OCCASIONAL PAPERS
OF
BERNICE P. BISHOP MUSEUM
HONOLULU, HAWAII

Volume XVI December 10, 1940 Number 6

Coleoptera from the Caroline Islands

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The collection upon which this paper is based was sent to me for determination by Elwood C. Zimmerman, Entomologist of Bernice P. Bishop Museum. I have included a few species from the Truk Islands which are supposed to be cotypes of species described by Fairmaire. They were received by the British Museum from the Godeffroy Museum in 1881, but have never been recorded. Some of the species, indeed, seem never to have been described; at least, I have been unable to find any descriptions. I have taken this opportunity to bring together such scattered records from the Caroline Islands as have come to my notice, but it is perhaps too much to hope that none has escaped me.

The holotypes of the new species, unless otherwise designated, are in Bishop Museum. Available paratypes have been generously presented to the British Museum.

RHYSODIDAE

Clinidium sulcicolle Grouvelle, Rev. d'Ent. 22: 136, 1903 (Hogolu [Truk] Islands).

HYDROPHILIDAE

Dactylosternum superficiale Knisch, Treubia 6: 199, 1925 (Ponape Island.)

HELODIDAE

Cyphon carolinense, new species.

Elliptical, testaceous, moderately nitid, yet fairly densely punctate and pubescent. Antennae with basal joint expanded, carinate along anterior edge, second

and third subequal in length, but third much more slender, together longer than fourth. Prothorax nearly 3 times as wide as median length, anterior angles produced, posterior subrectangular; surface finely, rather remotely punctate. Elytra with no trace of costae, much more strongly punctate than thorax, each puncture with a long semi-erect hair, some of these more erect than the others and about twice as long. Posterior margin of first and second abdominal segments feebly sinuate in middle, fifth segment with shallow median impression. (Male ?). Length, 3 mm.

Ponape Island, March 14, 1936, one example (Z. Ono).

RHIPICERIDAE

Callirhipis devasa Fairmaire, 1877: 153 [*derasa* in Junk, Col. Cat. (81): 2; also Van Emden, Mitt. Zool. St. Inst. u. Zool. Mus. Hamburg, **42**: 33, 1925].

Male: robust, dark chocolate brown, densely pubescent, thorax with a deep fovea on each side of middle, disk rather finely but unevenly punctate with moderately long flavous pubescence; elytra with suture and 4 costae on each elytron raised, the two outermost incomplete; puncturation double; consisting of rather deep round punctures, somewhat uneven in size and distribution, the interstices finely puncto-granulate; the pubescence lying in different directions, giving a marbled effect, forming irregular short transverse and oblique dark streaks. Antennae paler with long lamellae reaching to middle of elytra. Length, 21 mm.

Peloliu [Peleliu] Island, 1 example (Z. Ono), allotype.

From the above description it will be seen that the male differs widely in appearance from the shining glabrous female described from the Pelew [Palau] Islands [not Pelen as in Junk, Col. Cat. (81)] but the species in both sexes bears a remarkable similarity to *C. philiberti* Fairmaire from the Seychelles Islands. The male of the latter differs in little but the longer antennae, which reach to about the base of the last abdominal segment, while the female would fit Fairmaire's description of *C. devasa.*

Callirhipis (**Callirhipis** s. s. Van Emden, 1931) **carolinensis,** new species (fig. 1, *a*).

Male: reddish brown, antennae paler, reaching about to hind femora; thorax without discal foveae, moderately densely but unevenly punctate, shining between punctures, not concealed by the long but not dense clothing of hairs; elytra with suture and 4 raised lines on each, bordered by an indistinct line of more closely placed punctures on each side, the two outermost most distinct behind the middle, intervals irregularly punctate, punctures 4-5 across interval; pubescence as on thorax. Tarsi slender, compressed, claw joint as long as the rest together. Length, 11-13 mm.

Ponape, Kolonie, Feb. 2, 1936, 1 example (Z. Ono), holotype.

Peleliu, clubhouse, April 24, 1936, 1 example (Y. Kondo).

Distinct in its non-foveate thorax, sparse pubescence and rather densely punctate intervals between elytral carinae.

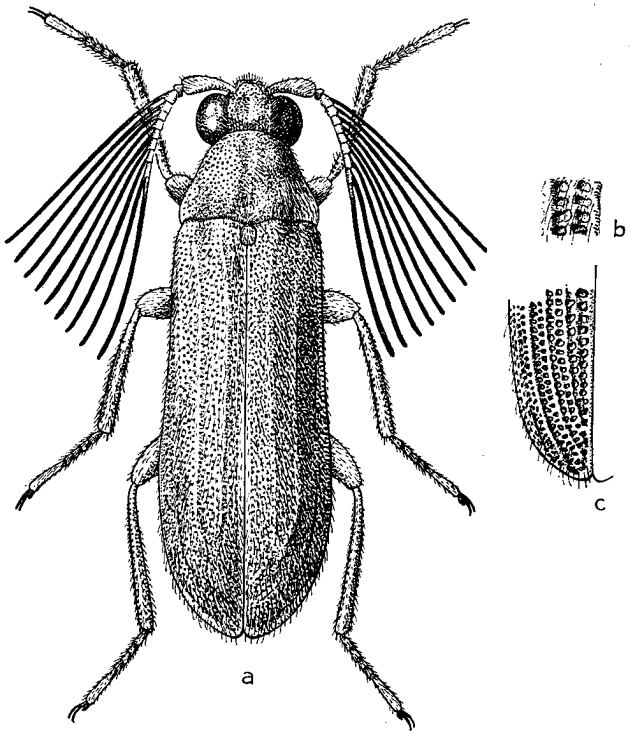

FIGURE 1.—**a,** *Callirhipis carolinensis*; **b,** *C. onoi,* elytral punctures; **c,** *C. onoi,* tip of left elytron.

Callirhipis (Parennometes) onoi, new species (fig. 1, *b, c*).

Male: elongate, reddish brown, rather sparsely clothed with reddish hairs. Antennae reaching nearly to middle of elytra, fourth joint with shaft slightly transverse (i. e. apical end wider than outer length), fifth about as long as wide at apex, thence increasing gradually in length to tenth. Thorax strongly and densely punctate, but punctures not confluent; disk with a deep impression on each side produced to base, a median basal impression between these, from which a shallow sulcus runs forward. Elytra each with four costae which become obsolete toward base; intervals with large deep flat-bottomed punctures which tend to become transverse and biseriately arranged behind middle; interspaces with scattered setiferous granules, especially at margins of pits. Tarsi slender, the claw joint of all tarsi as long as the rest together. Length, 13 mm.; length of antennal lamella, 5.5 mm.

Palau Islands, Melekeiok, March 7, 1936, 1 example (Z. Ono), holotype.

Koror Island, March 9, 1936, 1 example.

Very similar to *C. carolinensis* in general appearance but differing strikingly in elytral puncturation (subgeneric character, see Van Emden, 1931, Ent. Blätt. **27**: 51). Closely allied to *C. piceiventris* Fairmaire (Solomon Islands), but the latter has the elytral pits more regularly biseriate, tarsi with claw joint longer than the rest together.

CLERIDAE

Cylidrus cyaneus Fabricius, Mantissa Ins. **1**: 126, 1787 (India).

Cylidrus vescoi Fairmaire, Rev. Mag. Zool.: 361, 1849 (Fiji).

Ruk [Truk] Islands, one example from the Godeffroy Museum in the British Museum. This species has a wide distribution in the Indo-Malayan and Melanesian regions and is a predator upon Bostrychidae.

LAMPYRIDAE

Atyphella carolinae E. Olivier, Bull. Soc. Ent. France: 173, 1911.

Palau Islands, Anguar Island, April 16, 1936, several examples (Y. Kondo).

Yap Island: Balabat, May 16, 1936 (Z. Ono).

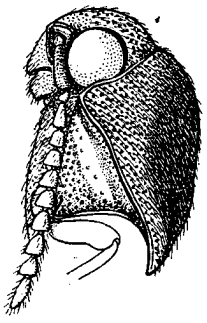

FIGURE 2.—*Maelodrus carolinensis.*

MELASIDAE

Maelodrus carolinensis, new species (fig. 2).

Female: black; underside, legs and antennae reddish; clypeus triangular, antennal cavities almost contiguous; antennae stout, reaching but little beyond basal angles of thorax, third joint twice as long as second, nearly as long as next

two together, 5-10 increasing slightly in length, 11 longer. Prothorax but little wider than median length, anterior margin bordered only behind eyes, disk strongly and closely punctate; antennary furrows superficial, impunctate, not quite marginal, a narrow band of fine granules between them and the lateral carina, prothoracic epimera subtriangular, inner portion strongly, not very closely, punctate. Elytra tapering slightly from shoulders, declivous at base, striae fairly well defined, their punctures becoming larger and deeper laterally and toward apex; intervals more finely but not closely punctate, tending to form transverse rows of 3 or 4 punctures. Fifth ventral segment entire, rounded (subacute) at apex. Metacoxae broadly angulate toward middle line, thence strongly narrowed to sides; tarsi rather short, fourth joint cordiform, excavate above for reception of fifth, basal joint of hind tarsi nearly as long as the rest together. Length, 6 mm.

Kusaie Island, Mount Fenkol [Crozer], Jan. 28, 1936, 1 example (Z. Ono).

It is with some doubt that I place the species in this genus, the antennary sulci being shallower and not quite marginal, the prothorax not longer than wide, and the last ventral segment not emarginate at apex. In the distinctly striate elytra with large deep punctures toward the apex it also differs from any of its allies. From *Porraulacus* it differs further in the antennary sulci being much more nearly marginal, and the posterior coxae strongly expanded inward.

BUPRESTIDAE

Chrysodema (Pseudochrysodema) badenii Saunders, Cist. Ent. **1**: 223, 1874.

Yap Island, May 21, 1936, 1 example (Z. Ono). Type locality.

Chrysodema (Pseudochrysodema) schmeltzii Saunders, Cist. Ent. **1**: 224, 1874 (Palau Islands).

Cyphogastra auripennis Saunders, Ent. Soc. London, Trans.: 432, pl. 28, fig. 2, 1867 (Guam).

Cyphogastra guamensis Kerremans, Ann. Soc. Ent. Belg. **55**: 294, 1911 (Guam).

variety **picata** Kerremans, Ann. Soc. Ent. France **61**: 23, 1892 (Guam, "Iles Mariannes").

subspecies **longueti** Théry, Soc. Ent. Belg., Ann. Bull. **68**: 494, 1926 (Guam).

Cyphogastra auripennis Kerremans, Ent. Soc. Belg. **10**: 171, 1909 (not Saunders).

Kerremans, 1910, gives the Caroline Islands (from Théry collection) as an additional locality for *C. auripennis* Saunders; and Oben-

berger, 1926, gives the Caroline Islands as the sole locality for this species. In reply to my enquiry for more precise data as to which form of the species occurred in the Caroline Islands, and if possible a more precise locality, Théry very kindly informs me that he has specimens of the first named from "Guam, Iles Mariannes, and Iles Carolines", but without further indication of locality.

Agrilus ornatus Deyrolle, Ann. Soc. Ent. Belg. 8: 155, 1864.

Palau Islands: Ngeremlengui, one female taken by Z. Ono, April 23, 1936.

This species is rather widely distributed from the Philippines to the Solomons, including North Celebes and the Aru Islands.

TENEBRIONIDAE

Mesomorphus villiger Blanchard, Voy. Pöle Sud 4: 154, pl. 10, fig. 15, 1853.

Palau Islands: Melekeiok, April 6, 1936; Ngeremlengui, Galmiskan, April 23, 1936, one example from each locality (Z. Ono).

Peleliu Islands, 1 example (Z. Ono); clubhouse, May 1, 1936, 1 example (Y. Kondo).

Widely distributed in the Indo-Malayan and Papuan regions, extending to Australia, Hawaii, Samoa, and Fiji, but apparently not in the Society or Marquesas Islands.

Diphyrhynchus carolinensis, new species.

Ovate, bronze black, subnitid, upper surface finely and not closely punctured, the interspaces finely alutaceous. Striae of elytra indicated only by lines of rather larger punctures except toward apex, where they become feebly impressed, the seventh interval there bluntly costiform and continued almost to apex. Length, 5 mm.

Peleliu Island, Ngemelis, May 2, 1936, 1 specimen (Y. Kondo).

From *D. chalceus* Fairmaire, from Fiji, Tonga, Wallis Island [Uvea], and other Pacific islands, it differs in its blacker color and indistinct elytral striae. *D. ovalis* Bates, from New Caledonia, is also similar, but is smaller and more nitid, the alutaceous sculpture much less developed and seventh interval scarcely prominent toward apex.

The genus is pre-eminently Melanesian extending into Australia, though one species is known from Singapore and Ceylon and another from the Seychelles Islands. The extension to New Zealand given for *D. chalceus* in Gebien's Catalogue (1911) I am unable to confirm.

Bradymerus carolinensis, new species (fig. 3).

Moderately slender, brownish. Cheeks narrow, not prominent laterally; antennae short, with six-jointed club; thorax about twice as wide as its median length, sides explanate, not crenulate, anterior angles acute, disk closely and rugosely punctured, with median furrow subobsolete, base bisinuate, marginate; elytra with carinae of intervals 3, 5, 7, and 8 complete, the two latter uniting and running to apex, carinae of intervals 1, except at base, 2, 4, and 6 broken into lines of granules, frequently confluent, punctures of striae large and round. Wings developed. Tibiae round, closely punctured. Length, 7 mm.

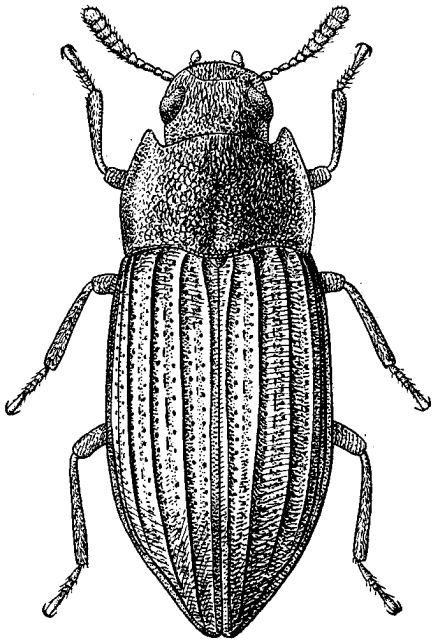

FIGURE 3.—*Bradymerus carolinensis.*

Truk Islands, Dublon Island, Dec. 22, 1935, 1 example in rotten bark (Z. Ono).

Resembles *B. granaticollis* Fairmaire from Samoa, but this has the cheeks laterally prominent beyond the eyes, the sides of the thorax crenulate and the disk more coarsely punctured.

Genus **DECHIUSTES** (BOLITOPHAGINARUM), new genus

Differs from *Scotoderus* Perroud (= *Dechius* Pascoe) in its shorter less parallel form and in the prosternal process being horizontal behind and received in a deep excavation of the mesosternum.

Genotype: *D. carolinensis,* new species.

Scotoderus costatus Fairmaire should also come into the genus, and in its more elongate form provides a connecting link with *Scotoderus*. On the other hand the new genus approaches *Apteromerus* Blair (1928) in which the prosternal process is declivous behind the coxae and the mesosternal cavity very much less developed, differences possibly consequent upon the apterous condition of that genus.

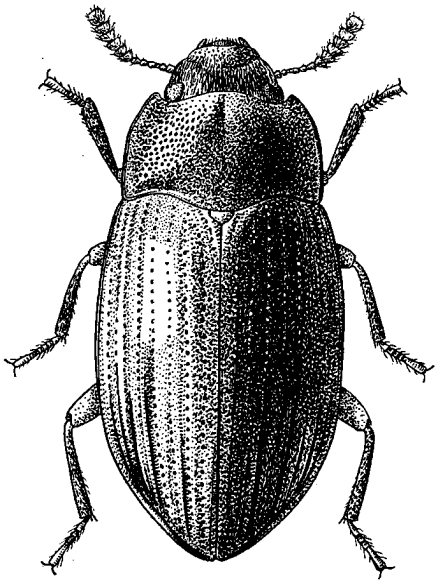

FIGURE 4.—*Dechiustes carolinensis.*

Dechiustes carolinensis, new species (fig. 4).

Shining, brownish piceous; elytra with faint bronzy luster.

Head transverse, strongly subrugosely punctate, clypeus truncate in front, the suture distinct; genae not prominent beyond eyes. Antennae rather short, reaching beyond middle of thorax, joints 6-10 transverse, 11 round. Thorax transverse, nearly twice as wide as median length, strongly but more sparsely punctured than head; sides rounded, more strongly convergent in front than behind; anterior margin bisinuate with angles prominent, a short longitudinal impression in middle; base bisinuate, marginate except in middle; with obtuse median lobe, angles rectangular. Elytra ovate, not very convex; striae with coarse punctures, but not incised; intervals, more finely punctate, convex or carinate towards apex, eighth interval forming strong carina from middle to apex; intervals 1, 3, 5, and 7 with shorter carina which fail to unite with this. Wings developed. Mentum trapezoidal, feebly carinate, fore margin rising to a point in

middle; mandibles bifid at apex. Prosternum rather finely punctate, intercoxal process rather broad, flat, horizontal behind, received in deep excavation of mesosternum; metasternum punctate, more coarsely at sides; abdomen finely and sparsely punctate. Tibiae rounded externally, densely punctate, posterior tibiae densely clothed with golden pubescence on distal half of inner side (male). Tarsi except claw joint, which is as long as the rest together, densely villose beneath. Size, 7 × 3 mm.

Ponape Island, Tamatamansakir, March 20, 1936 (holotype locality), 10 examples (S. Otomo); Tolocolme, Feb. 15, 1936, 6 examples (Z. Ono); Raitao, March 1, 1936, 1 example (Z. Ono); Kusaie Island, Mount Fenkol [Crozer], Lele, Jan. 30, 1936, 2 examples (Z. Ono).

With the facies of *Alphitobius* but differing in structure of legs, antennae, mouthparts, and so forth. The carination of the elytra differs from that of *Apteromerus convexus* Fairmaire, in which the carina of interval 5 runs to the apex, that of 3 joining it on one side and of the united seventh and ninth on the other. From this species the Caroline Islands form differs in its deeply excavate mesosternum.

The two examples from Kusaie Island are notably less black and more metallic than the specimens from Ponape, suggesting the inception of an insular race.

Heterophyllus pacificus, new species (fig. 5).

Broadly ovate, very convex, shining brownish piceous. Head small, not half as wide as base of thorax, clypeal suture impressed, antennae short, with 5-jointed club as long as the rest of the antenna. Prothorax twice as wide at base as median length, sides rounded and strongly converging from base, the latter with a rounded median lobe; disk very finely and sparsely punctate. Elytra with sides almost straight for most of their length, apex acute; lateral margin visible from above for only a short distance behind base; disk irregularly punctate, more strongly than thorax. Wings developed. Legs slender. Prosternal process elevated but blunt behind, its apex abutting against front margin of metasternum, the mesosternum being depressed in front and vertical toward base. Length, 2-2.5 mm.

Truk Islands, Dublon Island, Dec. 27, 1935, a large series from dead shelf fungus (Z. Ono).

Closely resembles *H. curtus* Fairmaire from Madagascar. The presence of this genus in the Pacific is of great interest, it being known hitherto only from Madagascar (with several species) and Africa.

Uloma cavicollis Fairmaire, Rev. Mag. Zool.: 447, 1849.

An examination of the type (male) from Uvea Island shows that Gebien, 1920, was mistaken in his determination of this species, the anterior femora are not toothed, the mentum is not flat and shining,

and the pronotal excavation does not have 4 tubercles. The species is indeed very close to, and probably not specifically distinct from *U. bituberosa* Kirsch, to which it would run in Gebien's key. In *U. cavicollis* the clypeus is uniformly swollen, in *U. bituberosa* the prominence is divided; the oblique tubercles of the prothorax have their highest point behind in *U. cavicollis,* with a small accessory tubercle on the inner side near the front margin (this is usually visible even in poorly developed individuals) ; in *U. bituberosa* the anterior end of the prominence is as high as or higher than the posterior, with no trace of this accessory tubercle, the elytral intervals are distinctly and moderately densely punctulate in *U. bituberosa,* almost laevigate in *U. cavicollis,* the mentum more broadly cordiform with shallower median impression than in *U. cavicollis,* the anterior tibiae with fewer (6) and larger teeth (7 or 8 in *U. cavicollis*). The distribution is also somewhat different—*U. cavicollis* occurs in Samoa, Tonga, and the Ellice Islands, whereas *U. bituberosa* appears to be confined to New Guinea and New Britain.

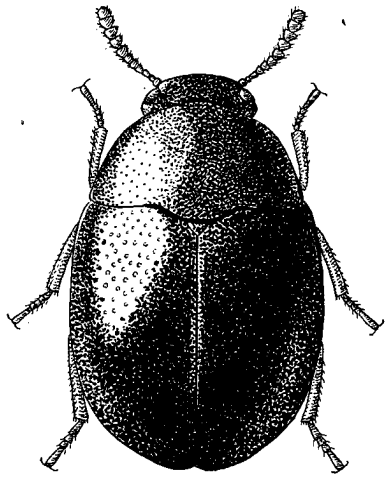

FIGURE 5.—*Heterophyllus pacificus.*

Truk Islands, Dublon Island, Dec. 22, 1935, 13 examples (Z. Ono).

Palau Islands, Melekeiok, April 6-7, 1936, 2 examples; Ngeremlengui, Galmiskan, April 23, 1936, 1 example (Z. Ono).

Uloma cavicollis ponapensis, new variety.

Blacker than the *U. cavicollis cavicollis,* with the elytral intervals flat, the striae feebly impressed so that the punctures appear more exposed and rounder.

Ponape Island, March 14, 1936 (holotype locality), 3 examples; Kolonie, Feb. 2, 1936, 1 example (Z. Ono); Tamatamansakir, March 20, 1936, 1 example.

Sciophagus pandanicola Boisduval, Voy. Astrol. Ent: 258, 1835.

Palau Islands, April 8, 1936, 1 example (Z. Ono).

Ponape Island, Kolonie, March 9, 1936, 1 example (Z. Ono).

Peleliu Island, Asias [Assias?], April 26, 1936, 1 example (Y. Kondo).

Widely distributed in the Pacific, being known from New Caledonia, Fiji, Samoa, Hawaii, Society Islands, and the Marquesas.

Toxicum quadricorne Fabricius, Syst. El. 1: 153, 1801.

Palau Islands, April 8, 25, 1936, 2 females (Z. Ono).

Truk Islands, Dublon Island, Dec. 22, 1935, 1 male, 1 female (Z. Ono).

Ponape Island, Tamatamansakir, March 20, 1936, 3 males (S. Otomo).

An Indo-Malayan species extending to the Philippine Islands, New Guinea, and the Solomon Islands.

The three males from Ponape are well-developed examples and differ from the normal in having the underside and legs dark red (not bright red as in var. *rufipes* Kirsch). The material, though inadequate for the drawing of full conclusions, affords some support for the tendency toward the formation of local races in the different constituent groups of the archipelago.

Chariotheca carolinensis, new species (fig. 6, *a*).

Subelliptical, shining, upper side black with elytra blackish purple, underside of legs and antennae reddish piceous.

Head and thorax very finely punctulate, antennae short, scarcely extending beyond middle of thorax, third joint scarcely longer than wide, similar to the fourth, the last five forming an elongate club, 8 to 10 about twice as wide as long. Thorax widest at base, sides feebly sinuate, converging throughout, sharply margined, anterior margin arcuately emarginate, the angles moderately prominent; base bisinuate, immarginate; disk evenly convex, with a feeble transverse impression before base; surface indistinctly punctulate. Elytra with sides feebly rounded, acute at apex; striae scarcely discernible, of indistinct fine punctures, epipleura moderately broad, not margined along episternum, terminating rather

suddenly before apex. Prosternum gently convex to anterior border, intercoxal process marginate throughout, acute at apex, received in deep angular cavity of mesosternum. Legs short, all tarsi feebly expanded, intermediate joints of posterior pair not quite as long as wide. Size, 8 mm.×3.5 mm.

Yap Island, Kadai, May 18, 1936, 1 example (Y. Kondo).

Smaller and more elliptical than *C. samoensis* Blair, and almost lacking in sculpture. Of the New Guinea species described by Gebien, it would appear to come near *C. spectabilis* but it is smaller and differently colored and sculptured.

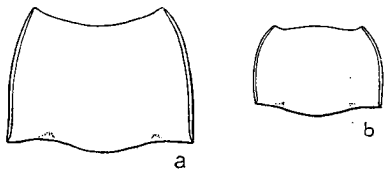

FIGURE 6.—**a,** *Chariotheca carolinensis,* prothorax; **b,** *C. striatipennis,* prothorax.

Chariotheca striatipennis, new species (fig. 6, *b*).

Elongate, parallel, moderately nitid, head and thorax black, elytra dark purple.

Head and thorax finely rather densely punctate, the head with a band of stronger punctures between the eyes. Antennae short, not reaching middle of thorax, third joint elongate, twice as long as 4, 6-10 successively more transverse. Thorax widest at base, not twice as wide as median length, sides feebly arcuate and converging forward, finely bordered; anterior border seen from above almost straight, angles obtuse, not prominent; disk strongly convex in front from side to side, but much less so before base, though without marked impression. Elytra about 4 times as long as thorax; striae deeply impressed in apical half, less so toward base, where the punctures are more obvious; intervals in basal half finely punctulate. Size, 5.5 × 2 mm.

Palau Islands, Melekeiok, April 7, 1936, 1 example.

Truk Islands, Dublon Island, Dec. 22, 1935, 2 examples (including holotype) in rotten bark.

Kusaie Island, Mount Fenkol [Crozer], Lele, Jan. 30, 1936, 1 example (all collected by Z. Ono).

This species has somewhat the build of *C. planicollis* Fairmaire as recorded by me (1928) from Samoa but this has the thorax much less convex in front and the elytra varicolored in longitudinal bands with the striae evanescent toward apex. *C. sulcipennis* Blair, from Samoa, also has the striae sulcate to apex but is a very much broader insect.

Araucaricola carolinensis, new species.

Nitid, piceous, antennae and legs testaceous.

Head and thorax finely, rather indistinctly punctured, the thorax widest about the middle, sides feebly arcuate, base feebly convex from side to side. Elytra much more strongly punctate, the punctures with a tendency to form striae, particularly a well defined sutural stria; toward apex puncturation becomes finer and more irregular. Length, 3.75 mm.

Palau Islands, Melekeiok, March 7, 1936, 1 example (Z. Ono).

Of the species recently described by me (1940) from the Society and Austral Islands it most resembles *A. australensis,* but has the thorax much less convex, less distinctly punctured, and the legs and antennae contrastingly pale.

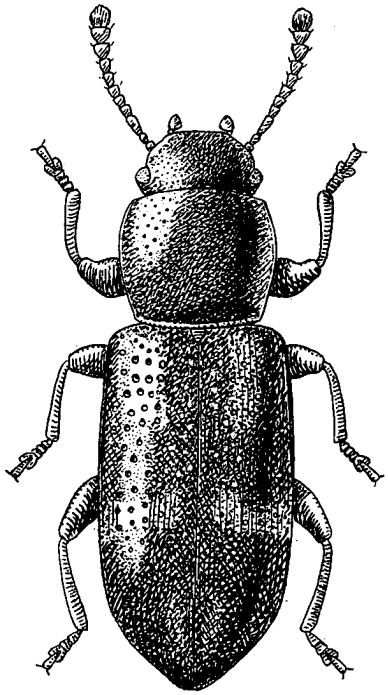

FIGURE 7.—*Lorelus carolinensis.*

Lorelus carolinensis, new species (fig. 7).

Pitchy brown, nitid, strongly and irregularly punctate, elytra with a short elongate pale streak on each at base and a transverse band of same color, which does not reach either suture or side margin, behind the middle. Head transverse, eyes prominent forming a marked reentrant angle with the genae; antennae slender, moniliform, reaching nearly to base of thorax, last 3 joints slightly en-

larged. Thorax subcordiform, sides rounded, contracted to base; anterior margin straight, the angles obtuse; base arcuate with angles yet more obtuse; disk convex, strongly and moderately closely punctate. Elytra rather wider than thorax at widest, sides slightly divergent to about three quarters of their length; puncturation notably coarser than that of head and thorax, but finer behind and obsolete at apex. Prosternum punctured in front and at sides, epimera strongly punctate; front and sides of metasternum also strongly punctate, epimera and elytral epipleura with a single row of large punctures; abdomen pale, impunctate except for a few large punctures in anterior angles of first and second segments. Length, 2.5 mm.; width, nearly 1 mm.

Truk Islands, Dublon Island, Dec. 25, 1935, 1 example (Z. Ono).

This genus is well represented in the Pacific, many species being known from New Zealand and two from New Caledonia; *Mesotretis fumata* Lea, from Norfolk Island, should probably also come here. In addition other species, as yet undescribed, occur in Fiji, also in India, Tonkin and Singapore. The species from Central and South America placed here by Champion may perhaps be transferred to *Prateus* LeConte; the two genera are very closely allied, if indeed really separable.

Amarygmus hydrophiloides Fairmaire, Rev. Mag. Zool.: 450, 1849.

Palau Islands, Ngeremlengui, April 23, 1936, 3 examples; Melekeiok, April 7, 1936, 2 examples. (All collected by Z. Ono.)

Widely distributed: New Guinea, Solomon Islands, Ellice Island, Uvea and Fiji.

Although the three examples from Ngeremlengui are all of the typical bright blue color, both those from Melekeiok are dark bronze, even darker than variety *A. samoensis* Haag from Samoa. Both forms occur also in Tonga and the New Hebrides.

OEDEMERIDAE

Copidita longicollis, new species (fig. 8, *a*).

Elongate, straw colored. Head elongate, distance from base of antennal sockets to top of labrum equal to width across genae; antennae slender, second joint about one-quarter as long as third. Thorax distinctly longer than wide (7.5 : 6), anterior margin arcuate in continuous curve with sides, disk shining, scarcely alutaceous, finely and moderately densely punctate, with a shallow depression on each side in anterior half and another before middle of base; base scarcely sinuate in middle. Elytra finely punctate and pubescent, with 4 raised lines bordered by rather vague lines of punctures, the outermost (subhumeral), strongly elevated behind shoulders but fading away behind, the humeral very indistinct, indicated only by the limiting lines of punctures. Abdomen with fifth ventral segment rounded at apex, fitting fairly closely to pygidium (male ?).

Basal joint of posterior tarsi longer than the rest together; penultimate transverse, villose beneath.

Peleliu Island, April 20, 1936, 2 examples (male ?) including holotype (Y. Kondo).

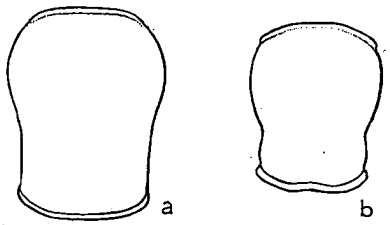

FIGURE 8.—**a,** *Copidita longicollis,* prothorax; **b,** *C. collaris,* prothorax.

Copidita collaris, new species (fig. 8, *b*).

Female ?: less elongate than the last and darker in color (pale testaceous, reddish); head similar, but second joint of antennae about one-third as long as 3. Thorax but little longer than wide (6.5 : 6), anterior margin arcuate with a narrow raised rim which projects at anterior angles; surface dull, alutaceous, finely and evenly, not densely, punctate; base distinctly sinuate in middle. Elytra with 3 raised lines, 2 dorsal and the subhumeral, these not defined by lines of punctures; punctures fine but slightly granuliform. Last ventral segment with the sides somewhat sinuate, the apex itself subtruncate, fitting moderately closely to pygidium.

Truk Islands, Dublon Island, Dec. 22, 1935, 1 example (Z. Ono).

Copidita semialutacea Pic, Mél. exot.-ent. **42**: 22, 1924.

Brownish testaceous, antennae with second joint nearly half as long as third, thorax but little longer than wide (5 : 4.75), surface alutaceous, moderately densely punctate, less densely before middle, anterior margin subtruncate in middle, anterior angles obtuse, the anterior margin not projecting, base sinuate in middle; elytra rather asperately but not closely punctate, the subhumeral raised line strong, the two dorsal very feeble. Length, 10 mm.

Ponape Island, Na, Feb. 24, 1936, 1 female (S. Otomo).

It is with some doubt that I identify this with Pic's species because of the lack of detail in his description. *C. carolinensis* Pic (Mél. exot.-ent. **42**: 22, 1924) I am unable to determine among the three species before me. In regard to size and color it would best fit *C. longicollis,* but is apparently relatively less elongate than *C. semialutacea,* whereas our insect is distinctly more elongate. In these respects it would seem to agree with the following species, but if so it is wrongly placed in *Copidita,* having the mandibles simple at apex.

Copidita carolinensis Pic, Mél. exot.-ent. 42:22, 1924 (scrips. *Copodita*) (Caroline Islands).

Sessinia canella, new species.

Ananca canella Fairmaire (? in litt.).

Testaceous, tips of mandibles blackish, a fuscous band near, but not including, the suture in basal half of elytra, a similar broad band from shoulder to apex; abdomen also fuscous. Mandibles long with apex entire, last joint of palpi elongate; frons near eyes densely punctate, but more sparsely in front; prothorax subcordiform, densely, not very finely punctate, with rather scanty pubescence directed forward, elytra finely subcoriaceous, moderately densely pubescent, with two pale lines approximately limiting the area between the two fuscous bands, extending nearly to apex.

Sexual differences slight; antennae a little longer in the male, thorax of female broader. Genital armature of male normally concealed; on each side of the slender aedeagus is a long arcuate process arising from a common basal piece; outside these are the long strap-shaped lobes of the sixth ventral segment of the abdomen.

Truk Islands (in British Museum from Godeffroy Museum), also the Solomon Islands, Gilbert Islands, Thursday Island, in British Museum. Type in British Museum.

It is probable that this species is identical with *Copidita carolinensis* Pic, in which case the latter name must have precedence.

MELOIDAE

Zonitis oceanica, new species (fig. 9).

Slender, rufo-testaceous, more or less clouded with fuscous, especially base and apex of thorax, elytra, mesosternum and metepisterna.

Head not produced in front, widest across eyes, subquadrangular behind, strongly and rather closely punctured except for a median line between the eyes free of punctures; antennae filiform, second joint about two-thirds length of third, joints 3-10 subequal, 11 a little longer. Thorax widest in middle, thence strongly contracted to apex, and more feebly toward base; puncturation slightly finer and more uneven than that of head, with a fine median sulcus. Elytra nearly three times as long as width across shoulders, tapering slightly throughout, separately rounded at apex, densely and rather coarsely punctured and pubescent. Fifth ventral segment of abdomen of male emarginate to about half its length, exposing the slender lobes of the sixth segment, which project a little beyond apex of pygidium. Length, 7 mm.

Truk Islands, Dublon Island, Dec. 23, 1935, one male holotype (Z. Ono).

Marianas Islands, Guam Island, 3 examples (O. H. Swezey).

In the holotype the thorax is but narrowly infuscate at base and apex, the elytra blackish with base beneath shoulders and extreme

apex testaceous. The three examples from Guam, however, exhibit considerable variability in color. One male having the head and greater part of the pronotum blackish with elytra as in the type, two females having the elytra entirely testaceous (perhaps a sexual character), one with dark and one with light type of thorax.

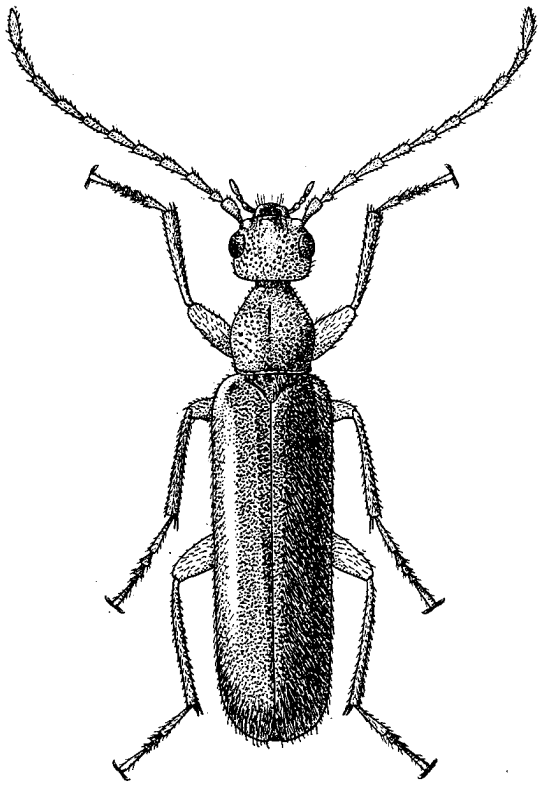

FIGURE 9.—*Zonitis oceanica.*

MORDELLIDAE

Glipa tricolor (Wiedemann), Zool. Mag. 2: 81, 1823. (*Mordella.*)

Ponape Island, Roi, Feb. 14, 1936, 1 example (Z. Ono).

An Indo-Malayan species of wide distribution, Sikkim, Assam, Burma, Indo-China, Hainan Island, Siam, Malaya, Sumatra, Java, Borneo, Philippine Islands, Celebes and the Seychelles Islands.

Mordellistena glipodoides Blair, Ent. Mo. Mag. **6**: 204, 1931.

Kusaie Island, Mount Matante, Jan. 22, 1936, 1 example (Z. Ono).

Previously known only from South India, Ceylon, Singapore, and Borneo.

RHIPIPHORIDAE

Micropelecotoides fulvosericans (Fairmaire), Pet. Nouv. Ent. **2**: 279, 1878. (*Pelectoides.*)

Ponape Island, Tamen [Taman ?], Feb. 27, 1936, 1 male; Pounaran, Neipip, March 7, 1936, 1 female (Z. Ono).

Already known from Samoa, Ellice Islands, Fiji, and Tonga.

PRIONIDAE

Rhaphipodus carolinensis Matsushita, Sapporo Nat. Hist. Soc., Trans. **14**: 115, 1935 (Palau Islands).

CERAMBYCIDAE

Aeolesthes inhirsutus Matsushita, Ins. Matsumur. **6**: 170 (fig.), 1932.

Palau Islands, Ngeremlengui, April 23, 1936, 2 examples (Z. Ono).

Ceresium unicolor Fabricius, Mantissa Ins. **1**: 147, 1787.

Palau Islands, April 8, 1936, 1 example (Z. Ono).

Widely distributed in the Pacific area and previously recorded from Palau by Matsushita (Sapporo Nat. Hist. Soc., Trans. **14**: 116, 1935).

Ceresium palauensis Matsushita, Ins. Matsumur. **6**: 169, 1932 (Palau Islands).

Ceresium yoshinoi Matsushita, Sapporo Nat. Hist Soc., Trans. **14**: 116, 1935 (Palau Islands).

Ceresium nanyoanum Matsushita, Sapporo Nat. Hist. Soc., Trans. **14: 117,** 1935 (Palau Islands).

Dihammus acanthias Pascoe, Ann. Mag. Nat. Hist. **15**(4): 65, 1875.

Truk Islands, Dublon Island, Jan. 9, 1936, 1 example (Z. Ono).

The species was described from Queensland and New South Wales and subsequently recorded by Aurivillius (1913, 1926) from Samoa. It is probably not more than a subspecies of *D. antenor*

Newman (=*fasciatus* Montrouzier) which ranges from the Philippine Islands to the Solomon Islands.

Dihammus bennigseni Aurivillius, Deutsch. Ent. Zeit.: 216, 1908.
Palau Islands, April 8, 1936, 1 example (Z. Ono).
Type locality: Ponape.

Dihammus (Niphohammus) korolensis Matsushita, Ins. Matsumur. **6**: 171 (fig.), 1932.
Dihammus lupinus Kriesche, Ent. Blätt. **32**: 66, 1936 (Palau).
Palau Islands, Ngeremlengui, April 23, 1936, 1 example (Z. Ono).

Dihammus (Niphohammus) auripilis Matsushita, Sapporo Nat. Hist. Soc., Trans. **14**: 119, 1935.
Truk Islands, Dublon Island, Jan. 1, 1936, 1 example (Z. Ono). I am a little doubtful of this identification.

Dihammus trucanus Kriesche, Ent. Blätt. **32**: 66, 1936 (Truk Island).

Nanyohammus luteosparsus Matsushita, Sapporo Nat. Hist. Soc., Trans. **14**: 118, 1935 (Palau).

Batocera oceanica Schwarzer, Ent. Mitteil. **3**: 281, 1914.
Palau Islands, April 25, 1936, 2 examples (Z. Ono).

Olenecamptus bilobus Fabricius, Syst. Eleuth. **2**: 324, 1801 (subspecies).
Olenecamptus lacteoguttatus Fairmaire, Le Nat. **3**: 359, 1881.
Truk Islands, April 7, 1936, 1 female (Z. Ono).

Type locality of Fairmaire's species is Truk Island, and there is a male from the same locality in the British Museum (from Godeffroy Museum). *Olenecamptus bilobus* Fabricius has a wide range from India and southern China to northern Australia, and exhibits considerable variation in the development of the markings.

Genus **CAROLINIELLA,** new genus

Eyes divided, coarsely faceted. Antennae longer than body in both sexes, scape claviform. Prothorax transverse, with sexual dimorphism, broadly emarginate in front, with large sharp lateral spine and a smaller tubercle at a higher level between it and the anterior angle. Elytra tapering slightly from shoulders, conjointly rounded at apex. Prosternum declivous behind the coxae, broadly emarginate at apex; mesosternum declivous in front, broadly convex; the sterna

and coxae of both segments noticeably flattened. Anterior legs of male thickened, the femora unarmed.

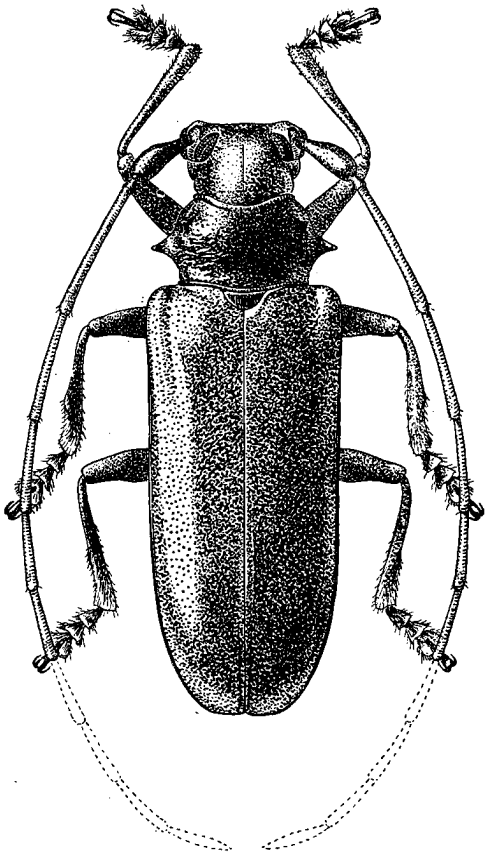

FIGURE 10.—*Caroliniella aenescens.*

Genotype: *Caroliniella aenescens,* new species.

Caroliniella (to be placed in the Homonoeini) resembles *Heteroclytomorphus* Blanchard in the thoracic armature, but differs in the apices of the elytra being rounded and in the structure of the sternum. In Aurivillius' key (Deutsch. Ent. Zeit.: 211-214, 1908) to the genera of this tribe it would run to *Homonoea* Newman, but differs in the sternum and coxae being flattened, the mesosternum sloping instead of vertical in front, and in the male having the prothorax enlarged and the legs thickened rather than elongated.

Caroliniella aenescens, new species (fig. 10, female).

Piceous black, elytra with aeneous reflections, becoming brownish near apex, without markings, nitid, subglabrous. Head with median furrow from vertex to clypeus, rather irregularly and sparsely punctate; scape claviform, nitid, rather strongly but not closely punctate in basal half, interspaces finely punctulate; third joint in female one-third longer than fourth, eighth reaching apex of elytra (antennae of male missing). Prothorax of male as wide, exclusive of spines, as elytra, transversely rugose toward sides, anterior margin rather deeply concave, completely bordered; in female smaller, about as wide with spines as elytra, the lateral rugulosity feeble, the anterior emargination much less deep, with its border widely interrupted in middle. Scutellum transverse, rounded, impunctate. Elytra widest at shoulders, thence tapering slightly till abruptly rounded at apex; rather strongly but irregularly and not closely punctate in basal half, more finely toward apex, each puncture with a minute backwardly directed hair that scarcely emerges out of the puncture; in addition there are narrow patches of fine dense decumbent pubescence near the lateral margin. Prosternum transversely rugulose but nitid and glabrous, declivous portion of mesosternum and the metepimera finely and densely pubescent; metathoracic epimera with patch of dense fulvous pubescence. Abdomen broadly nitid and almost impunctate in middle, but sides and apex with dense ashy pubescence. Last ventral segment in male broadly emarginate, in female sinuate-truncate with fine border. Male 33 × 10 mm. (across humeri), female 25 × 8 mm.

Truk Islands, Dec. 25, 1935 and Jan. 3, 1936, 2 examples (Z. Ono).

Caroliniella aenescens palauensis, new subspecies.

One female differs from the typical form in the presence of a broad discal band of fine pubescence on the elytra extending from behind the shoulders nearly to the apex; it also lacks the dense patch of fulvous pubescence on the metepimera, where it is replaced by a more scanty ashy pubescence.

Palau Islands, April 8, 1936, 1 example (Z. Ono).

Pterolophia palauana Matsushita, Sapporo Nat. Hist. Soc., Trans. **14**: 119, 1935 (Palau Islands).

Prosoplus yapensis Aurivillius, Deutsch Ent. Zeit. : 223, 1908 (Yap Island).

Prosoplus uchiyamai Matsushita, Sapporo Nat. Hist. Soc., Trans. **14**: 120, 1935 (Palau Islands).

Prosoplus lividus Matsushita, Sapporo Nat. Hist. Soc., Trans **14**: 120, 1935 (Palau Islands).

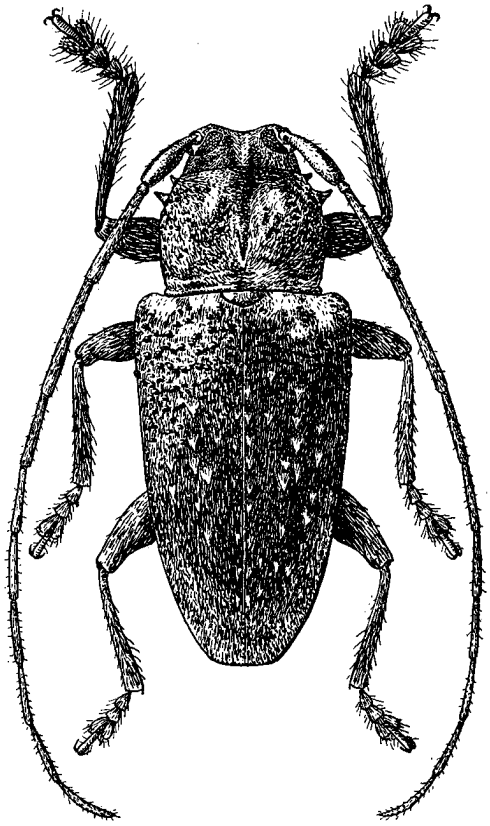

FIGURE 11.—*Prosoplus ponapensis.*

Prosoplus ponapensis, new species (fig. 11).

Dark castaneous, rather shining, moderately densely clothed with decumbent gray pubescence, upper side with flecks of longer ochraceous pubescence; the clothing not so dense as to prevent a shining appearance. Prothorax with subtriangular smooth area in front, disk uneven, with coarse punctures and elevations. Elytra somewhat granulate in anterior third, rounded at apex. The largest spots of ochraceous pubescence are: a pair at extreme base, one close to scutellum and one just before humeral callosity; two forming an oblique band immediately behind middle of disk; behind this band is an area of more scanty pubescence thus appearing darker. Underside and legs clothed with grayish ochreous pubescence with dark spots. Antennae in male with last 3 joints extending beyond apex of elytra; anterior coxae each with a long curved forwardly directed spine. Length, 12 mm.

Ponape Island, Reitao, March 19, 1936, 1 male; Nanpuil Island, March 3, 1936, 1 male (Z. Ono).

Very close to *P. samoanus* Aurivillius but shorter and broader, less densely clothed. Of the species already known from the Caroline Islands, it would appear that *P. ponapensis* is most closely allied to *P. uchiyamai,* but it lacks the gray oblique band on the elytra and the long erect hairs covering the body, and it is apparently less coarsely punctate.

Prosoplus trukensis, new species.

Similar to *P. ponapensis* but rather narrower and more parallel-sided, less nitid, owing to denser and more even pubescence, the thorax smoother, elytra granulate only at base and somewhat obscurely truncate at apex.

Truk Islands, Dublon Island, Jan. 5, 6, 1936, 2 males (Z. Ono).

It is with some hesitation that, in view of the three species already described from the Caroline Islands, I venture to describe these two species as new, but I wish to emphasize the point that though no doubt closely allied they do not appear quite to agree either with each other or with the earlier known species, and they inhabit different islands of the archipelago. Longer series, with accurate data, will conduce to a truer estimate of their specific relationships in this large genus of wide distribution in the southwest Pacific.

Sybra carolina Matsushita, Sapporo Nat. Hist. Soc., Trans. **14**: 121, 1935 (Palau Islands).

Sybra ponapensis, new species.

Elongate oblong, brown, moderately densely clothed with brownish-gray pubescence variegated with indistinct streaks of white color. Frons moderately strongly but not closely punctate; prothorax feebly transverse, sides lightly rounded, disk rather sparsely punctate; elytra 2.25 times as long as broad at shoulder, each acutely produced at apex, moderately strongly striate-punctate in basal two-thirds, with intervals somewhat convex, but punctures confused toward base and obsolete in apical third; the sutural stria continued to apex. The paler streaks of pubescence are as follows: one, very oblique, from fifth interval behind shoulder to third about middle; three confluent spots about two-thirds obliquely across fifth to seventh intervals; more indistinct on third and seventh intervals uniting and running into produced apex. Length, 10 mm.

Ponape Island, March 9, 1936, 1 example (Z. Ono).

This species is allied to *Sybra lineata* Pascoe of New Guinea and the Moluccas, but the frons and prothorax are more sparsely punctate, and the elytra are more acuminate at the apex. *Sybra carolina* Matsu-

shita would appear to be similar but has the apices of the elytra rounded.

Ropica carolinensis, new species.

Brownish testaceous maculated with darker, clothed with moderately dense decumbent pubescence maculated with darker and lighter spots. Head, thorax and elytra strongly but not closely punctured; the punctures being free from pubescence, except for a single hair in each, add to the spotted effects. Antennae and limbs also maculated, the former with short erect hairs in addition to the depressed pubescence; last four joints extend beyond apex of body. Thorax transverse, with the sides somewhat inflated and thus rounded; basal sulcus extraordinarily deep and shining, even in the middle, appearing almost like an articulation; apical sulcus less deep, entire. Elytra parallel, bluntly rounded at apex, puncturation irregular with traces of lineate arrangement on disk; sutural interval rounded, with slight elevations also about the fifth and seventh intervals above the declivity. Length, 9.5 mm.

Palau Islands, Angaur Island, April 16, 1936, 1 example (Y. Kondo).

Not very close to any species known to me owing to the swollen prothorax with its peculiar basal furrow and the long antennae; perhaps it requires a distinct genus.

Genus **NONYMOIDES,** new genus

Form elongate, subelliptical; eyes deeply emarginate, frons transverse; antennae distant, scape cylindrical, reaching nearly to middle of thorax; 2d joint elongate, together with third about as long as fourth and fifth together, fringed with long black setae beneath, joints from third onward becoming gradually shorter to eleventh. Prothorax subquadrangular, sides nearly straight, each with small tubercle near base. Elytra much wider at shoulders than thorax, thence narrowed gradually to three-fourths and more rapidly to apex; puncturation confused near suture and at sides, but on disk in fairly regular striae which are convergent backward; apex conjointly subacuminate or rounded. Prosternum as long in front of coxae as behind them. Legs rather slender, femora thickened, from anterior to posterior successively longer; middle tibiae with feeble sulcus; basal joint of posterior tarsi as long as second and third together; tarsal claws divaricate.

Genotype: *Nonymoides carolinensis,* new species.

In Lacordaire's key (Hist. Nat. Ins., Gen. Col. **9** (2): 800, 1872) to the genera of the tribe Acanthocinini it runs to the South African genus *Nonyma* Pascoe to which indeed it bears some resemblance, though differing in many points. Of Oriental genera probably *Opisoleus* Pascoe, of the Sunda region, is the nearest, though a considerably larger insect, with the elytra cristate behind the shoulder and truncate at apex.

Nonymoides carolinensis, new species (fig. 12).

Testaceous, clothed with moderately dense decumbent pubescence, thorax with a broad median band of darker shade and elytra maculate with the same, pubescence on lateral declivity almost invisible. Antennae slender, more than half of third joint projecting beyond base of thorax, 3 or 4 joints beyond apex of body. Disk of prothorax moderately densely and evenly punctate. Elytra with sutural area and lateral area in basal half moderately densely and evenly punctate, but in apical half of basal part of disk punctures in regular striae. Female a little larger and more robust than male, elytra less tapering behind, abdomen more convex. Length: male 5 mm.; female 7 mm.

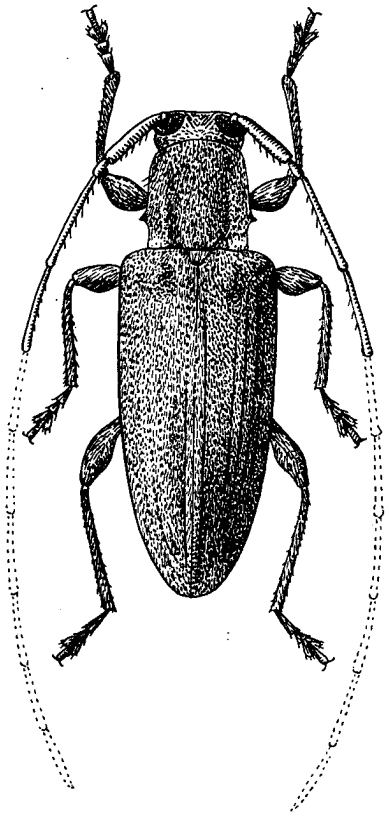

FIGURE 12.—*Nonymoides carolinensis.*

Kusaie, Mount Matante, Jan. 22, 1936, 3 specimens; Lele Island, Mount Fenkol [Crozer], Jan. 30, 1936, 1 male (all collected by Z. Ono).

Nonymoides latior, new species.

Very similar to *N. carolinensis* but broader, the prothorax distinctly transverse, elytra wider, legs shorter, all femora broadly banded with fuscous, processes of both pro- and meso-sterna wider. Length, 6 mm.

Kusaie, Lele Island, Mount Fenkol [Crozer], Jan. 30, 1936, 1 example (Z. Ono).

The type is a female, judging by the formation of the abdomen, but differs so widely in shape from the female of *N. carolinensis* that I cannot suppose it to be conspecific with the male of *N. carolinensis* with the same data.

Nonymoides minimus, new species.

Much smaller than the two preceding but with similar sculpture and coloring. Relatively broad, prothorax transverse, elytra widest at about two-thirds. Length, 2.5 mm.

Truk Islands, Dublon Island, Dec. 29, 1935, 1 example (Z. Ono).

CURCULIONIDAE

Sphaeropterus viridipictus, new species.

Sphaeropterus viridipictus Fairmaire (in litt.).

Two specimens from Truk Islands were received with this name by the British Museum from Godeffroy Museum, but I have not been able to find any description of the species. The two examples are not quite alike; both are clothed with round metallic green scales, without setae; one, taken as the type, having three bare stripes on the thorax, and the elytra with the first, fifth, and seventh intervals, as well as lateral margin and apex, densely clothed, and short lengths on the third, fourth, and sixth intervals forming a continuous oblique band of the same shortly before the apex. The other individual has a single broad median stripe on the thorax free from scales, and the elytra with the scales fairly evenly distributed throughout though not completely covering the derm (possibly in part abraded). Length, 3.5-4.5 mm.

Additional material will be required before it can be determined whether the difference described above is individual, sexual, or racial.

Deretiosus concolor Zimmerman, Haw. Ent. Soc., Proc. **10**: 163, 1938 (Ponape Island).

Microcryptorhynchus kondoi Zimmerman, B. P. Bishop Mus., Occ. Papers **15**(15) : 171, fig. 2, *a*, 1939 (Ponape Island).

Microcryptorhynchus trukae Zimmerman, B. P. Bishop Mus., Occ. Papers **15**(15) : 172, fig. 2, *b*, 1939 (Truk Islands).

PASSALIDAE

Gonatas carolinensis Gravely, Ind. Mus., Mem. **7** : 111, 1918 (Caroline Islands).

LUCANIDAE

Aegus alternatus Fairmaire, Le Nat. **3** : 340, 1881 (Alcimus) (Ponape Island).

Dorcus carolinensis Arrow, Ent. Mo. Mag. **75** : 84, 1939.

Dorcus dublonensis Arrow, Ann. Mag. Nat. Hist. XI, **4** : 580, 1939.

APHODIIDAE

Saprosites pygmaeus Harold, Ann. Mus. civ. stor. nat. Genova **10** : 91, 1877 (Key Island).

DYNASTIDAE

Anoronotum rufum Arrow, Ent. Mo. Mag. **75** : 86, 1939 (Palau Islands).

RUTELIDAE

Parastasia guttulata Fairmaire, Ann. Soc. Ent. Belg. **27** : 9 (New Guinea, Duke of York Islands).

MELOLONTHIDAE

Lepidiota carolinensis Arrow, Ent. Mo. Mag. **75** : 86, 1939 (Palau Islands, Peleliu Island).

The author is responsible for all statements in this paper.