New Species and New Records of Elaterid Beetles from the Pacific—II*

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(Presented at the meeting of May 11, 1942)

Among collections of Pacific island Elateridae submitted for study during recent months several undescribed species and a number of new distribution records have been found. The bulk of the material upon which this paper is based was submitted through Mr. E. C. Zimmerman by the Bernice P. Bishop Museum. Other specimens came from the British Museum (Natural History) through the kindness of Sir Guy A. K. Marshall, Director of the Imperial Institute of Entomology. Still others were the gift of Mr. Noel Krauss of Honolulu, who submitted material collected in Fiji by himself and by Mr. Otto Degener. Unless otherwise stated, the types have ben deposited in the type collection of the Bishop Museum. New records of island groups are printed in capital letters, new ones from individual islands, in italics.

Compsolacon gracilis (Candèze)

A new record from the Bismarck Archipelago: New Ireland, Namatanai, vii. 4. 1938 (G. F. Gee) C 2564; British Museum collection.

Dioxypterus flexuosus Fairmaire

Previously recorded from Viti Levu and Kambara in the Fiji group; a new record from the same archipelago: *Ovalau*, Andubangda, vii. 18. 1938, beating, 1,000-1,500 feet (E. C. Zimmerman).

Dioxypterus guttatulus Fairmaire

Described from Fiji without definite island record, and later recorded from Viti Levu. A new Fiji record: *Ovalau*, Andubangda, vii. 18. 1938, beating, 1,000-1,500 feet (E. C. Zimmerman).

Dioxypterus nigrotransversus Fairmaire

Described from Fiji without specific island record. A new, definite island record from Fiji: *Viti Levu*, Nandarivatu, 2,000 feet, xi. 1940 (Otto Degener).

Dioxypterus ottonis Heller

The type locality is New Guinea. The following is a new record: BISMARCK ARCHIPELAGO, New Ireland, Namatanai,

^{*} The preceding paper of this title was published by the Bernice P. Bishop Museum: Occ. Papers, vol. xvi, no. 5, pp. 91-130, 6 figs., Oct. 18, 1940.

Proc. Haw. Ent. Soc., Vol. XI, No. 3, August, 1943.

iv. 16. 1940, on coconut foliage (G. F. Gee) C 2247; British Museum collection.

Propsephus vitiensis Van Zwaluwenburg

Previously known from Viti Levu and Taveuni in the Fijis. A new Fiji record: Ovalau, Wainiloka, vii. 11. 1938, beating, 200 feet (E. C. Zimmerman).

Propsephus zimmermani, new species

Male, 11.0 mm. long; 3.4 mm. wide. Stout; moderately shining. Dark castaneous with elytra slightly lighter. Pubescence yellowish brown, fine.

Front flattened above, slightly convex on anterior half, moderately declivous; anterior margin broadly rounded; punctation uniform, rather coarse. Antennae exceeding hind angles of prothorax by about half length of the 11th segment; 2nd segment subglobular; 3rd half as long again as 2nd, the two together subequal to 4th; 4-10 feeble serrate, successively diminishing in width; 11th narrowed on apical one-third.

Prothorax slightly wider than long, widest just before apex of hind angles; sides converging forward from middle of hind angles to about middle, thence subarcuately narrowed to anterior margin. Pronotum moderately convex; punctation about as on head on anterior half and on sides, finer and sparser basally, with that part of the hind angles mediad of the carinae more finely and closely punctulate; no basal median canaliculation. Lateral margin of hind angles incurved apically, their tips subparallel; unicarinate. Basal sulci well-marked but small. Propleura coarsely punctate; almost impunctate mediad on basal third. Mucro straight behind fore coxae, but not horizontal, being directed dorsad at a slight angle; subapical tooth small; mucro narrowed behind subapical tooth, but not notched. Sides of mesosternal cavity moderately declivous in a single plane.



Fig. 1. Prosephus zimmermani n. sp. Aedeagus of holotype male.

Scutellum flat; finely punctulate. Elytra at base about as wide as prothorax; sides subparallel to about middle, thence narrowed to the apex. Striae well-marked by rows of fine punctures; interstriae flat (except basally, where they are convex), finely punctulate. Widening of hind coxal plates laterad of coxae, not acute.

Described from a holotype male: FIJI, Viti Levu, Nandarivatu, viii. 31. 1938, at light (E. C. Zimmerman). The aedeagus of the type is shown in figure 1.

KEY TO THE PROPSEPHUS OF OCEANIA

۷.	Antennal segments very wide; protnorax strongly transverse
	(Samoa)
	gracilicornis Van Zwal.
3.	3rd antennal segment equal to 4th
••	3rd antennal segment subequal to 2nd, or intermediate in length
	between 2nd and 4th; 2nd and 3rd together as long as 4th, or
	shorter4
4.	Mucro subhorizontal behind fore coxae; deeply, subrectangularly
	notched between subapical tooth and apex; sides of mesoster-
	nal cavity moderately declivous on basal half, then abruptly
	declivous; pronotum strongly convex, punctation deep and
	strong (Solomons)obesus Van Zwal.
	Mucro upturned in greater or less degree behind fore coxae; nar-
	rowed but not definitely notched behind subapical tooth; sides of mesosternal cavity declivous in single plane
ď	Antennae in both sexes definitely failing to attain apex of hind
э.	prothoracic angles
	Antennae relatively longer, those of male exceeding hind pro-
	thoracic angles by nearly half length of 11th segment (Fiji)
	zimmermani Van Zwal.
б.	Shiny black above: pubescence on upper surface black; size 10-12
	mm. (Solomons)nigripilis Van Zwal. Upper surface dark brown; pubescence brownish or grey; size not
	Upper surface dark brown; pubescence brownish or grey; size not
	exceeding 10 mm., even in female (Solomons)
7	compactus Van Zwal.
7.	Elytra greenish metallic (Marquesas)aenescens (Blair)
	Elytra greenish metallic (Marquesas)aenescens (Blair) Elytra not at all metallic
7. 8.	Elytra greenish metallic (Marquesas)
8.	Elytra greenish metallic (Marquesas)
8.	Elytra greenish metallic (Marquesas)
8. 9.	Elytra greenish metallic (Marquesas)
8. 9. 10.	Elytra greenish metallic (Marquesas)

Simodactylus cinnamomeus (Boisduval)

A new record from the Australs: Raivavae, viii. 14. 1934, 1,245 feet, Scirpus clump (E. C. Zimmerman); Bishop Museum collection. Also a new record from the Bismarck Archipelago: New Britain, Bainings, iii. 1941 (J. L. Froggatt) C 2723; British Museum collection.

Simodactylus acutus Van Zwaluwenburg

Known from Taveuni and Viti Levu; a new Fiji record: Munia (Lau Archipelago), viii. 3. 1938, beating shrubs, 800-900 feet (E. C. Zimmerman).

Simodactylus tasmani Candèze

A new record from Fiji: Mango (Lau Archipelago), 1 mile south of Marona, viii. 14. 1938, beating shrubs, 200-300 feet (E. C. Zimmerman).

Conoderus pallipes (Eschscholtz)

One of the most widely spread species in Oceania. New records: ROTUMA, Oinata, viii. 23. 1938 (Dr. Harold St. John); from Fiji Vanua Mbalavu (Lau Archipelago), Loma Loma, viii. 5. 1938, 200-500 feet (E. C. Zimmerman). Rotuma, with its few satellite islets, although politically part of the Fiji group, is geographically distinct.

Megapenthes porticulata, new species

6.9 mm. long. Generally yellowish brown; head fuscous for the most part, with sides and anterior part of front yellowish; antennae dark brown; pronotum with irregular fuscous suffusions on disc, a well-defined blackish spot on either side behind the middle and another toward the sides before the middle. Elytra with a basal blackish pattern on intervals 2 to 4, projecting farthest rearward along the 4th interval; this pattern is connected along the suture with another of the same color at about the middle of the elytral length, covering intervals 2 to 7 and narrowing irregularly laterad; the sutural interval blackish for its entire length, but the color much reduced toward the apex. Body beneath irregularly dark brown; legs yellowish brown. Pubescence short; light brown.

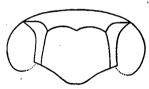


Fig. 2. Megapenthes porticulata n. sp. Front view of head, showing carination.

Head rather coarsely, closely and evenly punctate; vertex sharply differentiated from the rest of the head by a biarched carina which, on either side, connects above with a short carina arching above the eye, and below, with an oblique carina connecting anteriorly with the frontal margin (see figure 2); the lower middle area, enclosed within the lateral carinae, flattened; frontal margin at middle sharply rounded and strongly depressed. Antennae submoniliform, exceeding hind prothoracic angles by a small fraction of the length of the 11th segment; 3rd segment twice as long as 2nd, the two together nearly as long as 4th, but narrower; 5-10 of equal width but progressively decreasing in length; 11th slightly longer than 10th, broadly rounded apically.

Prothorax longer than wide, sides diverging slightly from rear to anterior margin, its width at anterior third slightly greater than at base of hind angles; pronotum moderately convex, punctation fairly coarse, dense, finer behind; sharply canaliculate medianly at base, faintly impressed along median line to about middle; hind angles convergent at tip, with a single sharp carina parallel with body axis. Sides of mesosternal cavity moderately inclined in a single plane; mucro nearly straight, sloping upward just behind fore coxae.

Scutellum elongate triangular; convex; rather abruptly inclined; densely, finely punctulate. Elytra at base narrower than hind angles of prothorax; sides subparallel to about middle, thence gradually narrowed to the conjointly rounded apices. Striae moderately impressed, the punctures rather coarse and deep, except apically; intervals finely punctulate,

subconvex toward base.

Described from a holotype of undetermined sex: FIJI, Ovalau, Thawathi, vii. 12. 1938, beating, 600-900 feet (E. C. Zimmerman). This species is remarkable for the biarched carina traversing the front of the head.

Megapenthes levuensis, new species

About 3.7 mm. long. Slender; pronotum shiny. Head and pronotum black, with hind angles of the latter yellowish white; antennae rufous on basal 3 segments, darker red on segments 4 to 8, and the apical 3 segments again lighter red; scutellum black; elytra reddish brown with sutural and lateral margins blackish. Body beneath reddish brown with propleura blackish (their hind angles yellowish); legs yellowish. Pubescence fine, semi-erect; generally brownish with that on darker areas of pronotum darker; that along sutural and lateral margins of elytra almost white.

Head with a sharp median carina which fails to attain the pronotum, its prominence emphasized by the concavity of the anterior portion of the front; another fine, less prominent carina on either side following the inner margin of the eye. Frontal margin subconically rounded, reflexed on sides. Antennae serrate from 4th segment on; exceeding hind prothoracic angles by slightly more than length of last two segments; prominently pubescent; medianly carinate along outer face of segments 3 to 9; 3rd segment about twice length of 2nd, two-thirds length of 4th, but narrower; 2nd and 3rd together nearly as long as 4th; 11th longer than 10th.

Prothorax longer than wide; sides subparallel to about middle, thence gently narrowed to anterior margin. Pronotum strongly convex; evenly, simply, rather finely punctate, the punctation finer and obsolescent towards the base; faintly impressed medianly on basal third. Hind angles directed straight backward, sides subparallel; so vaguely unicarinate as to be almost without carina. Propleura finely, sparsely punctate; prosternum more closely punctate.

Scutellum triangular; finely punctulate; strongly convex. Elytra at base narrower than hind prothoracic angles; sides gradually narrowed to posterior two-hirds, thence more sharply narrowed to the conjointly rounded apices. Striae with deep, relatively coarse, round punctures; intervals convex, rugose and finely punctulate. Punctation of abdomen

uniform, coarser than on prosternum.

Described from a holotype (probably a male): FIJI, Viti Levu, belt road 45-50 miles west of Suva, vii. 26. 1938, beating shrubs (E. C. Zimmerman). Another specimen, unfortunately damaged after reaching me, also from Viti Levu, was collected by Mr. E. H. Bryan, Jr., at Colo-i-Suva, vi. 28. 1924; it measures about 3.5 mm. in length.

Megapenthes parvus, new species

4.5 mm. long. Head and pronotum chestnut, with hind angles of latter somewhat lighter brown; antennae brown, the 3 basal segments and the distal part of the 11th, lighter brown; elytra rufous, with a blackish stripe on 1st and 2nd intervals along suture to about middle, and an ill-defined subtriangular blackish area on the lateral margin which, laterad, occupies the posterior two-thirds of the basal half of the wing-cover, and mediad attains to about the 5th interval, where it becomes vague. Body beneath generally dark rufous with prosternum, elytral epipleura and last abdominal segment, lighter rufous. Legs yellowish. Pubescence semi-erect; coarser on sides of pronotum than elsewhere; pale on sides of pronotum and over most of the elytral surface, brown to black on pronotal disc and on darker areas on elytra.

Front flat; anterior margin sharply rounded, not reflexed; a sharp median carina on lower half, and, on either side, following the inner margin of the eye, a blunt, keel-like prominence which becomes vague posteriorly; punctation fine anteriorly, somewhat coarser behind. Antennae exceeding hind prothoracic angles by about the length of the last segment; weakly serrate from 4th segment on; 3rd segment half as long again as 2nd, the two together shorter than 4th; middle segments with vague median

carina on outer face.

Prothorax longer than wide; sides converging gently from tips of hind angles to about anterior third, thence more strongly narrowed to anterior margin. Pronotum moderately convex; punctation fine, close, subconfluent toward sides; medianly, shallowly channelled for almost its entire length; basal declivity moderate; hind angles acute, very finely unicarinate.

Elytra at base as wide as hind prothoracic angles; sides subparallel to about middle, thence gently narrowed to the conjointly rounded apices; slightly divergent from sutural line near apex; striae with relatively coarse punctures, well-impressed; intervals subconvex basally; finely punctulate.

Described from a holotype of undetermined sex: FIJI, Tuvutha (Lau Archipelago), ix. 11. 1924 (E. H. Bryan, Jr.). The specimen has been patched with balsam, so that it is impossible to be sure of certain details of scutellum and mucro.

The sides of the pronotum and the greater part of the elytral area are conspicuously covered with whitish pubescence. The lateral keel-like ridges bordering the eyes are hardly well enough marked to be termed carinae.

Megapenthes insularis, new species

Females, 3.6-4.0 mm. long; males, 3.3-4.0 mm. long. Slender; dull. Head and eyes black; antennae blackish with 3 basal segments brown to rufous; dorsum reddish to yellowish brown, a black median band (vague in the paratype female) widened behind the middle, then narrowed again, extends the entire length of the pronotum; scutellum black; a longitudinal black stripe on each elytron occupying the sutural interval, but narrowing posteriorly, sometimes disappearing before the apex, sometimes continuing to the very tip; also on the elytra, a lateral black stripe on the two outer intervals, not attaining the humerus, and widening briefly behind the middle to occupy the three outer intervals. Underside of body yellowish brown with sometimes irregular blackish areas on metasternum and on basal abdominal sternites. Legs yellowish brown. Pubescence light brown; very fine, short, inconspicuous.

Front flattened anteriorly, convex on vertex; anterior margin broadly rounded, the edge sometimes slightly reflexed; punctation fine and close;

lateral margin along inner margin of the eye, subcarinate. Antennae feebly serrate from 4th segment; failing to attain tips of hind prothoracic angles by about half the length of terminal segment (female), or exceeding hind angles by about half the length of that segment (male); segments 2 and 3 subglobular, equal in length, together shorter than 4th, which exceeds

in length any one of the succeeding segments.

Prothorax longer than wide, even in female. Sides (female) gently, subarcuately narrowed from posterior third to anterior sixth, thence more sharply to the anterior margin, hind angles parallel or even slightly convergent apically; or (male) sides narrowed sharply from posterior third to anterior sixth, thence even more sharply to anterior margin, the hind angles flaring subarcuately from the general outline of the sides, subarallel behind. Pronotum moderately convex in female, somewhat less so in male; punctation moderately coarse, close-set (less so posteriorly); basal declivity with a sharply-impressed median canaliculation. Hind angles wide, acute at tip, sharply unicarinate, the carina meeting the lateral margin of the angle well before the apex. Mucro deeply channeled between fore coxae, slightly upturned behind them, thence straight to the acute apex; mesosternal cavity gently declivous at base, the anterior two-thirds horizontal. Hind coxae rounded at their widest point, not acutely pointed.

Scutellum elongate, triangular; sharply declivous; flattened posteriorly; finely punctulate. Elytra at base narrower than hind prothoracic angles; sides subparallel to about middle (female), or narrowed to about posterior third (male), thence more sharply to apex; tips separately rounded; striae coarse, deeply punctate; intervals convex toward base.

Described from the following specimens taken by E. C. Zimmerman on *Viti Levu*, FIJI: a holotype female, ridge west of Nandarivatu, ix. 9. 1938, 2,600-3,000 feet, beating shrubbery; an allotype male, Navai Mill near Nandarivatu, ix. 17. 1938, 2,500 feet, beating; a paratype female with the same data as the holotype, and a paratype male with the same data as the allotype. The paratypes are in the collection of the H.S.P.A. Experiment Station.

The subcarinate lateral ridge on the head following the inner margin of the eye is not so well marked as in M. levuensis, but is somewhat more obvious than in M. parvus.

Megapenthes tenuis, new species

Females, 5.5-7.0 mm. long; males, 4.25-5.0 mm. long. Elongate; males especially slender. Generally fuscous on upper surface, with the following areas yellowish-brown: (1) antennae; (2) on pronotum: anterior and hind angles and sometimes front and hind margins, as well as a narrow median stripe which may be faintly indicated basally or well-marked for nearly the entire length of the pronotum; (3) median part of the scutellum; (4) on elytra: an area on basal half which may or may not attain the lateral margin, and which attains the anterior margin along intervals 4 and 5 (female), or not (male), its hind margin slanting obliquely back laterad; on about distal three-eighths another area extending to apex (female) or only vaguely so, or plainly failing to reach the tip (male). The anterior yellowish area on the elytra fails to attain the sutural margin by the width of the first interval; the posterior one along its posterior half usually attains the suture. Legs flavous; underside of body generally light fuscous, with propleural areas yellowish. Pubescence on upper surface fine, fulvous, with prominent, semierect lighter-colored

hairs, especially on elytra; pubescence on underside fulvous, shorter and

somewhat finer than on dorsum.

Head gently and evenly convex on vertex, flattened or faintly concave anteriorly; frontal margin evenly rounded, slightly reflexed; punctation finely umbilicate, shallow, dense. Antennae loosely serrate, exceeding hind prothoracic angles by about 2 segments (male) or by 1 (female); 2nd segment short, 3rd about half as long again as 2nd, the two together much shorter than 4th; 4th nearly as long as 5th and 6th together (female) or about two-thirds their combined length (male).

Prothorax longer than wide, even in female; narrowest at anterior margin; sides almost straight in males, diverging backward to tips of hind angles; in the female the sides are faintly arcuate near middle, the hind angles subparallel. Pronotum moderately convex; finely, shallowly punctate; basal declivity with fine median impressed line. Hind angles wide, blunt, finely unicarinate. Propleura concave along anterior half, coarsely, sparsely punctate; almost impunctate posteriorly. Mucro sharply upturned behind fore coxae, thence extending almost straight backward; apex acute. Sides of mesosternal cavity posteriorly prominent; moderately inclined; undulate in profile.

Scutellum convex; subcordate; sharply inclined. Elytra moderately convex; narrower at base than hind prothoracic angles; sides subparallel to about middle (female) or narrowed from humeri to beyond middle (male), thence narrowed more abruptly to the apex. Striation fine, lightly impressed; intervals rather coarsely punctate, convex toward base. Hind margin of posterior coxal plate angulately rounded at widest point.

Described from the following specimens collected by E. C. Zimmerman on *Viti Levu*, FIJI: a holotype male, Nandarivatu, at light, 2,700 feet, ix. 11. 1938; an allotype female, ridge north of Vatuthero, Nandarivatu, 2,600-3,000 feet, beating shrubbery, ix. 8. 1938; a paratype male, Navai Mill near Nandarivatu, beating shrubbery, 2,500 feet, ix. 18. 1938; and a paratype female, Nandarivatu, at light, 2,900 feet, ix. 6. 1938. The paratypes are in the collection of the H.S.P.A. Experiment Station.

The aedeagus of the male has the tips of the lateral lobes slender and simple. The last sternite of the male is deeply and widely impressed on either side of the middle line. Variation of the yellowishbrown pattern on the elytra is probably even greater in a large series than is suggested by the above description.

KEY TO FIJI SPECIES OF MEGAPENTHES

 3. Antennal segments 2 and 3 very small, subequal, together much shorter than 4th; elytra rufous with suture and sides blackish......insularis Van Zwal

Pacificola vitiensis Van Zwaluwenburg

A new Fiji record: Kandavu, Yawi, iv. 28. 1941 (Noel Krauss). Another record, also new: ROTUMA, vii-viii. 1938 (Dr. Harold St. John); Bishop Museum collection. The Rotuma specimen has the pronotum predominantly yellowish brown instead of dark brown as in the type specimen of vitiensis, the darker coloration being limited to an indefinite area on the anterior half. In both the Rotuma and Kandavu specimens the canaliculation on the base of the pronotum is less pronounced than in the type.

Pacificola hermosa, new species

Male, 4.0 mm. long. Subnitid. Head dark yellowish brown; antennae with 1st segment light brown, 2nd and 3rd somewhat darker, from 4th on, blackish. Pronotum castaneous with median part of anterior margin yellowish brown and hind angles flavous. Scutellum blackish. Elytra light yellowish brown, a longitudinal blackish band occupying the interval either side of the suture to about the middle, then widening to cover vaguely the first 3 or 4 intervals for about one-eighth their length; it then continues backward along the 1st and 2nd intervals nearly to the apex, with a very brief, vague widening at about the posterior five-eighths. Prosternum yellowish brown; remainder of underside darker brown. Legs light yellowish brown. Pubescence yellowish; short, fine.

Front gently convex; finely, evenly punctulate; anterior margin evenly rounded. Antennae feebly serrate from 4th segment on; short, failing to attain hind prothoracic angles by about half the length of the terminal segment; 2nd segment subglobular; 3rd more slender and about half as long again as 2nd, the two together subequal in length to 4th, which is

longer than any of the succeeding ones.

Prothorax slightly longer than wide; sides subparallel on basal third, thence evenly narrowed to anterior margin. Pronotum strongly convex in both dimensions; finely, evenly punctate on disc, more closely toward sides, and somewhat more sparsely toward base. Hind angles stout, blunt, directed almost straight backward, subparallel; vaguely unicarinate, the carina reaching the lateral margin before the apex. Basal declivity abrupt; median canaliculation brief, sharply impressed. Propleura nearly flat, not channeled laterally; punctation coarse, sparse, lightly impressed. Prosternum more densely punctate than propleura. Mucro gently upcurved behind fore coxae, thence subhorizontal; sides of mesosternal cavity gently declivous in a single plane.

Scutellum subtriangular; convex on disc; rather strongly declivous. Elytra at base as wide as hind prothoracic angles; sides subparallel to about middle, thence gently narrowed to the conjointly rounded apices. Striae finely punctate, well-impressed; intervals convex and subgranulate on basal half. Last segment of hind tarsi subequal in length to 3rd.

Described from a holotype male: MARQUESAS, Hivaoa, Kaava Ridge, i. 6.1932, 2,820 feet, beating on Cheirodendron sp. (Le-Bronnec).

In the key to species of Pacificola (B. P. Bishop Museum Bull. 98, p. 134, 1932) this species runs to P. fasciata (known only from Uapou). The present species is lighter in color than fasciata and has the elytral pattern more clearly defined. More important is the somewhat finer punctation on the disc of the pronotum of hermosa, and the very definite, sharply impressed canaliculation on its pronotal basal declivity.

Anchastus vitiensis Van Zwaluwenburg

New records from Fiji: Vanua Mbalavu (Lau Archipelago), Loma Loma, viii. 5. 1938, beating shrubs, 200-500 feet (E. C. Zimmerman); Moala, Vunuka, viii. 23. 1938, beating shrubs, 100 feet (E. C. Zimmerman).

Anchastus maculatus, new species

Males, 3.5-4.0 mm. long; females, 3.8-5.0 mm. long. Males slender, females fairly robust. Shiny; black with hind angles of prothorax flavous to reddish; anterior margin and sometimes anterior part of pronotum dark rufous; each elytron with an elongate, submedian flavous spot on anterior half, and another, shorter, similar marking behind the middle (maculation of elytra variable, especially in females; the two submedian markings in extreme cases coalesce to form a vitta about two-thirds the length of the wingcovers). Antennae black to dark brown, 1st segment sometimes reddish. Underside of body black or fuscous with anterior part of pronotum flavous to reddish. Legs light yellowish brown. Pubescence fine, semierect, somewhat coarser on elytra than on pronotum; fulvous (on darker areas sometimes blackish).

Front convex; anterior margin rounded; punctation fine, dense, uniform. Antennae feebly serrate, elongate, exceeding hind prothoracic angles by slightly more than 3 segments in the male, by 2 segments in the female; 3rd segment half as long again as 2nd, the two together longer than 4th;

4-10 subequal in length.

Prothorax about as long as wide (male) or slightly wider than long (female); sides curved from base of hind angles to about middle, thence strongly narrowed to anterior margin (male), or widely arcuate from base of hind angles to anterior margin (female). Pronotum moderately convex (more strongly so in female); punctation finely subumbilicate, uniform, finer and obsolescent basally. Hind angles flat, without carina, definitely divergent and slender (male), or less strongly divergent and more robust (female). Basal declivity moderate, not channeled medianly; basal sulci short and extremely fine. Propleura coarsely punctate anteriorly; impunctate along inner portion of basal half or two-thirds. Mucro sharply upcurved behind fore coxae; sides of mesosternal cavity strongly declivous.

Scutellum feebly convex; sides subparallel, posteriorly rounded. Elytra to middle, thence more strongly to apex (male), or subparallel to middle, thence narrowed to apex (female). Apices conjointly rounded, diverging slightly from sutural line at extreme tip. Finely punctate-striate, punctures coarser toward base; intervals finely punctulate, convex basally. Hind coxal plates strongly, subrectangularly widened on inner half, the outer angle rounded, not acute. First segment of hind tarsi longer than

segments 2-5 together.

Described from the following specimens collected by E. C. Zimmerman on *Viti Levu*, FIJI: a holotype female, Nandarivatu, ix. 7. 1938, 2,700 feet, beating; an allotype male, Navai Mill near Nandarivatu, ix. 17. 1938, 2,500 feet, beating; two paratype females, Navai Mill, Nandarivatu, ix. 7. 1938, 2,700 feet, beating shrubbery; paratype female, Navai Mill near Nandarivatu, ix. 17. 1938, 2,500 feet, beating shrubbery; and a paratype male, Navai Mill, ix. 7. 1938, 2,700 feet, beating shrubbery; and a paratype male, Navai Mill near Nandarivatu, ix. 15. 1938, 2,500 feet, beating shrubbery. A paratype of each sex is in the H.S.P.A. Experiment Station collection.

One of the paratype females is considerably larger (5.0 mm. long) than the others, but in other respects it conforms so closely with the others, that, having been collected under the same circumstances as the rest, its inclusion in the series seems proper.

In all of the females the elytral markings, which are clearly separated in the three males, are more or less coalescent; in the holotype and in one female paratype there is a vague dark area separating the two flavous markings, but in the other two females definite coalescence has resulted in a single elongate vitta extending about two-thirds the length of each elytron.

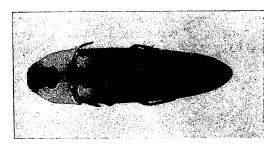


Fig. 3. Agonischius pulcher n. sp. Paratype female.

Neodiploconus nitidus (Schwarz)

The type localities are New Britain and Nusa Island (off New Ireland) in the Bismarcks. The following record is new: *New Ireland*, Namatanai, vi. 27. 1939 (G. F. Gee) C 2104; British Museum collection.

Melanotus guambatae Van Zwaluwenburg

A new record for this species: New Ireland, Namatanai, ix. 7. 1940, C 2382, and iv. 10. 1940 C 2529, both collected by G. F. Gee; British Museum collection. Previously recorded from Guadalcanal, Tulagi and Bougainville in the Solomons, and from New Britain.

Agonischius pulcher, new species (figure 3)

Females, 8.75-9.0 mm. long. Nitid; entirely black save for: (1) prothorax which is orange-red with a dorsal median black band extending

from the anterior margin backward to about the posterior fourth, narrowed at its middle, and more or less pointed behind; prosternum entirely orange-yellow except for coxal margins and distal part of mucro; and (2) a short basal orange-yellow area on each elytron, infuscate posteriorly and failing to attain either the suture or the humerus. Pubescence coarse, erect, black throughout except on hind prothoracic angles and along anterior margin of the elytra, where it is yellowish.

Front convex above, flattened on anterior half; punctation moderately fine, dense, uniform. Antennae strongly serrate from 4th segment on; exceeding hind angles of prothorax by about one segment; 3rd nearly twice as long as 2nd, the two together slightly longer than 4th; 4-10 triangular,

becoming progressively broader distally; 11th oval.

Prothorax wider than long; sides subparallel from hind angles to anterior third, thence arcuately narrowed to anterior margin. Pronotum strongly convex; punctation anteriorly as on head, finer and sparser toward rear; shallowly depressed medianly at base. Hind angles subparallel, broad, convex, vaguely unicarinate. Mucro moderately upcurved before hind coxae.

Scutellum elongate oval; feebly convex. Elytra at base slightly narrower than prothorax; gradually narrowed to beyond middle, thence more rapidly to the conjointly rounded apices; strial punctures feeble, vague, especially distally; intervals flat.

Described from a holotype female: BISMARCK ARCHI-PELAGO, New Britain, iv. 11. 1941, on blossoms of Melaleuca sp. (J. L. Froggatt) C 2662; and one paratype female, with same data and collection number. The holotype is in the British Museum collection, the paratype in the H.S.P.A. Experiment Station collection.

The Insects of Canton Island

BY R. H. VAN ZWALUWENBURG Experiment Station, H.S.P.A., Honolulu

(Presented at the meeting of May 11, 1942)

The use of Canton Island as a commercial airplane station during the past two years affords an opportunity to follow the changes that occur in the fauna of a small, isolated atoll when it is suddenly exposed to sustained contact with the outside world. Until very recently visitors to the island have been comparatively few: occasional castaways; a labor force which exploited the guano deposits for a year or more in the 1880's; a brief stay by a landing party to set out coconuts in 1916; and now and then short visits by naval parties or scientific expeditions. Continuous occupation of the island (by a British radio officer) dates from the summer of 1937.

In 1939 the Pan American Airways Company began construction of a base on Canton in preparation for regular service between Honolulu and Auckland. By the summer of 1940 Clipper planes

Proc. Haw. Ent. Soc., Vol. XI, No. 3, August, 1943.