctures more separate, between punctures partly with high granules, so that the pronotal disc bears a separate flat groove surrounded by high granules; pronotum before base with shallow transverse impression. Elytra with punctural rows without striae, punctures deeply impressed, interval 1 with a few small elongate granules, intervals 2-8 with distinctly elongate granules partly forming keels. Tibiae externally with 3 keels; modifications of male tibiae unknown (only females available). Aedeagus unknown.

D i a g n o s i s : *B. meyeri* n. sp. is a member of the *B. lo-bicollis* species group with small body size and with tibiae externally with three keels, but differs in dorsal shape and structure from the other New Guinean species of this group and is more similar and probably related to *B. sprecherae*, described from Sulawesi (SCHAWALLER 2006: figs. 69, 134). In the latter species, the pronotal granules are more numerous, distinctly smaller and arranged in a different way, the pronotal anterior corners are acute (rounded in *B. meyeri* n. sp.), and the elytral granules are smaller and lower as in *B. meyeri* n. sp.

# Bradymerus neuhaussi n. sp. (Figs. 7, 52)

Holotype ( $\mathcal{J}$ ): West Papua, Manokwari Prov., Minyambou to Mokwam, Arfak Mts., 1300–1900 m, 16.IV.1993, leg. A. RIEDEL, SMNS.

P a r a t y p e s : West Papua, Anggi, Tetaho, Iranmeba, 1500–1700 m, 25.III.1993, leg. A. RIEDEL, 4 ex. SMNS, 1 ex. HNHM.

Etymology: Named in honour of RICHARD NEUHAUSS (1855–1915), German physician and photographer, joined in an expedition 1908–1910 to New Guinea together with the botanist RICHARD SCHLECHTER and the anthropologist OTTO SCHLAG-INHAUFEN.

Description: Dorsal view see Fig. 7, dorsal side blackish without metallic shine, body length 11.0-11.8 mm. Genae not broader than eves, frons with distinct supraorbital furrows but without distinct supraorbital keels. Last 6 antennomeres forming a club. Anterior corners of pronotum distinctly protruding, lateral margin with feeble crenulation and unusually bent upwards, pronotal disc feebly convex, with rough and partly confluent punctation, before base in the middle with a large impunctate field with distinct lateral impressions, between punctures with high granules; pronotum medially with longitudinal impression bordered distally by a pair of short keels. Elytra with punctural rows without striae, punctures deeply impressed, intervals 1, 3, 5, 7 flat and with complete keels, intervals 2, 4 flat and without any granules, interval 6 flat and posteriorly with a row of granules. Tibiae externally without distinct keels; male posterior tibiae internally with a fine longitudinal stripe of densely set light setae. Aedeagus see Fig. 52.

D i a g n o s i s : *B. neuhaussi* n. sp. belongs to the species group around the common *B. principatus*, and shares with this species the large body size, the 6-segmented antennal club, the genae not broader than eyes and the shape and rough dorsal punctation of the pronotum, but can be easily distinguished from *B. principatus* by the different aedeagus, the larger impunctate field at the pronotal base, the pronotal lateral margin unusually bent upwards, and the elytral structure with intervals 1, 3, 5, 7 with complete keels (compare Figs. 7 and 10). *B. macrogonus* (Figs. 6, 51) has the genae broader than the eyes, a different elytral structure and a different aedeagus. See also under *B. buergersi* n. sp. (Figs. 2, 49).

#### 4 Key to the Papuan and Moluccan species of Bradymerus

The key is suitable only for males because of the use of male sexual characters. Not included in this key are *B. batjanensis* Gebien, 1925 and *B. trobriandensis* Gebien, 1922, because no specimens were available to the author. Included in this key are *B. celebensis* Gebien, 1925 and *B. wegneri* Kaszab, 1964 (syn. *B. kulzeri* Schawaller, 2006), keyed also for the Oriental Region (SCHAWALLER 2006).

- 2 Pronotum conical, widest at base; elytral intervals convex but without keels or granules. Fig. 12.....novaeguineense
- Pronotum with rounded lateral margins, widest in the middle; elytral intervals with keels or granules in different combinations.
  3

	Elytral intervals with distinct granules, but without keels 4
	At least some, or all elytral intervals with distinct keels 7
4	All elytral intervals with densely set high granules (Figs. 3, 5)
_	All elytral intervals with small, densely set or separated gran- ules (Figs. 8, 18)
5	Pronotum with protruding anterior corners and flat disc. – Fig. 3
-	Pronotum with rounded anterior corners and convex disc. – Fig. 5
6	Elytral intervals with a row of small, round and densely set granules, elytra parallel-sided, surface dull. – Figs. 18, 53semiasperatus
-	Elytral intervals with small, longitudinal and separate gran- ules, elytra oval, surface shining. – Figs. 8, 55 <i>plicicollis</i>
7	Pronotum before base in the middle with large, striking and shining, impunctate field (Figs. 2, 7)
-	Pronotum before base without or at most with a small im-
8	punctate field (e. g. Figs. 6, 10)
_	Pronotum with flat lateral margins, only elytral intervals 3, 5, 7 with complete keels. – Figs. 2, 49 <i>buergersi</i> n. sp.
9	Genae distinctly broader than eyes. – Figs. 6, 51
_	Genae not broader than eyes
10	Lateral margin of pronotum not separated from convex disc (Figs. 4, 9, 11)
_	Lateral margin of pronotum separated from flatter disc
11	(Figs. 10, 13, 14)
_	keels. – Figs. 11, 57 <i>rugipleuris</i> Pronotal disc flatter, elytral intervals 1–2 convex and with a row of feeble granules, only intervals 3–8 with complete
12	keels
_	granules, apicale of aedeagus with rounded lateral margins. – Figs. 4, 50
	granules, apicale of aedeagus with straight lateral margins. – Figs. 9, 54
13	Last 4 antennomeres forming a club; elytral intervals 1–4, 6, 8 with a row of small granules, intervals 5, 7 keeled; tibiae externally without distinct keels. – Fig. 14 <i>crassimargo</i>
	Last 6 antennomeres forming a club; elytral intervals differ- ent; tibiae externally with distinct keels
14	intervals 3, 5, 7, 8 these granules higher and more confluent, nearly keeled; basale of aedeagus short. – Figs. 10, 56
_	<i>principatus</i> Elytral intervals with keels, these keels slightly sinuated and sometimes interrupted, particularly on intervals 6, 8, 9; male
15	posterior femora ventrally with a field of densely set light setae; basale of aedeagus longer. – Figs. 13, 58 <i>sculptilis</i> Elytral intervals convex, without keels and granules; male
	anterior tibiae with distinct internal tooth before the middle. – Figs. 21, 44
_	Elytral intervals with keels or granules in different combina- tions; male anterior tibiae without armature
16	All tibiae in both sexes externally with 3 keels

_	All tibiae in both sexes without or at most with 1 keel 20
17	Pronotum with nearly parallel lateral margins and long pro-
	truding anterior corners, pronotal disc with medial and dis-
	tinct lateral longitudinal impressions (Fig. 29)lobicollis
_	Pronotum with rounded lateral margins and shortly protrud-
	ing anterior corners, pronotal disc without distinct lateral lon-
	gitudinal impressions (Figs. 15, 32, 34)
10	Pronotal disc with rough and confluent punctation, between
10	
	punctures partly with granules but without distinct humps or
	tubercles, disc only with shallow longitudinal impression
	Figs. 32, 35
-	Pronotal disc different (Figs. 15, 34) 19
19	Pronotal disc between punctures partly with high granules, so
	that pronotal disc bears 1 hump behind middle and 1 hump
	on each side; elytral lateral margin with serriform tubercles
	Figs. 15, 39cheesmanae n. sp.
_	Pronotal disc between punctures partly with high granules, so
	that pronotal disc bears a separate flat groove surrounded by
	high granules; elytral lateral margin only feebly crenulate
	Fig. 34
20	Genae distinctly broader than eyes
_	Genae not broader than eyes
21	Small species, body length 4.0-5.2 mm; pronotum widest in
	anterior third. – Figs. 33, 38biroi n. sp.
_	Larger species, body length 6.0–8.0 mm; pronotum widest in
	the middle or near base. 22
22	All or odd-numbered elytral intervals with complete keels 23
_	Elytral intervals with rows of tubercles, sometimes tubercles
	confluent and partly keeled
23	All elytral intervals with complete high keels; frons with dis-
	tinct supraorbital keels Figs. 16, 40 crenatus
_	Elytral intervals 1 (only posteriorly), 3, 5, and 7 with com-
	plete keels; frons without distinct supraorbital keels SCHA-
	waller 2006: figs. 20, 86
24	All elytral intervals with elongate granules, partly confluent
	and keeled; pronotum widest near the middle. – Fig. 26
	ternatensis
_	Elytral intervals different (Figs. 22, 23); pronotum widest
	near base
25	All elytral intervals with a row of separate distinct granules;
	pronotum before base in the middle with a small impunctate
	field; apicale of aedeagus shorter with nearly acute tip. –
	Figs. 22, 45raucipennis
_	Elytral intervals 1, 3, 5, 7 and 9 with a row of distinct elongate
	granules, posteriorly tubercles confluent and keeled; prono-
	tum with a large impunctate field before base in the middle;
	apicale of aedeagus longer with rounded tip. – Figs. 23, 46
26	All elytral intervals flat and densely wrinkled, pronotal disc
	between confluent punctures with several granules, anterior
	corners of pronotum not protruding. – SCHAWALLER 2006:
	figs. 46, 112 under <i>kulzeri</i>
_	Elytral intervals at least partly with keels or granules; prono-
	tal disc between punctures sometimes only with a few gran-
	ules, anterior corners of pronotum protruding
27	Pronotum with finer separate punctation, at least widely be-
41	fore base (e. g. Figs. 19, 24)
_	Pronotum with rough confluent punctation, at most only
_	small field before scutellum with separate punctation, at most only
	Figs. 20, 27)
28	Elytral intervals 2–8 with fine or distinct complete keels. 29
-0	

174

Elytral intervals at least partly with rows of separate or confluent granules.
30
29 All elytral intervals with a row of distinct granules.

Fig. 19. .....kuntzeni

tubercles, intervals 5-8 with elongate confluent tubercles,

nearly keeled. - Figs. 24, 41. ..... dohertyi n. sp.

forming a club; pronotum flat without transverse basal im-

pression; elvtra parallel-sided. - Figs. 25, 47. ..... toxopei

forming a club; pronotum convex with shallow transverse ba-

sal impression; elytra elongate oval. – Fig. 28.....

lorentzi n. sp.

Smaller species, body length 4.7-6.0 mm; only odd-num-

tation; aedeagus with basale shorter than apicale. - Figs. 20,

42. .....integer

with small patch of densely set light setae; aedeagus with ba-

sale longer than apicale. - Figs. 17, 43. ..... laticollis

granules, intervals 2, 4, and 6 without granules, intervals 3, 5,

7, and 8 with complete keels. - Figs. 30, 37.....beccarii n. sp.

Body length 5.5–6.0 mm; elytral intervals 1, 3, 5, and 7 with

with basale longer than apicale, apicale elongate triangular.

- Figs. 31, 48.....solomonis

Pronotum convex with shallow medial impression; aedeagus

34 Pronotum flat with distinct medial impression; aedeagus

- Body length 7.0-8.5 mm; male posterior femora ventrally

33 Body length 4.7–5.0 mm; elytral interval 1 with a few tiny

**31** Larger species, body length 6.0–8.5 mm; all elvtral intervals

32 Body length 6.0–6.5 mm; male posterior femora without se-

- Smaller species, body length 5.7 mm; last 5 antennomeres

- Elytral intervals 1-4 flat and with a row of small and separate

30 Larger species, body length 7.5-8.5 mm; last 6 antennomeres

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