

**SPECIES OF NEW GUINEA *PAEDERUS*
(COLEOPTERA: STAPHYLINIDAE) IN THE
COLLECTION OF BISHOP MUSEUM**

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Abstract. Members of *Paederus* from New Guinea are reviewed, with the study mainly based on specimens from Bishop Museum. Twenty-nine species are treated, including 12 described as new. Aedeagi of most of the new species are illustrated.

Paederus Fabricius, 1775, is comprised of large or moderate-sized species. The genus is distributed worldwide. Most species are bicolorous of black or blue and red, the red being confined to the pronotum and abdomen. The New Guinea fauna is notable by having the majority of the species completely black or black with the elytra dark blue or green. Only a few New Guinea species have the pronotum red.

Nearly all the specimens studied are from Bishop Museum, Honolulu (BPBM); several specimens are from the British Museum (Natural History), London (BMNH).

1. *Paederus hornabrooki* Last

Paederus hornabrooki Last, 1979, Faun. Abh. (Dres.) 7(13): 133.

Specimens examined. PAPUA NEW GUINEA: 1, Olsobip, Fly Riv, 400-600 m, VIII.1969 (J. & M. Sedlacek).

2. *Paederus katumbuensis* Last

Paederus katumbuensis Last, 1979, Faun. Abh. (Dres.) 7(13): 128.

Specimens examined. IRIAN JAYA: 2, Guega, W of Swart Val, 1200 m, 14-15.XI.1958 (J.L. Gressitt); 1, Star Mts, Sibil Val, 1245 m, X-XI.1961 (L.W. Quate).

3. *Paederus problematis* Last

Paederus problematis Last, 1979, Faun. Abh. (Dres.) 7(13): 136.

Specimens examined. PAPUA NEW GUINEA: 1, Korgua, 1450 m, 30.VI.1963 (H. Clissold).

4. *Paederus perlongus* Last

Paederus perlongus Last, 1979, Faun. Abh. (Dres.) 7(13): 131.

Specimens examined. PAPUA NEW GUINEA: 1, Kepilam, 2420-2490 m, 23.VI.1963 (J. Sedlacek).

5. *Paederus morosus* Cameron

Paederus morosus Cameron, 1952, Treubia 21(2): 247.

1. "Woodville," Hillside Walk, Storrington, West Sussex, RH20 3HL, England.

Specimens examined. PAPUA NEW GUINEA: 2, Tifalmin, 1400 m, 20.VIII.1963 (R. Straatman); 1, same loc., 1350 m, 19.VII.1963 (Straatman); 1, Telefomin, 1600 m, 14.VIII.1963 (Straatman); 1, Eliptamin Val, 1200–1350 m, 19–30.VI.1959 (W.W. Brandt); 2, same loc., 1–15.VII, 1–15.IX.1959 (Brandt); 1, Feramin, 150–200 m, 11–22.V.1959 (Brandt); 1, same loc., 23–31.V.1959 (Brandt).

6. *Paederus kamonoensis* Last

Paederus kamonoensis Last, 1979, Faun. Abh. (Dres.) 7(13): 123.

Specimens examined. PAPUA NEW GUINEA: 2, E Highlands, Aiyura, 1800–1900 m, 6.I.1965 (J. Sedlacek).

7. *Paederus okapaensis* Last

Paederus okapaensis Last, 1979, Faun. Abh. (Dres.) 7(13): 125.

Specimens examined. PAPUA NEW GUINEA: 7, Kassem Pass, 1460 m, 18.VII.1963 (J. Sedlacek); several spms, Kassem, 1350 m, 48 km E of Kainantu, 7.XI.1959 (T.C. Maa); several spms, same loc., 28.X.1959 (Maa); 7, Mt Otto, above Kabebe, 2200 m, 22–24.VI.1955 (J.L. Gressitt); 2, Goroka–Kabebe, 1800 m, 24.VI.1955 (Gressitt); 1, 13–20 km SE of Okapa, 1800–1900 m, 27.VIII.1964 (J. & M. Sedlacek).

8. *Paederus laensis* Last

Paederus laensis Last, 1979, Faun. Abh. (Dres.) 7(13): 136.

Specimens examined. PAPUA NEW GUINEA: 1, Bulolo, 1000 m, 19.VIII.1956 (E.J. Ford); 1, Wau, 27.VIII.1961 (J. Sedlacek); 1, same loc., 1000–1300 m, 20.IV.1962 (Sedlacek); 1, same data but 8.VIII.1961; 1, same data but 24.IX.1961. IRIAN JAYA: 26, Vogelkop, Fak Fak, S coast of Bomberai, 100–700 m, 4–9.VI.1959 (T.C. Maa); 23, same loc., 700–900 m, 4–10.VI.1959 (J.L. Gressitt & Maa).

9. *Paederus politus* Fauvel

Paederus politus Fauvel, 1878, Ann. Mus. Civ. Genova 22: 237.

Specimens examined. PAPUA NEW GUINEA: 5, Wau, Kunai Ck, 1200–1400 m, 28.VII.1962 and 15.V.1965 (J. Sedlacek); 1, Buburamba Riv, 18 km SE of Okapa, 1100 m, 31.V.1967 (G.A. Samuelson); 11, Wau, 1000–1500 m, VI–IX.1961 and 20.IV.1962 (Sedlacek); 2, Salawaket Ra, Sepalakambang, 1920 m, 12.IX.1956 (E.J. Ford); 1, Finisterre Ra, Saidor, Matoko, 29.VIII–5.IX.1958 (W.W. Brandt); 2, Eliptamin Val, 1200–1665 m, 1–15.VIII.1959 and 23–30.VI.1959 (Brandt); 2, Huon Penin, Laleng, 1300–2000 m, 23.IV.1963 (Sedlacek); 1, Star Mts, Sibil Val, 1245 m, 18.X–8.XI.1961 (Quate). NEW BRITAIN: 1, Gazelle Penin, nr Varzin, 8.X.1957 (Gressitt).

10. *Paederus gestroi* Fauvel

Paederus gestroi Fauv., 1878, Ann. Mus. Civ. Genova 22: 237.

Specimens examined. PAPUA NEW GUINEA: 5, Wau, 1200 m, 28.VI, 15–22.VIII.1961 and 25–30.IV.1962 (J. & J.H. Sedlacek); 1, Mindik, 1200–1600 m, IX.1968 (N.L.H. Krauss); 1, Salawaket Ra, Baingoang, 1800 m, 15.IX.1956 (E.J. Ford); 3, Bulolo, 1000 m, 17–27.VIII.1956 (Ford); 1, same loc., 27.VIII.1956 (T.C. Maa); 1, Bisianumu, E of Port Moresby, 500 m, 22.IX.1955, *Crotalaria* flowers (J.L. Gressitt); 10, Kiunga, Fly Riv, VII–IX.1957 and VII.1961 (W.W. Brandt); 1, Daradae Pl'n, 80 km N to Port Moresby, 500 m, 7.IX.1959 (Maa); 2, Oriomo Riv, 6 m, 13, 17.II.1964 (Clissold); 1, Huon Penin, Laleng, 1300–2000 m, 23.VI.1963 (Sedlacek). IRIAN JAYA: 9, Wisselmeren, Orapura–Itouda, Kamo Val, 1500–1530 m, 11–15.VIII.1955 and 17.VIII.1962 (Gressitt & Sedlacek); 7, Enarotadi, 1800–1900 m, 5–6.VIII.1955 and VII–VIII.1962 (Gressitt); 1, Wamena, 1700 m, 10–25.II.1960 (Maa); 1, Vogelkop, Sururai Vill area, W shore of Lake Anggi Giji, 1850 m, 25.VII.1957 (D.E. Hardy); 1, Wisselmeren, Tage L, 1760 m, 4.VIII.1955 (Gressitt); 2, Wisselmeren, Waghete, Tigi L, 1700 m, 16.VIII.1955 (Gressitt); 1, same

data, Gakokebo [Itorikebo] (Gressitt); 1, Central Mts, Archbold L, 760 m, 26.XI–3.XII.1961, sweeping (S. Quate).

11. *Paederus reticulatus* Last

Paederus reticulatus Last, 1979, Faun. Abh. (Dres.) 7(13): 125.

Specimens examined. PAPUA NEW GUINEA: 1, Sepik-Waghi Div., N of Banz, 1900 m, 11.VII.1955 (J.L. Gressitt).

12. *Paederus illesei* Puthz

Paederus illesei Puthz, 1969, Pac. Insects 11: 529.

Specimens examined. PAPUA NEW GUINEA: 1, Eliptamin Val, 1350–1665 m, 23–30.VI.1959 (W.W. Brandt).

13. *Paederus copiosus* Last

Paederus copiosus Last, 1979, Faun. Abh. (Dres.) 7(13): 126.

Specimens examined. PAPUA NEW GUINEA: 9, 13–20 km SE of Okapa, 1800–1900 m, 27.VIII.1964 (J. & M. Sedlacek); 5, Moife, 15 km NW of Okapa, 2100 m, 7–14.X.1959 (T.C. Maa); 7, Mt Piora, 6°45'S, 146°E, 1900–1950 m, 12.VI.1966 (J.L. Gressitt); 4, Eastern Highlands, Purosa, 1700 m, 17–25.V.1966 (Gressitt & Tawi); 2, Sinofi, 30 km S of Kainantu, 1590 m, 1–6.X.1959 (Maa).

14. *Paederus cyaneus* Cameron

Paederus cyaneus Cam., 1937, Nova Guinea (N.S.) 1: 95.

Specimens examined. PAPUA NEW GUINEA: 1, Astrolabe, Musgrove Riv, 280 m, 29.II.1964 (J. Sedlacek).

15. *Paederus hagenensis* Last

Paederus hagenensis Last, 1979, Faun. Abh. (Dres.) 7(13): 135.

Specimens examined. PAPUA NEW GUINEA: 8, 11 km S of Mt Hagen (town), 2000–2300 m, 20–21.V.1963 (J. Sedlacek); 6, Chimbu Val, 1800 m, 16.V.1963 (Sedlacek); 3, Tomba, slopes of Mt Hagen, 2450–2650 m, 23–25.V.1963 (Sedlacek); 2, Lake Sirunki, 2550 m, 17.VI.1963 (Sedlacek); 2, Kepilam, 2450–2600 m, 22–23.VI.1963 (Sedlacek); 2, Southern Highlands, Dimifa, SE of Mt Giluwe, 2200 m, 11.X.1958 (J.L. Gressitt); 1, Southern Highlands, SE slope Mt Giluwe, 2450 m, 12.X.1958 (Gressitt).

16. *Paederus wauensis* Last

Paederus wauensis Last, 1979, Faun. Abh. (Dres.) 7(13): 124.

Specimens examined. PAPUA NEW GUINEA: many, Wau, ca. 1200–1500 m, various dates and collectors.

17. *Paederus huonensis* Last

Paederus huonensis Last, 1979, Faun. Abh. (Dres.) 7(13): 128.

Specimens examined. PAPUA NEW GUINEA: 1 Mt Kaindi, 16 km SW of Wau, 2300 m, 8–9.VI.1962 (J. Sedlacek); 5, same loc., 2350 m, III–VI.1966, V.1967 (J.L. & M. Gressitt); 2, Wau, ca. 2400 m, 9–12.I.1962 (J.J.H. & M. Sedlacek, G. Montieth); 1, same loc., 1200 m, XII.1965 (P. Shanahan); 2, Mt St Mary, 1900 m, 22–31.VII.1968 (Mena & A.B. Mirza); 4, Kepilam, 2420–2540 m, 21.VI.1963 (Sedlacek);

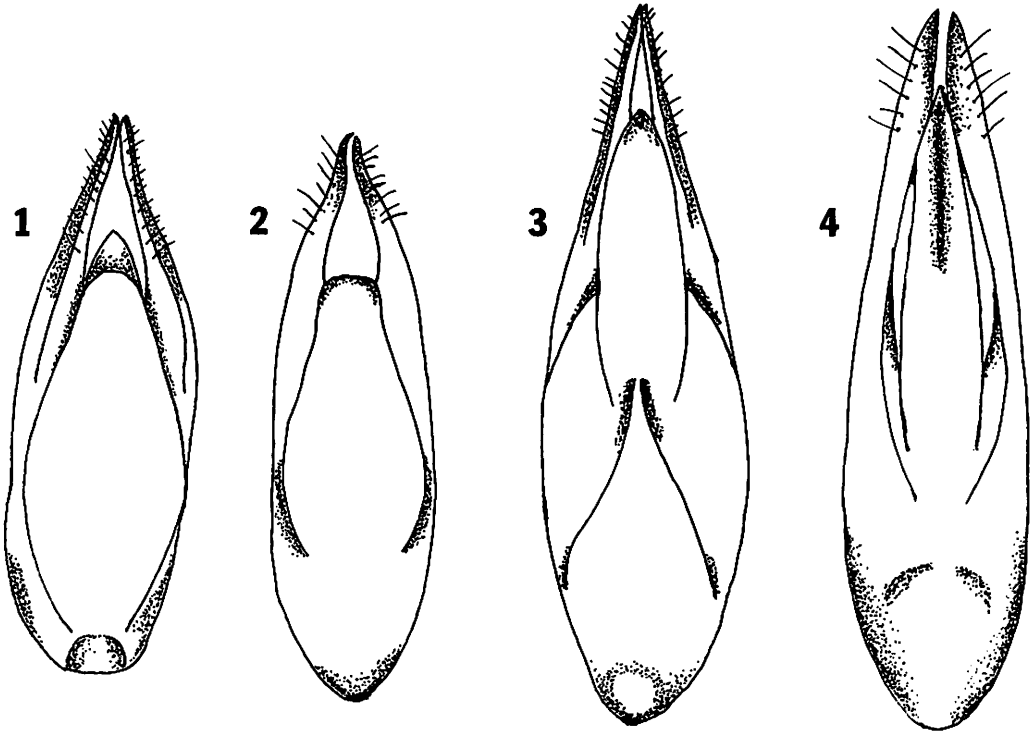


FIG. 1-4. Aedeagi: 1, *Paederus kuborensis*; 2, *P. litoreus*; 3, *P. samuelsoni*; 4, *P. paeninsula*.

1, Mt Piora, 6°45'S, 146°E, 2100 m, 12.VI.1966 (J.L. Gressitt); 11, Bulldog Road, ca. 14 km S of Edie Creek, 2405 m, 4-10.VII.1966 (G.A. Samuelson); 2, E end of Saruwaged Ra, 200 km SSW of Kabwum, 2550 m, 5-12.VIII.1966 (Samuelson); 1, Aiyura, 1800-1900 m, 6.I.1965 (Sedlacek).

18. *Paederus kuborensis* Last, new species

Fig. 1

Black except legs, antennae, palpi and tergites 7 and 8, yellow-red.

Head at outer circumference of eyes as broad as long (excluding mouthparts); strongly but not densely punctured, microsculpture rather mixed but mostly alutaceous; temples converging to posterior margin, with rather long and outstanding bristles laterally; eyes convex, from above less than $\frac{1}{2}$ length of temples; antennae with all segments elongate and setose. *Pronotum* longer than broad (7:6); with very strong punctures; median area impunctate, with confused reticulate microsculpture; broadest at about middle; with erect slender bristles; moderately shining. *Elytra* as long as broad at posterior margins; coarsely punctured and calloused, with confused microsculpture; with long fine bristles especially laterally. *Scutellum* large; with alutaceous microsculpture. *Abdomen* sparingly punctured and pubescent, with fine alutaceous microsculpture. *Legs* long; setose, especially tibiae. *Aedeagus* as Fig. 1.

Length: 13 mm.

Holotype ♂, PAPUA NEW GUINEA: Western Highlands, Kubor Range, 2950 m, 22.VI.1966 (J.L. Gressitt) (BPBM 13,419).

Remarks. The large punctures of the pronotum are comparable with those of *P. copiosus* Last, but in this species the microsculpture of the head and abdomen is quite different. The head and pronotum have the same fine reticulate microsculpture as *P. laensis* Last, but the shape of the head and elytra differ.

19. *Paederus litoreus* Last, new species

Fig. 2

Black except base of antennae, palpi, tergites 7 and 8, and tarsi red; last 3 segments of antennae yellowish-white.

Head a little broader than long; sparingly punctured, with fine reticulate microsculpture; eyes not very convex, from above shorter than length of temples (5:3) where there are short porrect bristles; temples not strongly converging to "neck"; antennae with all segments much longer than broad and setose. *Pronotum* longer than broad (7:6); transversely very convex; broadest at anterior $\frac{1}{2}$; with dense extremely fine puncturation, 4 or 5 distinct punctures bordering median line, a short central deep narrow furrow towards posterior margin; sparingly setose. *Elytra* as long as broad at posterior margins; very coarsely punctured and calloused; with short decumbent setae and longer, stronger bristles laterally. *Scutellum* large; with alutaceous microsculpture. *Abdomen* parallel-sided; sparingly punctured, with a distinct alutaceous microsculpture; with lateral bristles, especially near last tergites. *Legs* of usual paederine structure; long and slender with bristles. *Aedeagus* as Fig. 2.

Length: 9 mm.

Holotype ♂, IRIAN JAYA: Vogelkop, Fak Fak, S coast of Bomberai, 9.VI.1959 (T.C. Maa) (BPBM 13,420).

Remarks. Compared with *P. laensis* Last, this species is smaller; the elytra are shorter, the puncturation is a little less dense; the head has the same fine reticulation but the pronotum is covered with very dense minute puncturation, and the interspaces are narrower than the punctures, less shining.

20. *Paederus samuelsoni* Last, new species

Fig. 3

Black except antennae, palpi, and legs, which are reddish yellow; 8th tergite obscurely red.

Head as long as broad including outer circumference of eyes where it is broadest; moderately shining, sparsely punctured, with indistinct microsculpture; eyes moderately convex, from above shorter than temples (8:3), which have rather long porrect bristles; temples straight laterally, converging to "neck"; antennae long, all segments much longer than broad and strongly setose; labrum strongly dentate, with long bristles. *Pronotum* longer than broad (9:7); moderately shining, irregularly and rather strongly punctured, without microsculpture; broadest at anterior $\frac{1}{2}$; convex; with erect bristles. *Elytra* as broad as long at posterior margins; coarsely but not closely punctured, with confused microsculpture; "shoulders" hardly discernible; with strong bristles. *Scutellum* large; with alutaceous microsculpture. *Abdomen* moderately strongly but not densely punctured, with fine alutaceous microsculpture. *Legs* with long bristles. *Aedeagus* as Fig. 3.

Length: 13–14 mm.

Holotype ♂, PAPUA NEW GUINEA: Mt Wilhelm, 2600–3000 m, 2.VII.1963 (J. Sedlacek) (BPBM 13,421). *Paratypes*: PAPUA NEW GUINEA: 1, Lake Sirumki, 2600–2900 m, 15.VI.1963 (Sedlacek); 1, Kepilam, 2450–2600 m, 22.VI.1963 (Sedlacek); 1, Keglugl, nr Mt Wilhelm,

2500–2720 m, 1.VII.1963 (Sedlacek); 2, Morobe Prov, Mindik, 1200–1600 m, IX.1968 (N.L.H. Krauss). (BMNH, BPBM, author's coll.)

Remarks. This species is similar to *P. huonensis* but differs by having a flatter, less rounded head; more coarsely punctured, less shining elytra; and reddish-yellow antennae and legs.

21. *Paederus paeninsula* Last, new species

Fig. 4

Head, pronotum, and elytra greenish or blue-black; abdomen, tibiae to some extent blackish; femora with apical $\frac{1}{3}$ or $\frac{1}{2}$ blackish; antennae with segments 4–8 black, last 3 segments creamy white.

Head a little broader than long counting outer circumference of eyes; sparingly but rather strongly punctured, especially near eyes, shining and without microsculpture; eyes not very convex, from above about $\frac{1}{3}$ length of temples, which are broadly rounded and with rather long outstanding bristles. *Pronotum* about as long as broad; broadest at anterior $\frac{1}{3}$; with a very irregular row of punctures on either side of median line; shining, without microsculpture; with long lateral bristles; laterally and transversely convex. *Elytra* about as long as broad at posterior margins; very coarsely punctured and pubescent; interstices shining; "shoulders" indistinct. *Abdomen* moderately punctured and setose, with very fine alutaceous microsculpture. *Legs* typically long and setose. *Aedeagus* as Fig. 4.

Length: 12–13 mm.

Holotype ♂, PAPUA NEW GUINEA: Huon Penin., Pindiu, 1200–1450 m, 18.IV.1963 (J. Sedlacek) (BPBM 13,422). *Paratypes*: PAPUA NEW GUINEA: 1, same data as holotype; 1, same data but 800–880 m, 17.IV.1963; 1♂, same data but 500–600 m, 19.IV.1963; 1, Zengaren, 1800 m, 28.IV.1963 (Sedlacek); 1, Laleng, 1300–2000 m, 23.IV.1963 (Sedlacek); 2, Tobo-Salemborg, 26.IV.1963 (Sedlacek). (BMNH, BPBM, author's coll.)

Remarks. This species is similar to *P. mimicus* Last, 1979, but the middle segments of the antennae are darkened; the head lacks the fine microsculpture, is more shining; the elytra are not so densely punctured; the basal $\frac{2}{3}$ of the femora are yellowish; and tergites 7 and 8 are black (red in *mimicus*).

22. *Paederus maai* Last, new species

Fig. 5

Black except tergites 6–8 and tarsi reddish yellow; antennae with last 3 segments whitish.

Head a little broader than long; moderately shining, sparsely punctured, with confused reticulation; eyes not very convex, from above a little less than $\frac{1}{2}$ length of temples, which have a number of porrect bristles; antennae with all segments much longer than broad and setose; labrum bilobed and strongly reticulate, with long slender bristles. *Pronotum* a little longer than broad; broadest at middle; convex; with sparsely scattered punctures, microreticulate; with erect lateral setae. *Elytra* a little broader than long at posterior margins; sparingly punctured on surface callosities; with setae. *Scutellum* triangular; with microsculpture. *Abdomen* finely and sparingly punctured, with alutaceous microsculpture; with lateral setae. *Legs* typically long; with slender bristles, especially on tibiae. *Aedeagus*, as Fig. 5.

Length: 11 mm.

Holotype ♂, IRIAN JAYA: Vogelkop, Fak Fak, S coast of Bomberai, 100–700 m, 5.VI.1959 (T.C. Maa) (BPBM 13,423).

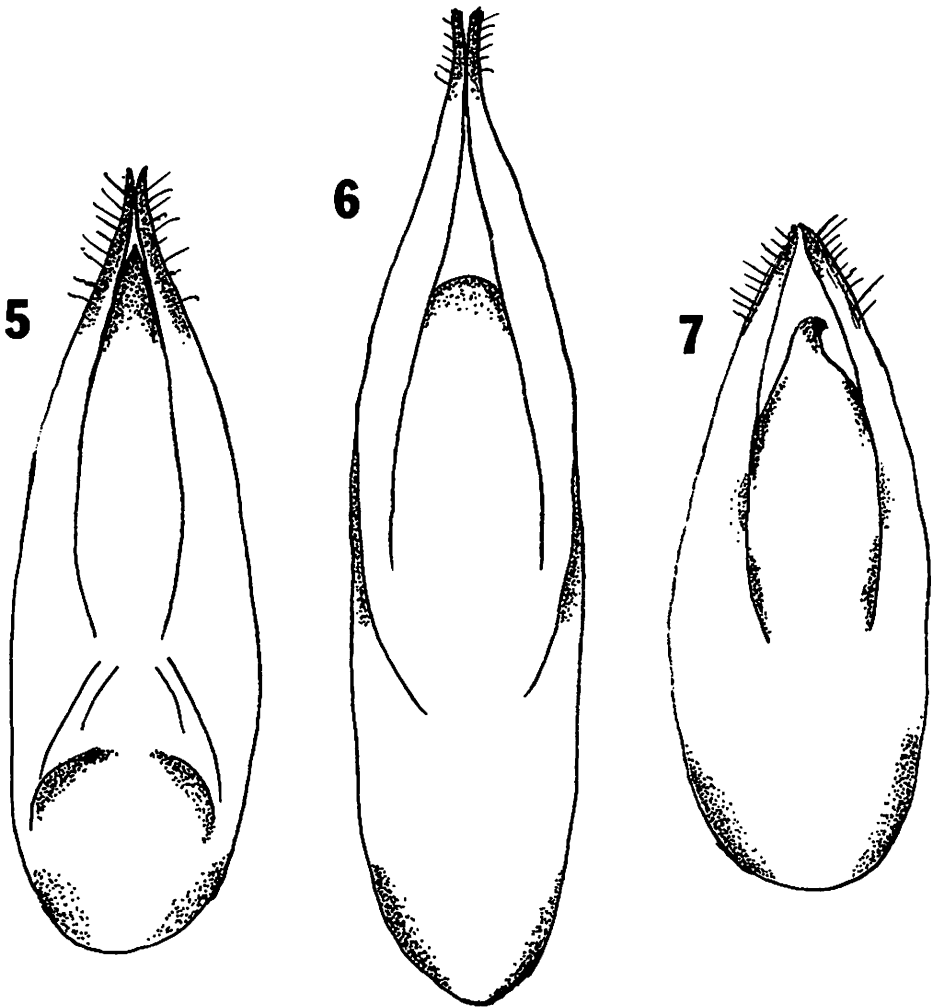


FIG. 5-7. Aedeagi: 5, *Paederus maai*; 6, *P. sedlaceki*; 7, *P. brandti*.

Remarks. This species is similar to *P. laensis* Last but has shorter elytra, sparser puncturation on surface irregularities, and longer setae. It is *laensis* in many other respects, including the microsculpture of the head and pronotum.

23. *Paederus sedlaceki* Last, new species

Fig. 6

Antennae, maxillary palpi, legs, pronotum, scutellum, and abdomen black.

Head slightly broader than long; shining, without microsculpture; very sparingly punctured towards temples, which have rather long slender bristles; temples straight laterally and converging towards posterior margin; eyes moderately convex, from above only $\frac{1}{2}$ length of temples; labrum strongly dentate and with long bristles; antennae with all segments much

longer than broad, with long bristles. *Pronotum* longer than broad (7:6); shining; elongate oval; with an irregular row of punctures on either side of median line. *Elytra* about as broad as long; broadest at posterior margins; "shoulders" hardly discernible; shining, with very sparse punctures, bosses, and setae. *Scutellum* large; triangular; with coriaceous microsculpture. *Legs* with long slender setae. *Aedeagus* as Fig. 6.

Length: 12 mm.

Holotype ♂, PAPUA NEW GUINEA: Kepilam, 2420–2490 m, 23.IV.1963 (J. Sedlacek) (BPBM 13,424). *Paratypes*: PAPUA NEW GUINEA: 2, same data as holotype; 5, same data but 2420–2540 m, 21.IV.1963; 2, Lake Sirunki, 2600–2900 m, 15.VI.1963 (Sedlacek); 6, same data but 2550 m, 17.VI.1963; 1, Yaibos, 2030–2180 m, 11.VI.1963 (Sedlacek); 1, same data but 2000 m, 12.VI.1963; 3, Laiagam, 2600–2700 m, 19.VI.1963 (Sedlacek). (BMNH, BPBM, author's coll.)

Remarks. This species is similar to *P. hornabrooki* Last but is a little larger; the elytra are sparsely but coarsely punctured; the legs and base of 8th tergite are completely red; and the aedeagus is different (see Fig. 6).

24. *Paederus brandti* Last, new species

Fig. 7

Black, basal 3 and apical 4 segments of antennae reddish yellow, 8th tergite reddish, elytra greenish black.

Head a little broader than long; a little shining, sparsely punctured with fine microsculpture; eyes moderately convex, from above $\frac{1}{2}$ length of temples; temples with rather long bristles; all segments of antennae longer than broad. *Pronotum* as long as broad; shining; very sparsely punctured; convex; with rather short lateral setae. *Elytra* at "shoulders" narrower than at posterior margins; coarsely punctured, interstices shining; with moderately strong bristles. *Scutellum* with transverse microsculpture. *Abdomen* moderately punctured, with fine microsculpture. *Legs* with fine slender bristles, more so on tibiae. *Aedeagus* as Fig. 7.

Length: 10–12 mm.

Holotype ♂, PAPUA NEW GUINEA: [Eastern Highlands], Kassem Pass, 1350 m, 18.VII.1963 (J. Sedlacek) (BPBM 13,425). *Paratypes*: PAPUA NEW GUINEA: 3, same data as holotype; 1, Karimui, 1080 m, 14.VII.1963 (Sedlacek). (BPBM, author's coll.)

Remarks. This species is similar to *P. huonensis* and *P. wauensis* but is of a more slender build; the puncturation of the elytra is much less coarse than that of *huonensis*, and the elytra are narrower and more parallel-sided than in *wauensis*; also, the aedeagus is different (see Fig. 7).

25. *Paederus centralis* Last, new species

Fig. 8

Head and abdomen black; pronotum and antennae red; elytra blue-black; legs with base of tibiae yellow-red.

Head a little broader than long; shining, sparsely punctured, without microsculpture; temples subparallel with moderately long bristles; eyes not very convex, from above $\frac{1}{2}$ length of temples; antennae with segments much longer than broad, 2nd segment shortest, all with slender bristles at apex. *Pronotum* a little longer than broad; anterior corners well rounded, then straight but slightly converging to posterior corners; shining without microsculpture, but with erect bristles around anterior corners. *Elytra* longer than broad (6:5); parallel-sided; very coarsely punctured but interstices shining; with short semidecumbent bristles; suture narrowly bordered. *Scutellum* with fine microsculpture. *Abdomen* with fine sparse puncturation, with very fine transverse

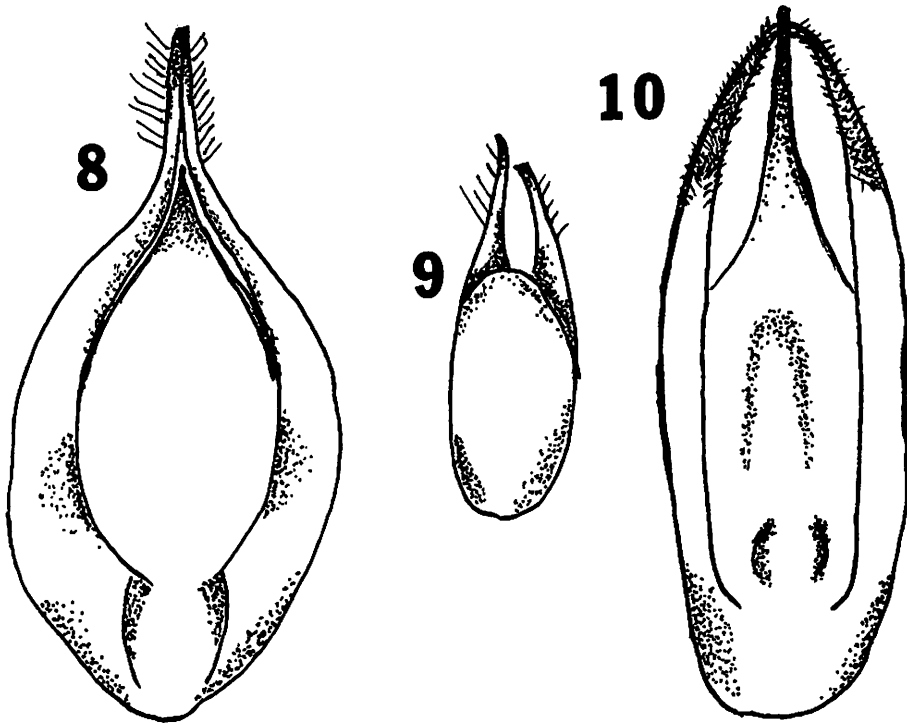


FIG. 8-10. Aedeagi: 8, *Paederus centralis*; 9, *P. tambulensis*; 10, *P. ismayi*.

microsculpture and lateral bristles. *Legs*, especially tibiae, with fine slender bristles. *Aedeagus* as Fig. 8.

Length: 9-10 mm.

Holotype ♂, IRIAN JAYA: Central Mts, Archbold Lake, 760 m, 26.XI-3.XII.1961 (S. Quate) (BPBM 13,426). *Paratypes*: IRIAN JAYA: 5, same data as holotype but (L.W. Quate); 1, Waris, S of Hollandia, 450-500 m, 24-31.VII.1959 (T.C. Maa); 1, Swart Val, W side, 1400-2000 m, 10.XI.1958 (J.L. Gressitt); 1, same data but 1500-1950 m, 13.XI.1958; 1, same data but 19.XI.1958; 6, Swart Val, Karubaka, 1300 m, 7.XI.1958 (Gressitt); 1, same data but 1450 m, 17.XI.1958; 1, same data but 1350 m, 18.XI.1958; 3, Guega, W of Swart Val, 15.XI.1958 (Gressitt). (BMNH, BPBM, author's coll.)

Remarks. The head and pronotum of this species do not have the same microreticulation of *P. ismayi*, n. sp., or the same alutaceous sculpture of *P. sythoffi* Bernh. (from Java). *Paederus centralis* is more shining; the elytra are longer and more parallel-sided; and the antennae are completely red.

26. *Paederus tambulensis* Last, new species

Fig. 9

Black except elytra, which are dark greenish blue or mauve, and basal 3 or 4 segments of antennae, which are dusky yellow.

Head transverse (3.5:4) from outer circumference of eyes, which are large, convex, and equal to length of temples, where there are some rather large punctures; moderately shining without microsculpture; antennae with all segments longer than broad, segment 2 being shortest, sparingly setose. *Pronotum* a little longer than broad; broadest at anterior $\frac{1}{3}$ where corners are broadly rounded; laterally straight, narrowing to posterior corners, which are more evident; with 2 irregular rows of 5 or 6 punctures and lateral setae; shining without microsculpture. *Elytra* longer than broad (5.75:4); parallel-sided; shining, coarsely punctured, sometimes confluent; with short decumbent pubescence. *Scutellum* rounded; with fine microsculpture. *Abdomen* moderately punctured; with rather long fine setae. *Legs* black. *Aedeagus* as Fig. 9.

Length: 6–7 mm.

Holotype ♂, PAPUA NEW GUINEA: Mt Giluwe, 2500 m, 1.V.1963 (J. Sedlacek) (BPBM 13,427). *Paratypes*: PAPUA NEW GUINEA: 1♀, same loc. as holotype, 27.V.1963 (Sedlacek); 2♀, Tambul, 2200 m, 8.VI.1963 (Sedlacek). (BPBM, author's coll.)

Remarks. This species is similar to *P. gestroi* Fauv., but it has coarse and irregular elytral puncturation; black pronotum and legs; and different form of aedeagus (see Fig. 9).

27. *Paederus ismayi* Last, new species

Fig. 10

Head, middle segments of antennae, abdomen, and legs black, apex of tibiae with dense yellow setae, apical 3 segments of antennae whitish, basal 2 segments and maxillary palpi reddish yellow; pronotum red, elytra blue or purple.

Head transversely rounded; microreticulate, sparsely punctured and setose; eyes not very convex, from above shorter than temples (4:3); antennae with all segments much longer than broad, with distinct rather long bristles. *Pronotum* a little longer than broad; broadest just anterior to middle; convex; microreticulate, with 5 or 6 punctures bordering median line; with a few lateral setae. *Elytra* a little broader than long at posterior margins; coarsely and moderately densely punctured; with short semidecumbent setae, these much longer at "shoulders." *Abdomen* finely and sparsely punctured, with alutaceous microsculpture. *Legs* setose.

Length: 11 mm.

Holotype ♀, PAPUA NEW GUINEA: Central Prov, Eilogo, 2.VII.1981, rain forest (J.W. Ismay) (BMNH). *Paratype* ♀, same data as holotype; 1♂, same loc., 24.VIII.1981, rain forest, swept (Ismay) (BMNH).

Remarks. This species is similar to *P. sythoffi* Bernh. (from Java) except the head is more rounded; the legs are black; the apices of the tarsi and antennae are differently colored; the head and pronotum are microreticulate (not alutaceous as in *sythoffi*); the pronotum is duller, the elytra shorter and not parallel-sided but as broad as pronotum; and the aedeagus is different (see Fig. 10).

28. *Paederus gressitti* Last, new species

Head, pronotum, and tergites 3–6 black; apex of abdomen yellow; legs with at least $\frac{1}{2}$ base of femora yellow, otherwise fuscous; antennae with middle segments dusky, last 3 and basal 3 paler; maxillary palpi yellow with apex of 3rd segment darkened.

Head as long as broad; moderately shining, almost impunctate, with very indistinct microsculpture; eyes moderately convex, from above $\frac{1}{3}$ length of temples, where there are a few short bristles. *Pronotum* longer than broad; moderately shining, with 3 or 4 rather large punc-

tures on either side of middle line but without microsculpture. *Elytra* longer than broad, much broader at posterior margins; "shoulders" obsolete and anterior margin no broader than base of pronotum; impunctate but with finely roughened surface. *Scutellum* large; triangular; with alutaceous microsculpture. *Abdomen* dull, with alutaceous microsculpture; 6th tergite broadest, then sharply narrowed to last tergite. *Legs* long; finely setose, especially on tibiae.

Length: 9 mm.

Holotype ♀, IRIAN JAYA: NE, Swart Val, Karubaka, 1300 m, 7.XI.1958 (J.L. Gressitt) (BPBM 13,428).

Remarks. In general appearance this species is similar to *P. okapaensis*; it is a little smaller and lacks the microreticulation of head, pronotum, and abdomen. The structure of the elytra is similar but the head and pronotum are more shining and segments of the antennae are longer and more slender; also, there are some color differences.

29. *Paederus punctatus* Last, new species

Black, elytra with a blue tinge, antennae with basal and apical segments rufous.

Head about as long as broad; shining, puncturation very sparse, without microsculpture; with long outstanding lateral bristles; temples strongly converging to "neck"; eyes not very convex, from above much shorter than temples (8:3); antennae with segments much longer than broad, setose. *Pronotum* longer than broad (6:4.5); moderately shining, impunctate; broadest at anterior 1/3, laterally straight, a little converging to posterior margin; convex; with very few punctures. *Elytra* as long as broad at posterior margins; shorter than pronotum; very coarsely punctured, shining; with long lateral bristles; suture shining, very distinct. *Scutellum* with confused alutaceous microsculpture. *Abdomen* shining, with moderately dense, coarse, elongate punctures; with very long bristles; broadest at tergites 4 and 5. *Legs* long; with rather dense long bristles.

Length: 11 mm.

Holotype ♀, IRIAN JAYA: Vogelkop: Sururai, SW of Lake Anggi Giji, 2000–2100 m, 4–5.III.1963 (R. Straatman) (BPBM 13,429).

Remarks. This species is of similar size to *P. laensis*, but it differs from the latter and most other species from New Guinea by having the abdomen with fairly strong, moderately close puncturation, the punctures elongate; and long, outstanding bristles on the elytra.

Acknowledgments. Through the kindness of Dr G.A. Samuelson I have been able to study all the material of the genus *Paederus* Fab. taken in New Guinea from the collection in the Bishop Museum, Honolulu. I record my thanks to Dr J.W. Ismay of the Department of Primary Industry, Papua New Guinea, for allowing me to include a new species from his material and also to the authorities of the British Museum (Natural History), London, for facilities provided to their collection; my thanks are also due to Mr Jonathan Cooter for typing from the written manuscript.