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INSECTS OF CAMPBELL ISLAND. COLEOPTERA: HYDRAENIDAE, PTILIIDAE, LEPTODIRIDAE, BYRRHIDAE, LATHRIDIIDAE, MELANDRYIDAE[1]

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Abstract: The families Hydraenidae, Ptiliidae, Leptodiridae, Byrrhidae and Melandryidae are each represented on Campbell I. by 1 known species, and the Lathridiidae is represented by 2 or 3 species. One species of each of the 6 families is reported upon here, and 2 of them, *Acrotrichis subantarctica* (Ptiliidae) and *Orchesia rennelli* (Melandryidae) are here described as new.

This paper concerns 6 families of Coleoptera: Hydraenidae (Limnebiidae), Ptiliidae, Leptodiridae (Anisotomidae, Catopinae), Byrrhidae, Lathridiidae, and Melandryidae. These families belong to several different superfamilies. Thus grouping them together in this article prevents a proper systematic arrangement of the families in this volume. A probable additional species of the family Lathridiidae appears to have been lost during the period of study. The above 6 families are each represented by 1(5) or 2(1) species in this paper.

We are indebted to T. Nagatani, Charles Chang and Carol Nakashige for preparing most of the illustrations for this paper.

Family HYDRAENIDAE (Limnebiidae)

This group was earlier considered a tribe of the subfamily Helophorinae of the family Hydrophilidae. It has also been considered as 1 or 2 subfamilies of the Hydrophilidae. The group is found in all regions, but is less well represented in the tropics.

Genus **Meropathus** Enderlein

Meropathus End., 1901, Zool. Anz. **24**: 121 (type: *M. chuni* End.; Kerguelen); 1903, Wiss. Ergebn. Deutsch. Tiefsee-Exped. **3**: 206; 1909, Deutsche Südpolar-Expedition **10** (Zool. 2): 411.—Orchymont, 1938, Rev. Franc. d'Ent. **5**: 78.—Jeannel, 1940, Mem. Mus. Natl. Hist. Nat. Paris, ser. 2, **14**: 129.

This is a rather distinct genus and its known range is limited to a few subantarctic islands (Kerguelen, Marion, Campbell). The species are characterized by rather broad rough elytra with grooves and irregularities, as well as pubescence.

Meropathus chuni Enderlein, the type, was referred to *Ochthebius* by Kidder (1876), Water-

1. Result of work supported by National Science Foundation grants G-18800 and GB-518.

house (1879) and Studer (1889) before it was described as new genus and species by Enderlein. According to Jeannel (1940, p. 135) the larva of *M. chuni* is very closely related to those of *Ochthebius*, and the Hydraenidae belong to the Staphylinoidea.

KEY TO SPECIES OF MEROPATHUS

1. Pronotum fairly smooth, feebly pubescent or pubescent with median glabrous area; head with a weak swelling in middle between eyes.....2
   Pronotum strongly ridged; ridges with strong hairs; head with a distinct tubercle in middle between eyes; elytron with long hairs on ridges; costa 1 in 2 short parts: pre- and postmedian; long hairs also on suture basally (Campbell) ..... **campbellensis** Br.
2. Pronotum weakly hairy; elytron with thin rows of hairs; elytron widest at end of basal 1/3 (Kerguelen)..... **chuni** End.
   Pronotum densely pubescent except for glabrous median area which is widest antemedially and with a few punctures, and a glabrous spot on each side of base; elytron with distinct rows of hairs; elytron widest at end of basal 1/8 (Marion I.) ..... **randi** Jeannel

Meropathus campbellensis Brookes, new status Fig. 1.

Meropathus chuni campbellensis Br., 1951, Cape Exped. Ser. Bull **5**: 28 (Campbell I.; DOMINION MUS.)

♂. Dorsum and upper parts of head covered by a thin, pale testaceous, granulate, wax-like substance, with occasional groupings of stout, curved, reddish hairs generally arranged longitudinally and marginally; with wax removed surfaces piceous with texture granulate to tuberculate; labrum piceous, subglabrous, not generally covered with wax; maxillary palpus shiny piceous, glabrous; antenna with segments 1–3 reddish testaceous, subglabrous; 4–8 darker, sparsely clothed with fine setae. Ventral surfaces usually lacking wax, clothed with fine, reddish, subadpressed hairs. Legs pitchy orange, sparsely to moderately clothed; tibia darker than femur, usually covered with wax and stout hairs on external surface; tarsus dark, shiny pitchy brown, with infrequent long, slender setae.

Head almost as long as broad, widest at eyes; occiput tuberculate-granulate, elevated medially and swollen sublaterally near eye; eye small, strongly projecting and coarsely facetted; lateral ocellus distinct, placed submedially near eye; frontoclypeus transverse, granulate; labrum with paired strongly developed, horn-like projections directed subdorsally; each projection triangularly elongate, fairly stout and briefly rounded at apex; gena excavated, depth about equal to breadth of eye; maxillary palpus with segment 1 slightly longer than broad; 2 longer than 1; 3 swollen, slightly shorter than 1+2 together; last slender, conical, acute apically, about 3/4 as long as 3. *Antenna* short, not reaching base of prothorax; segment 1 very long and slender, gradually swollen apically, 3/7 as long as entire length of antenna; 2 short, globular; 3 minute, dilated apically, about as long as broad; remaining segments thickened, each somewhat broader than long, forming a loose club with 4 slightly longer than 5, 6 longer than 4, 7 subequal to 6, last slightly longer than 7 and broadly rounded apically. *Prothorax* 3/4 as long as broad, widest before middle, breadth exceeding that of head, constricted basally and narrower than breadth of elytra at basal margin; disc with a large median, longitudinal channel, flanked laterally by a longitu-

dinal carina and with postlateral area of explanate margin broadly swollen. *Scutellum* obsolete. *Elytra* fused, each 3/8 as broad as long, convex; strongly tuberculate, humerus carinate, basal 1/4 broadly depressed mesad of humerus, suture feebly raised; disc with about 3 longitudinal, uneven series of broad, discontinuous swellings. *Ventral surfaces* granulate; abdomen with sternites 1–5 subequal in length; 6 longer than 5, apical margin subtruncate and entire; last usually hidden and bordered behind by apex of pygidium; pygidium when exserted broadly triangular, with apex evenly rounded. *Legs* similar; metafemur subflattened; metatibia straight, gradually thickened to apex, almost as long as femur and armed apically with 1 spur; metatarsus with segments 1–3 small, slightly increasing in length, last longer than combined lengths of others, claw large and simple. Length 2.2–2.6 mm; breadth 0.8–1.0.

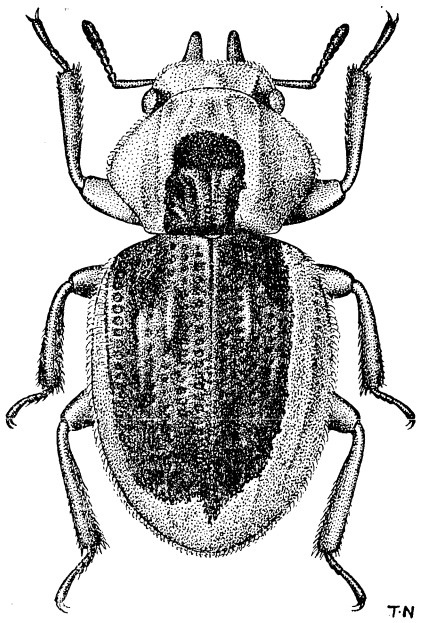

Fig. 1. *Meropathus campbellensis* ♂, dorsal view.

♀. Resembling ♂, but lacking conspicuous projections of labrum; abdomen with sternite 6 briefly notched medially at apical margin, last usually hidden. Length 1.9–2.5 mm; breadth 1.0–1.1.

This was described by Brookes as a subspecies of the type species, *chuni* from Kerguelen. However, upon direct comparison with *chuni* and *randi* Jeannel, it proves to be a distinct species.

DISTRIBUTION: Campbell I.

CAMPBELL I.: 2, Courrejolles Pt., 13.IX.1947, Sorensen (Dom. Mus.); many, Courrejolles Pen., 220 m, mollymawk rookery, 14. XII. 1961, Gressitt; many, Courrejolles Pen., 220–230 m, under stones, 12.II.1963, Wise; same, 12, 13.II.1963, Rennell; 1, St. Col–Mt. Azimuth, 250 m, albatross carrion, 12. II. 1963, Rennell; 7, Rocky Bay, rockhopper penguin rookery, Berlese, and in moss on shore rocks, 18.II.1963, Rennell, Wise; Beeman Hill, 100 m, sooty albatross nest, 11. XII. 1961, Gressitt (Bishop).

Family PTILIIDAE

This family, the feather-wing beetles, includes the smallest known Coleoptera. Their wings, very slender with feather-like setae, are characteristic. The following appears to be the first record from a subantarctic island. We are indebted to H. S. Dybas for helping us to place this species.

Genus **Acrotrichis** Motschulsky

Trichopteryx Kirby & Spence, 1818, Intr. Ent. **3**: 40 (part).
Acrotrichis Mots., 1850, Bull. Soc. Nat. Moscou **23**, 1: 236 (*Acratichis*); 1868, *op. cit.* **41**

(2): 172, 173.—Reitter, 1909, Fauna Germ. **2**: 266, 273.
Acrotrichis Wollaston, 1853, Ins. Mad., 108; 1857, Cat. Col. Mad., 35.

This genus occurs in most regions, but most of the known species are Holarctic. Many of the species have been included in *Trichopteryx* in earlier works.

Acrotrichis subantarctica Gressitt and Samuelson, n. sp. Fig. 2.

♀. Brownish black to pitchy reddish: head dark pitchy with a reddish tinge, paler on most of mouthparts with labium and maxillae testaceous brown; antenna dull testaceous; pronotum pitchy black, somewhat reddish near hind angle; scutellum and elytron blackish brown; elytron more brownish along median portion, particularly near base and apex; ventral surfaces largely dark reddish brown, more pitchy on meso- and metasterna; legs dull testaceous, somewhat more reddish on coxae. Dorsum moderately clothed with fairly long subrecumbent auburn hairs; ventral surfaces similarly clothed, with hairs paler on abdomen and legs.

Head 5/8 as broad as prothorax and just over 1/2 as long as pronotum at median line; frons and occiput evenly and weakly convex, rather finely and somewhat closely punctured; labrum rounded-triangular, obtusely rounded apically, somewhat more sparsely punctured than frons; eyes subrounded and strongly convex; gena 1/2 as deep as eye. *Antenna* with segments 1 & 2 subequal, each fairly stout but longer than broad; segments 3–7 slender, not differing greatly in length; 8 slightly stouter; 9 much stouter, oval; 10 stouter and more flattened, broad apically; 11 somewhat similar in size and shape to 10, suddenly narrow-

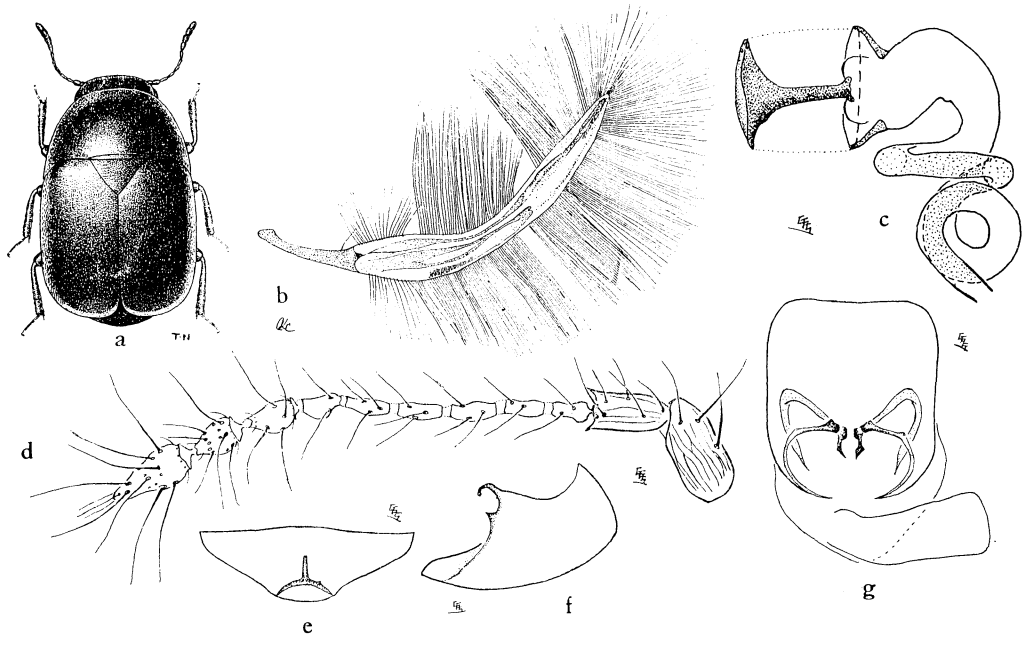

Fig. 2. *Acrotrichis subantarctica*, n. sp. a, dorsal view, ♀; b, right wing; c, spermatheca, ♀; d, right antenna, holotype ♀; e, last sternite, chaetotaxy omitted, allotype ♂; f, sclerotized portion of aedeagus, lateral view, allotype ♂; g, aedeagus, ventral view, allotype ♂.

ed apically; all segments with fairly long oblique hairs. *Prothorax* not quite 3/5 as long as broad, as broad as elytra; anterior margin weakly convex; lateral margin evenly and weakly rounded with hind corner directed somewhat backwards and subacute; posterior margin concave, again separately somewhat concave in central portion opposite scutellum; disc evenly convex, finely and subregularly punctured. *Scutellum* weakly convex, subequilaterally triangular, finely punctured. *Elytron* .56× as broad as long, suboblong, narrowed and broadly rounded-truncate apically; disc moderately and subevenly convex, rather finely and subevenly punctured. *Abdomen* extending about 1/6 elytral length beyond apex of elytron. Prosternum fairly smooth and shiny, obtuse anterior to adjacent procoxae. Mesosternum with a median hairy ridge separating coxae by about 1/5 their diameters. Metasternum nearly as long as abdomen, rather smooth and weakly convex, finely and not very closely punctured. Metathoracic wing slender, when extended, reaching well beyond apex of abdomen; fringing hairs very long, regular and rather evenly spaced. *Abdomen* with segments 1 & 6 each about 3× as long as 5; all rather smooth, finely and sparsely punctured; last sternite broadly rounded apically. Spermatheca as in fig. 2c. *Legs* flat and strongly tapering; metacoxa very large, subtriangular, flat, nearly as wide as 1/2 of posterior margin of metasternum; metafemur partly hidden by metacoxa, subparallel-sided; metatibia much more slender, fairly straight; metatarsus extremely slender with claws relatively large. Length 1.36 mm; breadth 0.55; length of elytron 0.58; length of abdomen 0.45.

♂. Abdominal sternites with minute hairs, but with longer ones at side of sternites 3 and following, and forming a fairly dense row on apical margin of penultimate segment; last sternite with a median 3-pronged structure which appears to be internal. Aedeagus as in figs. Breadth of thorax 0.58 mm; length of elytron 0.58; length of abdomen 0.35. The allotype is incomplete, with the head and prothorax missing. Of the entire series of 54 specimens, 53 are ♀♀.

Paratypes: Length 1.05–1.40 mm; breadth 0.55–0.62.

Holotype ♀ (D. S. I. R.), Beeman Camp, 2–50 m, Perseverance Harbor, Campbell I., in chicken yard debris, 6–11. XII. 1961, Gressitt; allotype ♂ (BISHOP), Rocky Bay, in rockhopper penguin nest Berlese, 28. XI. 1961, Gressitt & Rennell. ♀ paratypes (DOM. MUS., BISHOP, C.N.H.M.): 17, same data as holotype; 5, same data, but 26–30. XI. 1961. Gressitt; 1, Tucker Cove, 1–50 m, under *Poa* tussock, 21–25.XI.1961, Gressitt; 1, Tucker Cove, 4 m, tussock leaf mold Berlese, 3. III. 1963, Wise; 4, Campbell I., miscellaneous Berlese, XII. 1961, Gressitt; 2, Beeman Hill, 100–200 m, 2. XII. 1961, Gressitt; 22, same data as allotype.

Differs from *A. inconspicua* (Matthews), which was described in *Trichopteryx*, in being elongate oval instead of subquadrate, in being more than 1/2 again as long, in having apex of abdomen tridentate instead of bidentate, body more extensively pubescent, and in having elytron slightly longer than length of head and prothorax combined.

It is possible that this species may have been introduced from New Zealand. However, it does not agree with any of the species described from New Zealand or Australia in this family.

Family LEPTODIRIDAE (Anistomidae, Catopinae)

Brookes described the Campbell species as a new genus and new species, *Austrocatops*

campbellicus. He based his new genus on 3 differences from *Paracatops*: femur with a small tooth on middle of underside; antenna more slender; maxillary palpus more robust. These differences appear to be too weak and too vague to stand. Therefore, we agree with the conclusion of Szymczakowski who recently placed *Austrocatops* in synonymy with *Paracatops*.

Genus **Paracatops** Portevin

Choleva Latreille, 1796, Char. Gen. Ins., p. 4 (part) (type: *Luperus cisteloides* Fröl.).—Broun, 1893, Manual N. Zealand Col. **6**: 1339.

Paracatops Portevin, 1907, Ann. Soc. Ent. France **76**: 69 (type: *Choleva antipoda* Kirsch).—Jeannel, 1922, Arch. Zool. Exp. Gen. **61**: 40.

Austrocatops Brookes, 1951, Cape Exped. Ser. Bull. **5**: 26 (type: *A. campbellicus* Brookes).

The genus is known from New Zealand and the Auckland Is. as well as Campbell.

Paracatops campbellicus (Brookes) Fig. 3.

Austrocatops campbellicus Brookes, 1951, Cape Exped., Ser. Bull. **5**: 27, fig. 3, textfig. 1 (Campbell I.; Dominion Mus.).

Paracatops campbellicus: Szymczakowski, 1963, Bull. Ent. Pologne **33** (4): 107, figs. 1, 2 (Campbell I.).

♂. Dorsum dark reddish brown, with silky auburn, mostly adpressed pubescence; head darker, with auburn pubescence; frons, gena and mandibles paler; clypeus and labrum orange-testaceous; eye bearing short, erect hairs; maxillary palpus reddish brown, finely clothed; antenna reddish brown, with pale, suberect pubescence; segments 7, 9–11 slightly darker with pale apices and bearing sparse, long, slender setae. Ventral surfaces dark reddish brown and clothed like dorsum. Legs reddish brown with pro- and mesotarsus paler; moderately clothed.

Head deflexed, subrounded, 6/7 as long as broad, widest at eyes and barely exceeding breadth of prothorax at anterior angles; occiput convex, punctate-granulate, with punctures about as large as interspaces; eye oval, subcoarsely facetted; frons transverse, punctate; clypeus transverse; labrum with anterior margin concave; gena about as deep as breadth of eye, excavated; maxillary palpus with segment 1 gradually thickened apically; 2 stout, subequal to 1; 3 stout, conical, apically acute, 3/7 as long as 2. *Antenna* 1/2 as long as body; segment 1 about 2× as long as broad; 2 slender, 2/3 as long as 1; 3 nearly as long as scape; 4–5 subequal, about as long as pedicel; 6 shorter than 5; 7 nearly as broad as long, subequal to 5; 8 usually much shorter and narrower than 7 and 9; 9–10 subequal, similar to 7; last longer than 10, with apex acutely produced. *Prothorax* about 3/5 as long as broad, widest at middle, narrowed anteriorly, with sides well rounded, basal margin sinuate and equal to breadth of elytra at basal margin; disc confusedly punctate-granulate. *Elytron* 2/7 as broad as long, with apex subtruncate and exposing 1 or 2 tergites; submedial area near sutural margin with a fine, impressed, longitudinal line extending from scutellum to apical 1/5; disc finely seriate in close, transversely sinuate rows; epipleuron gradually narrowing and ending at apical 1/5. *Ventral surfaces* mostly punctulate-granulate; metasternum somewhat elevated apically; abdomen with sternites 1–4 subequal in length; 5 longer; last 2× as long as 4, fairly broad apically, weakly concave at extremity.

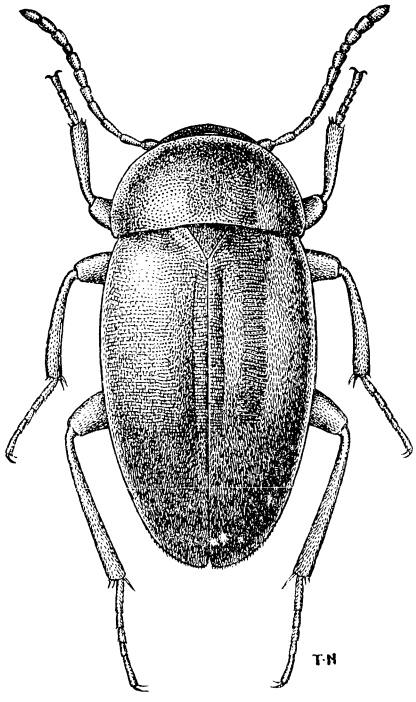

Fig. 3. *Paracatops campbellicus*, dorsal view.

Legs increasing in length posteriorly; profemur with inner margin concave basally and bearing a tooth beyond middle; tibiae shorter than femora, armed apically; mesotibia arched; pro- and mesotarsus with basal segment dilated; metatarsus slender, with segment 1 nearly as long as 2+3 together, 2–4 decreasing in length, last 5/6 as long as 1; claw slender and simple. Length 3.1–3.5 mm; breadth 1.3–1.5.

♀. Differing from ♂ as follows: abdomen with sternites 1–3 subequal; 4 shorter; 5=3; last subequal to 5, triangular, with apex acute and briefly rounded; profemur lacking tooth; tarsi not dilated. Length 2.9–3.4 mm; breadth 1.3–1.5.

There is variation in size of antennal segment 8. This segment is relatively smaller in this species than in Auckland Is. material of *Catops avivorus* Broun, which is probably a synonym of *Paracatops antipoda* (Kirsch). The synonymy was indicated by Brookes, 1951. The species is also smaller and darker, as well as smoother and shinier than Aucklands material. The Auckland species is differentiated by the following: prothorax more convex and more angulate at hind angle, elytron more evenly narrowed and slender apically with extreme apex rounded and usually attaining apex of abdomen, and antennal segment 8 larger.

DISTRIBUTION: Campbell I.

MATERIAL EXAMINED: 2, Courrejolles, 13. IX. 1947, Sorensen (DOM. MUS.); 1, Courrejolles Pen., 200 m, under *Colobanthus*, 14. XII. 1961, Gressitt; 8, Courrejolles Pen., 220–230 m (5 in nest of *Puffinus griseus*), 12. II. 1963, Rennell, Wise (BISHOP); 3, Mt. Azimuth, S. side, 250 m, 12.II.1963, Wise; 1, St. Col–Mt. Azimuth, 250 m, 12.II.1963, Rennell; 31, St. Col, 180 m, 12. VIII. 1962, Rennell; 3, Mt. Lyall ridge, 21. II. 1963, Wise; 20, Moubray Hill, 29. IV. 1962, 3.I.1963, Rennell; 2, Lookout Bay, Perseverance Harbor, 3.II.1963, Rennell; 1, Lookout Bay beach, 19.XII.1961, Gressitt; 1, Tucker Cove, 0–100 m, 7. VIII. 1962, Rennell; 14, Rocky Bay, in penguin nests, 28.XI.1961, 20. XII. 1961, Gressitt; 5, Rocky Bay, 18. II. 1963, Rennell, Wise; Smoothwater Bay, 2. III. 1963, Wise; 1, 6′ Lake, 1.8 m, 9. II. 1963, Rennell (BISHOP).

Family BYRRHIDAE

The following genus is not a very characteristic byrrhid in its appearance, although its characters seem to indicate its placement here. According to some authorities to whom material has been submitted, it should belong to the Dascillidae. The characters indicating its placement in the Byrrhidae are as follows: small transverse clypeus placed under strong-

ly inflexed anterior margin of frons, procoxae transverse, prosternum with apex of broad intercoxal piece fitting into a small excavation of mesosternum, and mesocoxae well separated.

Genus **Liochoria** Pascoe

Liochoria Pasc., 1875, Ann. Mag. Nat. Hist. ser. 4, **16**: 212 (type: *L. Huttoni* Pasc.). The genus *Epichorius* Kirsch, 1877 (Dtsch. Ent. Zschr. **21**: 155, 165; type: *E. aucklandiae* Krsch.) will probably have to be synonymized with *Liochoria*. It was placed in the Dascillidae.

This genus is known from New Zealand, Auckland Is. and Campbell I.

Liochoria sorensoni Brookes Fig. 4.

Liochoria sorensoni Br., 1951, Cape Exped. Ser. Bull. **5**: 32, fig. 4 (Campbell I.: Tucker Cove & St. Col Peak; DOM. MUS.).

Dorsum black with a dark metallic luster ranging from green or blue to reddish bronze, with very short, pale, erect hairs; labrum and mandible piceous; maxillary palpus dark reddish brown to piceous, sparsely clothed; antenna with basal segments pitchy reddish brown with sparse, short, suberect hairs, 5–11 darker with pale margins and bearing a fine, suberect pubescence. Ventral surfaces reddish orange to piceous, with a rather short, pale, subadpressed pubescence. Legs reddish brown to piceous, tarsi paler than tibiae; pubescent.

Head subrounded, about as long as broad, widest at eyes; occiput fused with frons, confusedly punctate; eyes subrounded, finely facetted; clypeus transverse, placed in a deep transverse channel between inflexed anterior margin of front and elevated labrum; labrum subrounded, elevation of surface equal to that of front, punctured; gena about 1/2 as deep as eye, deeply channeled; maxillary palpus flattened with lengths of segments 1–2 subequal, dilated apically, last with apex rounded, almost 2× as long as 2. *Antenna* about 1/3 as long as body; segment 1 robust, 2× as long as broad, punctate-granulate; 2 slender, 5/9 as long as 1; 3 slender, 2/3 as long as 1; 4=2; 5 longer than 4, dilated apically; 5–10 subequal, shorter than 4, subflattened and about as broad as long; last longer than 10, with apex broadly rounded. *Prothorax* 4/7 as long as broad, widest basally and equalling breadth of elytra at basal margin, gradually narrowed to anterior angles where breadth barely exceeds that of head; disc convex, confusedly punctate, with punctures mostly larger than interspaces. *Elytron* nearly 3× as long as broad, highly convex; disc with about 8 impunctate, longitudinal, impressed lines extending from base to apical 1/4 or more, punctation confused, with interspaces granulate and mostly larger than punctures; epipleuron ending near basal 1/4, impunctate, feebly concave basally. *Ventral surfaces* punctate; prosternum produced between and beyond procoxae, with apex rounded and fitting into a triangular depression of transverse mesosternum; metasternum bearing a short, median, impression posteriorly; abdomen more finely puntured; sternites 1–3 subequal in length; 4 slightly shorter than 3; last 2× as long as 4, with apex of ♂ subtruncate and emarginate at extremity, and with apex of ♀ entire and more evenly rounded. *Legs* flattened, punctate with femora grooved internally, tibiae armed apically with 2 spurs, tarsi with segment 3 bearing a membraneous, spatulate lobe beneath, claws simple; pro- and mesotibiae nearly equaling femora; metatibia barely exceeding femur; metatarsus with segment 1 almost as long as 2+3 together, discounting lobe of 3, 4 small, last as long as 2+3+4. Length 7.2–

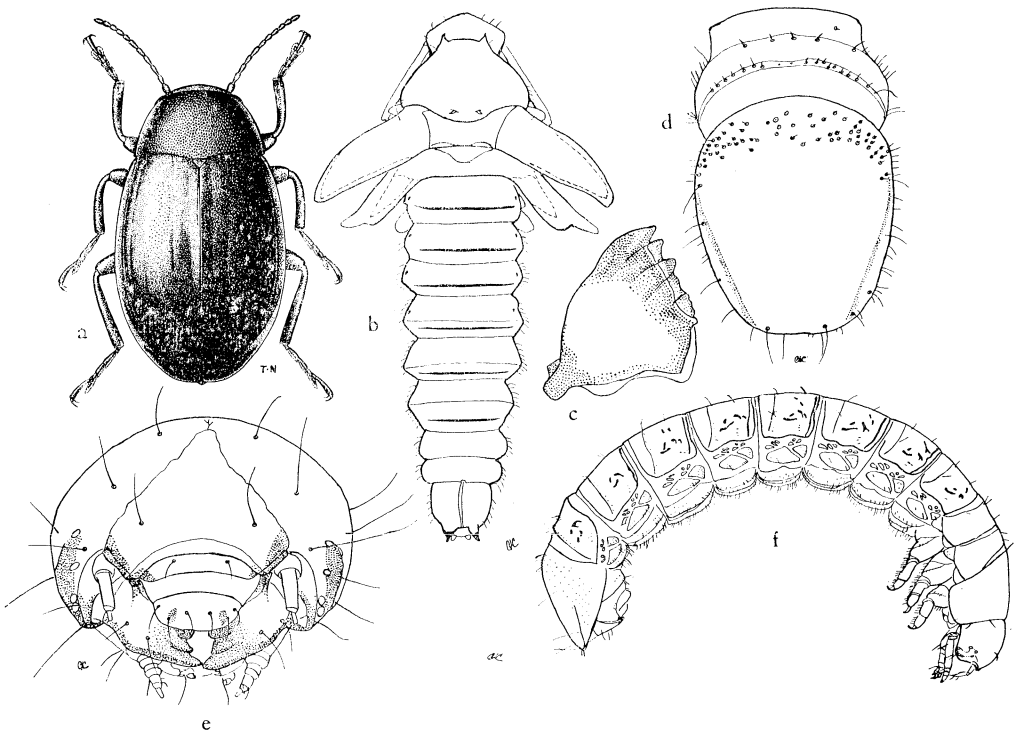

Fig. 4. *Liochoria sorensoni*. a, dorsal view; b, pupa, dorsal view; c, right mandible of larva, inner surface; d, apical segments of larva, dorsal view; e, head of larva, frontal view; f, larva, lateral view.

8.6 mm; breadth 4.0–4.6.

DISTRIBUTION: Campbell I.

MATERIAL EXAMINED: 2, Mt. Azimuth, 310–410 m, 17. I. 1961, Johns (CANTERBURY); 5, St. Col Ridge, 180–280 m, 7, 27. XII. 1961, Gressitt, Rennell (D. S. I. R., DOM. MUS.); 1, St. Col Peak, 260 m, 30. VIII. 1962, Rennell; 9, Mt. Lyall, 100–400 m, 5. XII. 1961, Gressitt, 390 m, 19. II. 1963, Rennell; 2, Mt. Lyall Ridge, 27. II. 1947, Sorensen; 1, same data, but 300 m, XII. 1962, Rennell; 5, Smoothwater Bay, 5 m, 3. I. 1963, Rennell; 1, Moubray Hill summit, 240 m, 16. II. 1963, Wise; 2, Beeman Camp, 2–50 m, 12–17. XII. 1961, Gressitt, 14. II. 1963, Wise; 2, Shoal Pt., 0–10 m, 21. X. 1962, Rennell; 2, Mt. Dumas, N. slopes, 200–300 m, 5, 6. II. 1963, Wise; 3, Mt. Filhol, 200 m, 9. II. 1963, Rennell; 4, Rocky Bay, 28. XI, 20. XII. 1961, Gressitt; 1, Mt. Puiseux, 400 m, 17. XII. 1961, Gressitt (BISHOP).

Larva: Slender, elongate, subcylindrical; body evenly arched dorso-ventrally in repose. Dull testaceous, in part somewhat darker: head ochraceous brown with lateral margin, ocellar area, edges of mandibles and parts of anterior margin of head-capsule pitchy black; ocelli pale externally and black in inner portions; antenna and anterior 1/2 of clypeus very pale; maxilla and labium largely pale; pronotum ochraceous brown, narrowly paler anteriorly and more broadly pale posteriorly and laterally; remainder of tergites testaceous with a slightly reddish tinge, less reddish (but appearing darker) on posterior portions,

with a few narrow irregular dark reddish marks not far from side of each tergite; sides pale; sternites pale testaceous; legs pale with ends of some segments narrowly darkened. Body, including head, clothed with widely spaced long erect pale hairs; some shorter, denser and darker hairs on pleura. *Head* about as broad as long; capsule slightly broader than long, subevenly rounded except for anterior portion, evenly convex above; frontal suture somewhat sinuate, forming a triangle which is somewhat longer than broad, and narrow at apex; antenna slender, fully 1/2 as long as mandible, with segment 1 short, 2 & 3 each much longer than broad; ocelli 6, subequal, arranged irregularly around a vertically elliptical dark area: 4 in front and 2 behind; clypeus transverse, anterior margin straight; labrum convex in anterior margin; mandible slightly longer than broad, subtriangular, with 3 short teeth on cutting edge; palpi with segments subequal in length; maxillary palpus fairly long, about 2× as long as labial palpus. *Thorax* barely broader than head and nearly 3× as long; prothorax as long as meso- and metathorax combined, their surface rather smooth, very finely wrinkled transversely, and with a shallow transverse groove at end of apical 1/3 of pronotum and another near anterior border of mesonotum; thoracic spiracle not obvious. *Legs* equal, fairly short, strongly tapering, with acute claws, and numerous short dark hairs beneath. *Abdomen* of approximately same width as thorax; tergites (except last) similar, fairly smooth, minutely wrinkled; spiracles weakly pigmented, not distinctly margined; last tergite nearly as long as 2 preceding combined, relatively flat above, slightly longer than broad, broadly ovate, wider near base, smooth and slightly convex along median portion, with irregular rows of punctures along side; anal pore ventral, in center of last sternite; rest of sternites uniform, each with 5 swollen areas: large pentagonal anterocentral piece, 2 posterior triangular pieces and 2 narrow lateral pieces. Length 17.6 mm; breadth 2.1.

Pupa: Whitish testaceous on head, thorax, elytral pads and legs, pinkish testaceous on abdomen; pitchy black on distal portions of caudal spines; slightly pitchy on tips of pronotal spines and on edges of carinae of abdominal tergites. Body with rather few erect pale hairs, mostly on pleura and at sides of tergites, with a few on top of head and one on elytron. Head with posterior portion semicircular, mouthparts projecting, with maxillary palp particularly long; antenna reaching slightly beyond hind angle of pronotum; pronotum much broader than long, much broader posteriorly, convex above, with a pair of widely spaced spinous tubercles on anterior margin, and a pair of slightly closer and more slender ones near middle of basal margin; elytron strongly convex, ridged, suddenly narrowed preapically; hind wing more sinuate on hind margin and more acute; abdominal tergites with central portion of each raised, smooth and bordered behind by a sharp edge; last tergite ridged medially, with a pair of long acuminate spines on apex; spiracles small, distinctly raised; pleura rather evenly convex; sternites rather even and smooth; last sternite with a pair of fairly large papilli just before anal pore which projects downward and slightly backward, reaching about as far backward as end of tergite. Length 13.6 mm; breadth of pronotum 3.8, abdomen 3.9.

Family LATHRIDIIDAE

Three species of this family were taken on Campbell, but 1 appears to have been lost.

Genus **Lathridius** Herbst

Latridius Herbst, 1793, *In* Jablonsky, Nat. Ins. Käfer **5**: 3, 10.—Latreille, 1810, Cons. Gen. Ord. Nat. Crust., Arach., Ins. p. 431 (incl. *Latridius porcatus* Herbst).
Lathridius Illiger, 1801, Mag. für Ins. **1**: 140. Emendation.—Walkley, 1948, Proc. Ent. Soc. Wash. **50** (6): 149 (fixed type as *L. porcatus=Tenebrio minutus* L.); *op. cit.* **54** (5): 223.
Cornithassa Thomson, 1859, Skand. Coleop. **1**: 93.

Lathridius minutus (Linnaeus)

Tenebrio minutus L., 1767, Syst. Nat., ed. 12, p. 675.
Latridius porcatus Herbst, 1793, *In* Jablonsky, Nat. Ins. Käfer **5**: 6.
Enicmus (*Cornithassa*) *minutus*: Fall, 1899, Trans. Amer. Ent. Soc. **26**: 123, 127.
Lathridius minutus: Walkley, 1952, Proc. Ent. Soc. Wash. **54** (5): 226.

We are indebted to W. O. Steel for identifying the species. The generic status of the species follows the nomenclatorial proposal of Walkley (1948), wherein the species indicated by Latreille (1810), *Latridius porcatus* Herbst (actually a synonym of *minutus*), is designated as the type of the genus.

DISTRIBUTION: Cosmopolitan.

MATERIAL EXAMINED: Campbell I.: 2, Beeman Camp, 2–50 m, 6–11.XII.1961, in chicken yard debris, Gressitt; 1, Rocky Bay, penguin nest Berlese, 28.XI.1961, Gressitt and Rennell.

Genus **Melanophthalma** Motschulsky

Melanophthalma Mots., 1866, Bull. Soc. Nat. Moscou **39**, 3: 269.—Fall, 1899, Trans. Amer. Ent. Soc. **26**: 145, 166.—Reitter, 1911, Fauna Germ. **3**: 85, 89.

The genus is widely distributed throughout the world.

Melanophthalma globipennis (Reitter) Fig. 5.

Corticarina globipennis Reitt., 1881, Mitt. Münch. Ent. Ver. **5**: 139 (Auckland Is.).
Melanophthalma globipennis: Hetschko, 1926, Col. Cat. **15** (85): 69.

Dorsum reddish testaceous to pitchy brown, clothed with pale, slender, suberect hairs; frontoclypeus and labrum darker than occiput. Antenna with scape and pedicel pale, segments 3–8 darker; 9–11 piceous; clothed with pale, slender hairs. Ventral surfaces reddish testaceous to pitchy brown, with mostly short, subadpressed hairs. Legs unicolorous, paler than or matching color of abdomen; finely clothed.

Head slightly longer than broad, widest at eyes and barely exceeding breadth of prothorax at anterior margin; occiput punctate; eye subrounded; subcoarsely facetted; frontoclypeus subtriangular, separated from labrum by a fine suture; labrum large, 3/8 as long as broad, weakly bilobed, granulate; gena about 1/2 as deep as diameter of eye, excavated. *Antenna* about 1/3 as long as body; segment 1 swollen, slightly longer than broad; 2 subglobular, 2/3 as long as 1; 3 slender, =2; 4–7 subequal, shorter than 3; 8 shorter than 7; remaining segments swollen, forming a loose club with 9 nearly 2× as long as 8; 10 slightly shorter than 9; last slightly flattened, nearly 2× as long as 10 with apex somewhat acute. *Prothorax* 4/5 as long as broad, widest and slightly angulate before middle, gradually narrowed anteriorly and to base where breadth is subequal to that of elytra at basal

margin; disc confusedly punctate with punctures mostly larger than interspaces; surface broadly and transversely depressed near basal 1/3. Metathoracic wing reduced; club-shaped. *Scutellum* transverse, rounded apically. *Elytron* 3× as long as broad, highly convex, widest near middle where breadth is nearly 2× as broad as widest portion of prothorax; disc confusedly punctate, punctures larger than those of prothorax, interspaces mostly 1/2 as large as punctures; epipleuron narrow, gradually decreasing in breadth and ending at apical 1/4. *Ventral surfaces* punctate; abdomen with sternite 1 as long as following 3 together; last subequal to 4, broadly rounded apically. In ♂ aedeagus short, weakly declivous apically, extremity acuminate; endophallus exerted beyond apex of aedeagus. *Legs* slender; tibia as long as femur; tarsus nearly 2/3 as long as tibia; metatarsus with segment 1 slightly longer than 2, last 1.8× as long as 2, claw slender and simple. Length 1.3–1.6 mm; breadth 0.6–0.8.

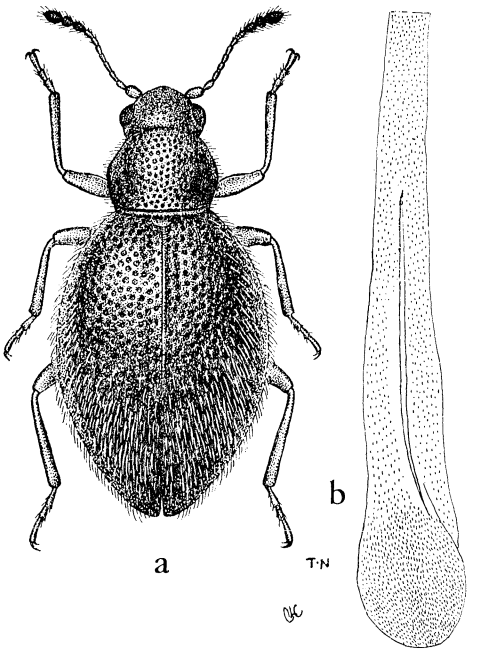

Fig. 5. *Melanophthalma globipennis.* a, dorsal view; b, right wing.

This material compares closely with specimens from the Auckland Is., the type locality of the species.

DISTRIBUTION: Auckland Is., Campbell I.

MATERIAL EXAMINED: 18, Northwest Bay, 5 m, tussock, 30. XII. 1962, Rennell; 1, Smooth-water Bay, leaf mold Berlese, 16. II. 1963, Wise; 7, Lookout Bay, beach, on *Poa*, *Stilbocarpa polaris*, 19, 30. XII. 1961, Gressitt, Rennell; 30, Tucker Cove, 1–50 m, *Poa*, 21–25. XI. 1961, Gressitt; 2, same data, but *Dracophyllum*, grass turf, 1–5, 6–11. XII. 1961; 2, same data, but, *Coprosma*, 6, 7. VIII. 1962, Rennell; 5, Beeman Camp, 2–50 m, *Dracophyllum*, *Poa*, *Pleurophyllum criniferum*, 21–25, 26–30. XI, 6–11. XII. 1961, Gressitt; 4, Beeman Station, 5. III. 1963, Wise; 1, Camp Cove, 5. II. 1963, Rennell; 1, nr. Station, 23. X. 1961, Wise; 2, Perseverance Harbor, base of *Bulbinella* Berlese, 24. II. 1963, Wise; 26, Shoal Pt., 0–10 m, 29. VII. 1962, 0–30 m, 1. XII. 1962, 7. II. 1963, Rennell; 1, Mt. Dumas, N. slope, 80 m, 31. VIII. 1962, Rennell; 1, Campbell I., miscellaneous Berlese, XI–XII. 1961, Gressitt.

Family MELANDRYIDAE

This family occurs in both Northern and Southern Hemispheres. The following species appears to be the first to be recorded from a subantarctic island.

Genus **Orchesia** Latreille

Orchesia Latr., 1807, Crust. et Ins. **2**: 194 (type: *Hallomenus micans* Panz.).—Lacordaire,

1859, Gen. Col. **5**: 542.—Reitter, 1911, Fauna Germ. **3**: 360.

The genus is best represented in Europe, South America, Australia and Tasmania. There are also species is Asia and North America. It seems to be unrecorded from New Zealand. It is apparently absent from South Africa.

Orchesia rennelli Gressitt and Samuelson, n. sp. Fig. 6.

♂. Dorsum shiny black with a slight brownish to bronzy tinge, evenly clothed with short subrecumbent reddish brown hairs; antenna reddish brown basally, becoming duller brown apically; palpi dark reddish brown; ventral surfaces reddish brown, darker anteriorly at sides and paler along middle portion of abdomen; legs reddish brown, paler reddish on coxae and basal portions of femora; tibial spurs pale reddish brown. Antenna moderately clothed with short pale pubescence; ventral surfaces thinly clothed with short fine pale thorny hairs; legs rather thinly clothed with fine pale hairs.

Head about 3/4 as broad as prothorax, subrounded in anterior view and subevenly convex, entire surface distinctly and subevenly punctured; interantennal width slightly greater than interocular width; frontoclypeus weakly emarginate anteriorly; labrum about 2× as broad as long, subevenly rounded anteriorly and very weakly depressed near middle of apex; gena about 1/6 as deep as eye; maxillary palpus very large, last segment distinctly longer than preceding 2 segments combined, slightly curved on upper border and nearly straight on lower border which bears a pubescent longitudinal groove. *Antenna* not quite 2/5 as long as body; segment 1 about 2× as long as broad, moderately thickened; 2

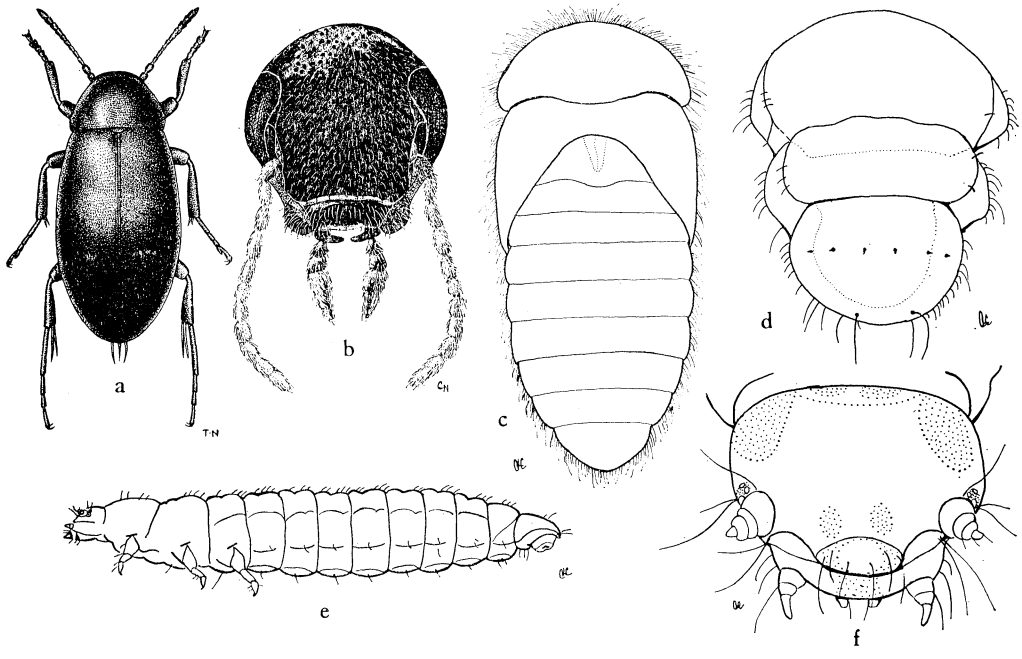

Fig. 6. *Orchesia rennelli*, n. sp. a, dorsal view, ♂; b, head, frontal view; c, pupa, dorsal view; d, apical segments of larva, dorsal view; e, larva, lateral view; f, head of larva, frontal view.

slightly shorter than 1, thickened towards apex; 3 shorter and more slender than 2; 4 slightly shorter and slightly stouter than 3; 4–10 subequal in length but gradually increasing in thickness, 10 about as broad as long; 11 as long as 9+10 and abruptly narrowed apically. *Prothorax* nearly 5/6 as long as broad, weakly convex on anterior margin; lateral margin subevenly convex, widest somewhat behind middle; basal margin weakly sinuate, slightly convex at middle and slightly concave at each side of middle; disc subevenly convex, rather finely and closely punctured. *Scutellum* slightly broader than long, rounded apically and minutely punctured. *Elytron* just over 4× as long as broad, weakly and subevenly convex at side, widest just behind middle, somewhat narrowly rounded apically; epipleuron obliquely ventral anteriorly, becoming vertical behind middle, gradually narrowing posteriorly and less distinctly set off posteriorly; disc subevenly convex, rather closely and minutely punctured throughout. *Ventral surfaces* in large part finely punctured, more heavily and sparsely so on metasternum, more dense on metepisternum and abdomen, and almost impunctate on coxal plate. *Legs* fairly slender and distinctly flattened; metafemur fairly smooth, not greatly widened in middle; metatibia 2/3 as long as metafemur; metatarsus fully 2× as long as metatibia, segment 1 slender, slightly arched, slightly longer than remaining segments combined, segment 2 slightly longer than 3 and shorter than 4; a strong bristle beneath each tarsal claw. Aedeagus with a long acuminate median lobe and slender slightly arched pair of lateral lobes. Length 2.5 mm; breadth 1.1.

♀: Antenna just over 1/3 as long as body. Last abdominal sternite subevenly rounded apically. Length 2.7 mm; breadth 1.2.

Paratypes: Length 2.1–2.7 mm; breadth 0.9–1.3.

Holotype ♂ (Dom. Mus.), Moubray Hill, 200 m, under stone, 12. XII. 1961, Gressitt; allotype ♀ (Bishop), Courrejolles Peninsula, 200 m, from rocks and moss around mollymawk nests, 14. XII. 1961, Gressitt & Rennell; paratypes (Bishop, Dom. Mus., D. S. I. R., Canterbury): 8, same data as allotype; 44, Courrejolles Penin., 220–230 m, on rock cliffs of mollymawk colony, 13. II. 1963, Rennell, Wise; 1, same data, but on tussock, Rennell; 2, same data, but on cushion plant, Rennell; 5, Mt. Lyall, 200–400 m, 5.XII.1961, Gressitt; 1, Mt. Lyall, S. slopes, 300 m, under stones, 19. II. 1963, Wise; 4, Rocky Bay, penguin colony, on rocks, 18. II. 1963, Rennell, Wise; 2, Monument Harbor, under stones above high water mark and on rock, 9. II. 1963, Rennell, Wise.

Differs from *micans* Panzer in being much shorter and darker, with head more finely punctured and with eyes much more widely separated than their diameters. Also in the new species the pronotum is more transverse anteriorly, relatively longer, broadest well anterior to base, with basal angles obtuse; elytron shorter, slightly broadened behind middle and less narrowed apically; mesotibia more slender.

Larva: Pale testaceous, very slightly ochraceous on posterior portion of head capsule and lateral portion of pronotal disc, and slightly darker brown on central portions of last 2 abdominal tergites; ventral surfaces quite pale, slightly testaceous posteriorly. Body largely clothed with short suberect pale golden hairs, and a few longer setae at sides of pronotum and on anterior portion of head. Body fairly slender, subparallel-sided, slightly narrowed anteriorly and posteriorly; moderately dorso-ventrally compressed. Head capsule fairly flat above, widest just behind eyes, slightly narrowed posteriorly, subtrapeziform anteriorly, dorsal surface rather smooth and finely punctured; clypeus and labrum somewhat short and deflexed downward, a depression on each side anterior to antenna; antenna rather stout basal-

ly and strongly tapered, of 3 segments. Eye spots black, in 2 nearly separated portions on each side. Pronotum rather flat, slightly grooved medially and each side with several fairly large foveae. Mesonotum with a sinuate oblique groove, followed by a general smooth area with some punctures; metanotum with a more regular and more transverse groove. Abdominal tergites 1–7 each with a nearly straight transverse groove near middle and with weak callosities anteriorly and posteriorly; tergite 8 narrower, with a less distinct groove and more distinct callosities; last tergite almost semicircular, narrowed at base with a rather broad depression following a transverse series of 4 small tubercles just anterior to middle; a fairly distinct tubercle on upper edge of apical margin on each side of middle. Abdominal sternites fairly smooth, with a few scattered bristles. Legs fairly slender, each shorter than width of body. Length 5.7 mm; breadth 1.4.

Pupa: Testaceous, more whitish on abdomen. Body clothed with fairly long whitish suberect hairs, sparser on ventral surface of abdomen. Head fairly flat in front; antenna fairly stout, just exceeding apex of profemur; segments mostly broader than long. Pronotum rather plain, slightly depressed medially; remainder of dorsum fairly smooth, largely impunctate. Abdominal sternites fairly even; last sternite with a fairly stout and subacute process on each side and intervening apical margin truncate. Length 3.5 mm; breadth 1.4.

Larva and pupa, Northwest Bay, Campbell I., in tussock, 20. XII. 1962, Rennell.