

ALTICINAE OF NEW GUINEA I. MICREPITRIX

(Coleoptera : Chrysomelidae)¹

By G. A. Samuelson

BISHOP MUSEUM, HONOLULU, HAWAII

Abstract: The genus *Micrepitrix* is reported from New Guinea for the first time; 3 new species are described and illustrated.

Genus *Micrepitrix* Laboissière

Micrepitrix Lab., 1933, Mus. Paris Bull. ser. 2, 5: 205 (type: *M. coomani* Lab.; Indo-China; type in ?Paris Mus.).—Chen, 1935, Sinensia 6: 777.—Gressitt, 1955, Ins. Micronesia 17 (1): 35.—Gress. & Kimoto, 1963, Pacific Ins. Mon. 1B: 757.

Diagnosis: dorsum sparsely clothed with erect setae; prothorax transverse, basal margin narrower than elytral base, ante-basal impression reaching side; procoxal cavity closed posteriorly; abdomen with sternite 1 longer than following 3; metatibia with 1 minute spine.

The genus is previously unrecorded from New Guinea; 3 new species are described and illustrated here.

I am indebted to Mrs Barbara Downs and Mr T. Nagatani for preparing part of the illustrations, and to Miss Carol Nakashige for her help.

1. Frontoclypeus strongly produced anteriorly; gena $3/4$ or more as deep as eye 2
 Frontoclypeus not strongly produced anteriorly; gena at most $2/3$ as deep as eye,
 usually about $1/2$ as deep 3
2. Elytron with a longitudinal, strongly inflated post-humeral swelling on basal $1/2$;
 dorsum yellow testaceous **dimorpha** ♀
 Elytron lacking a post humeral swelling; humeral interstice rather evenly costate;
 dorsum yellow testaceous **dimorpha** ♂
3. Interocular space about $1.4\times$ as large as narrowest diameter of eye; pronotal disc
 with most punctures $0.6-1.0\times$ as large as interspaces; dorsum piceous **picea**
 Interocular space about $1.8\times$ as large as narrowest diameter of eye; pronotal disc
 with most punctures about $2\times$ as large as interspaces; dorsum yellow testaceous
 **serraticollis**

1. This investigation was supported by a grant (G-10734) from the National Science Foundation. Results of fieldwork supported by a grant to Dr J. L. Gressitt from the John Simon Guggenheim Memorial Foundation Fellowship, 1955-1956.

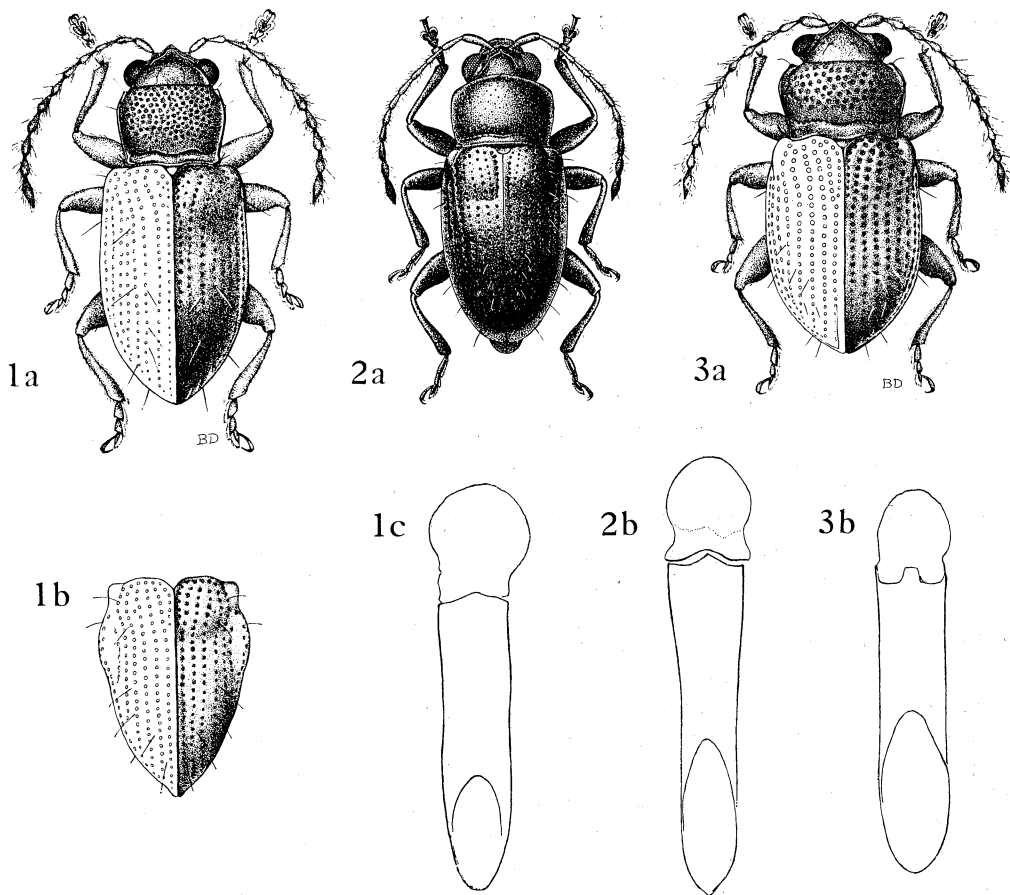
Micrepitrix dimorpha Samuelson, n. sp. Fig. 1.

♂. Dorsum yellow testaceous; elytron slightly darker than pronotum; antenna with apical 5 segments darkened; prosternum and legs yellow testaceous; remaining sterna and abdomen brownish. Dorsum sparsely clothed with long, pale erect setae; vertex with a transverse row of 4 long setae; antenna submoderately clothed, apical segments with long setae as well as shorter hairs; ventral surfaces and legs moderately clothed with short, subadpressed hairs.

Head distinctly longer than broad, widest at eyes, narrower than prothorax; labrum with anterior margin convex, surface microgranulate; frontoclypeus carinate medially, sides weakly impressed, anterior margin straight with side slightly swollen; interantennal space carinate, ending at postantennal swellings, 7/10 as broad as transverse diameter of antennal socket; antennal socket circular, feebly margined; eye subrounded; interocular space $1.8\times$ as broad as narrowest diameter of eye; gena nearly $4/5$ as deep as eye; postantennal swellings oblique, slightly broader than deep, separated medially by a fine line; vertex evenly convex, smooth excepting transverse row of seta-bases. *Antenna* $3/4$ as long as body, apical segments thickened; segment 1 thickest near middle; 2 strongly dilated, thickest preapically; 3 slender, gradually thickened to apex; 4-6 dilated apically; 7-8 more strongly dilated than 6; 9-10 strongly swollen, thickest at apical $1/3$; last fusiform, apex acute; relative lengths of segments as follows: $11 : 9 : 9+ : 7+ : 8+ : 7 : 8 : 8 : 9 : 9 : 13$. *Prothorax* nearly $7/10$ as long as broad, widest near apical $1/3$, base narrower than elytra; anterior margin nearly straight, not distinctly microserrate; anterior angle small, rounded; side more strongly convex anteriorly, basal portion convexly narrowed to prebasal constriction; posterior angle briefly rounded; basal margin feebly sinuate; disc strongly punctured on anterior $2/3$, most punctures $2-3\times$ as large as interspaces; ante-basal impression rather deep, distinctly sinuate and containing a series of small punctures; prebasal area swollen, impunctate. *Scutellum* about $1/2$ as long as broad, apex broadly rounded. *Elytron* $2.8\times$ as long as broad, broadest near basal $1/3$; lateral margin flexed inward embracing side of venter, extreme apex nearly square; humerus briefly swollen, humeral interstice rather evenly costate; surface transversely depressed near basal $2/7$; disc with 9 longitudinal rows of punctures, also 1 short sutural row ending near basal $2/7$ and a marginal row laterally; most punctures $3\times$ as large as transverse interspaces and $1.5\times$ as large as longitudinal interspaces; interstices swollen; epipleuron narrow. *Ventral surfaces* with intercoxal piece of prosternum punctate, metasternum with several fine transversely impressed lines and punctures near side, abdomen granulate and sparsely punctulate; abdomen with relative lengths of sternites as follows: $14 : 3+ : 3 : 3+ : 6$; last sternite with apical extremity weakly sinuate, surface with a broad, semicircular, preapical impression. *Aedeagus* moderately arched, $6\times$ as long as breadth at middle, base dilated, apex subacutely rounded, apical $3/8$ concave. *Legs*: metafemur $3\times$ as long as broad, metatibia slightly longer than femur; metatarsus $5/8$ as long as tibia, segment 1 with length subequal to $2+3$ together, 3 bilobed, claw appendiculate.

Length 1.67 mm; breadth 0.68.

♀. Coloration and vestiture as in ♂. Chiefly differing from ♂ as follows: gena $9/11$ as deep as eye; antenna $2/3$ as long as body, relative lengths of segments as follows: $11 : 8+ : 7 : 8 : 7 : 7 : 7+ : 8 : 8+ : 8+ : 13$; prothorax $5/7$ as long as broad; elytron strongly swollen a short distance behind humerus, from basal $1/6$ to basal $5/12$, swelling about



Figs. 1-3. 1, *Micrepitrix dimorpha*, n. sp.: a, dorsal view ♂; b, dorsal view of elytra ♀; c, aedeagus. 2, *M. picea*, n. sp.: a, dorsal view; b, aedeagus. 3, *M. serraticollis*, n. sp.: a, dorsal view; b, aedeagus.

3× as long as high and 3 interstices broad, outline of swelling evenly convex; abdomen with relative lengths of sternites as follows: 15 : 4+ : 4 : 2+ : 7; last sternite with apical margin slightly convex, surface with a fine, transverse line at apical 1/3, area behind line paler than area preceding it.

Length 1.69 mm; breadth 0.81.

Paratypes: Coloration and vestiture as above.

Length 1.59-1.69 mm; breadth 0.69-0.73.

Holotype ♂ (BISHOP 3733), NW New Guinea, Wisselmeren, Waghete, Tigi L., 1700 m, 16.VIII.1955, Gressitt; allotype ♀, same data; 4♂ paratopotypes, same data; 2♀ paratopotypes, same data; 1 paratype ♂, Wisselmeren, Enarotadi, 1900 m, 21.VIII.1955, Gressitt.

Differs from *coomani* Lab. and *carolina* (Chûjô) by having gena 4/5 or more as deep

as eye instead of about $1/2$ as deep; from *serraticollis*, n. sp. by having anterior margin of pronotum not distinctly microserate; from *picea*, n. sp. by having larger pronotal punctures and paler coloration; from last 2 by having more a produced gena.

Micrepitrix picea Samuelson, n. sp. Fig. 2.

♂. Dorsum piceous; head paler anteriorly, labrum yellow testaceous, frontoclypeus red testaceous; antenna with segment 1 brown, 2-6 yellow testaceous, 7-8 reddish, 9-11 piceous; ventral surfaces and femora piceous; tibiae and tarsi brownish. Dorsum sparsely clothed with long, pale, erect setae; vertex sparsely setose; antenna submoderately clothed, with longest hairs on apical 3 segments; ventral surfaces and legs submoderately clothed with short, subadpressed hairs.

Head slightly longer than broad, widest at eyes, narrower than prothorax; labrum with anterior margin slightly convex, surface nearly smooth; frontoclypeus carinate medially, sides shallowly impressed, anterior margin straight, slightly raised; interantennal space carinate, $5/8$ as broad as transverse diameter of antennal socket; antennal socket circular, feebly margined; eye subrounded; interocular space $1.45\times$ as broad as narrowest diameter of eye; gena $2/3$ as deep as eye; postantennal swellings oblique, converging anteriorly and connected with median carina of front; vertex unevenly convex, surface with about 14 small punctures. *Antenna* $3/4$ as long as body, apical segments thickened; segment 1 fusiform, 2 gradually thickened to apical $1/4$, apex narrowed, 3-5 slender basally, dilated apically, 6 barely swollen apically, 7-10 subfusiform, swollen, last fusiform, apex acute; relative lengths of segments as follows: $13 : 11+ : 10+ : 9 : 10 : 8 : 9 : 9+ : 10 : 11 : 14$. *Prothorax* $3/4$ as long as broad, base narrower than elytra; anterior margin straight, microserate; anterior angle small, briefly parallel to anterior margin, then oblique laterally; side obliquely expanded to first large seta-base (widest point of prothorax), then gradually narrowed to weak prebasal constriction; posterior angle briefly rounded; basal margin sinuate, broadly convex at middle; disc punctate, most interspaces $1-1.5\times$ as large as punctures, ante-basal impression sinuate, bearing a series of small punctures, prebasal area a little swollen and impunctate. *Scutellum* $5/8$ as long as broad, apex broadly rounded. *Elytron* fully $3\times$ as long as broad, broadest at basal $3/8$; extreme apex briefly rounded; lateral margin flexed inward embracing side of venter; humerus briefly swollen; surface transversely depressed near basal $1/4$; disc with 9 longitudinal rows of punctures, also 1 short sutural row ending at basal $1/4$ and a marginal row; most punctures $1.5-2\times$ as large as transverse interspaces and about $1\times$ as large as longitudinal interspaces; interstices impunctate, lateral 3 most strongly swollen; epipleuron narrow. *Ventral surfaces* with intercoxal piece of prosternum punctate, metasternum smooth, abdominal sternites microgranulate; abdomen with relative lengths of sternites as follows: $17 : 4+ : 4 : 4 : 7$; last sternite with apical margin sinuate, extremity obtusely produced, preapical area with a shallow, triangular impression. *Aedeagus* slightly arched; $8.2\times$ as long as narrowest width near middle; base dilated, rounded; apex acute; surface of apical $2/5$ concave. *Legs*: metafemur $2.6\times$ as long as broad; metatibia slightly shorter than femur; metatarsus $3/4$ as long as tibia, segment 1 subequal in length to 2+3 together, 3 bilobed, claw appendiculate.

Length 1.92 mm; breadth 0.81.

♀. Differing from ♂ as follows: antenna yellow testaceous, apical 3 segments brown-

ish, length $2/3$ as long as body, relative lengths of segments as follows: $11 : 9+ : 8+ : 6 : 6 : 6 : 7+ : 7+ : 8+ : 8+ : 13$; prothorax $2/3$ as long as broad, most discal punctures about as large as interspaces; abdomen sparsely punctulate, relative lengths of sternites as follows: $17 : 3+ : 3 : 3+ : 5$; last sternite with apical extremity subtruncate, surface with a preapical puncture.

Length 1.67 mm; breadth 0.76.

Paratypes: Piceous above; discal punctures of pronotum mostly smaller than interspaces.

Length 1.56–1.80 mm; breadth 0.70–0.75.

Holotype ♂ (BISHOP 3734), NE New Guinea, Kumur, Upper Jimmi V., 1000 m, 13.VII.1955, Gressitt; allotype ♀, same data; 2 paratopotypes, same data; 1 paratype, Korop, Upper Jimmi V., 1300 m, 12.VII.1955, Gressitt; 1 paratype, Nondugl, 1600 m, Waghi V., 9.VII.1955; 1 paratype, SE New Guinea, Mendi, S Highlands, 1660 m, 6.X.1958, Gressitt.

Differs from *coomani* and *carolina* by having gena more strongly produced; from *dimorpha* and *serraticollis*, n. spp. by darker coloration, and from all 4 by having smaller punctures on pronotal disc.

Micrepitrix serraticollis Samuelson, n. sp. Fig. 3.

♂. Yellow testaceous; eye, apex of mandible, apical antennal segment, parts of metasternum and claws darker red to brown testaceous. Dorsum sparsely clothed with long, pale, erect setae; vertex with a transverse row of 4 long setae; antenna submoderately clothed, apical 7 segments with long setae as well as shorter hairs; ventral surfaces and legs moderately clothed with short, subadpressed hairs.

Head distinctly longer than broad, widest at eyes, narrower than prothorax; labrum with anterior margin slightly convex, surface smooth; frontoclypeus carinate medially, sides shallowly impressed, anterior margin straight, feebly raised; interantennal space carinate, $4/5$ as broad as transverse diameter of antennal socket; antennal socket circular, weakly marginated; eye subrounded; interocular space slightly over $1.8\times$ as broad as narrowest diameter of eye; gena $8/13$ as deep as eye; postantennal swellings oblique, about as broad as deep, separated medially by a fine line and partially by upper end of carina of front; vertex evenly convex, smooth excepting transverse row of 4 seta-bases. *Antenna* $4/5$ as long as body, apical segments thickened; segment 1 thickest at middle, 2 gradually thickened to apical $1/4$; 3–6 dilated, thickest preapically, 7–8 more strongly dilated than 6; 9–10 more strongly dilated than 8, last fusiform, apex acute; relative lengths of segments as follows: $12 : 10 : 8 : 8+ : 9+ : 9 : 9+ : 9+ : 10 : 10 : 14$. *Prothorax* $5/8$ as long as broad, base narrower than elytra; anterior margin straight, microserate; anterior angle small, obtuse-rounded, slightly produced anteriorly; side moderately convex anteriorly, widest at apical $1/3$, nearly straight posteriorly to prebasal constriction; posterior angle rounded; basal margin sinuate; disc strongly punctured on apical $3/5$, most interspaces about $1/2$ as large as punctures, basal $2/5$ impunctate excepting a series of punctures in sinuate ante-basal impression. *Scutellum* about $5/8$ as long as broad, apex broadly rounded. *Elytron* $2.8\times$ as long as broad, broadest at basal $3/7$, extreme apex nearly square, apex of sutural margin briefly and acutely produced; lateral margin flexed inward embracing side of venter; humerus briefly swollen, humeral interstice costate; surface broadly and shallowly impressed

before basal $1/3$; disc with 9 longitudinal rows of punctures, also 1 short sutural row ending near basal $1/4$ and a marginal row; most punctures $2-3\times$ as large as transverse interspaces and about $1\times$ as large as longitudinal interspaces; interstices a little swollen, lateral interstice widest near middle; epipleuron narrow. *Ventral surfaces* with intercoxal piece of prosternum punctate, metasternum mostly smooth and abdomen granulate and sparsely punctulate; abdomen with relative lengths of sternites as follows: $14 : 3+ : 2+ : 2+ : 6+ :$ last sternite with extreme apex truncate, surface with a broad, semicircular, preapical impression. *Aedeagus* moderately arched, $5.9\times$ as long as breadth at middle, base feebly dilated, apex subacutely rounded, apical $4/9$ concave. *Legs*: metafemur $2.3\times$ as long as broad, broadest near middle; metatibia with length subequal to femur; metatarsus $4/7$ as long as tibia, segment 1 with length subequal to $2+3$ together; 3 bilobed; claw appendiculate.

Length 1.66 mm; breadth 0.78.

♀. Coloration and vestiture as in ♂. Chiefly differing from ♂ as follows: antenna $8/11$ as long as body, relative lengths of segments as follows: $12 : 8 : 8+ : 7+ : 9 : 8 : 9 : 9+ : 10 : 13$; abdomen with relative lengths of sternites as follows: $16 : 4 : 4 : 3 : 6$; last sternite with apical extremity truncate, surface flat, with a fine, transverse, preapical line.

Length 1.82 mm; breadth 0.86.

Paratypes: Color and vestiture as in ♂.

Length 1.62–1.69 mm; breadth 0.78–0.83.

Holotype ♂ (BISHOP 3735), NW New Guinea, Wisselmeren, Obano, 1770 m, Paniai L., 9.VIII.1955, Gressitt; allotype ♀, same data; 2 paratopotypes, same data; 1 paratype, Wisselmeren, Enarotadi, 1900 m, 20.VIII.1955, Gressitt.

Differs from *coomani*, *carolina* and *picea*, n. sp. by paler coloration; from *dimorpha*, n. sp. by having prothorax more transverse.