MICROGONUS, NEW GENUS, AND RHYNCOGONUS, FROM THE MARQUESAS *

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GENERAL RELATIONS

The genus Rhyncogonus and the related Microgonus are both members of that large group of broad nosed weevils belonging to the subfamily Brachyrhininae (Otiorhynchinae) of the family Curculionidae. In using the term Brachyrhininae, I am following Pierce.9 The genus Rhyncogonus was established in 1885 by Sharp 10 for the reception of two Hawaiian species and redefined in 1919 by the same author. 11 Later other species from the Hawaiian islands were discovered, so that now thirty-three species from this archipelago are known. Most of these are from the islands of Kauai and Oahu, but others have been found on Molokai, Lanai, and Hawaii, and on the smaller islands, Necker, Laysan, and Nihoa and the distant Wake Island. The peculiarities of these have been noted by Perkins 12 and need not be repeated here except as they will serve as a basis for comparison with species with which this paper is to deal.

Besides the Hawaiian species and R. fallax Perkins from Wake Island, one species of Rhyncogonus, R. gracilis Perkins, has been described from Rapa, six species from the Marquesas, and one species, R. planidorsis Braun, from the Kermadec Islands. The members of the Pacific Entomological Survey have added considerably to this list, collecting not only all of the species previously described from the Marquesas, but seventeen additional species of Rhyncogonus, increasing the number now known from the Marquesas to twenty-three species. The Entomological Survey has also obtained one species of the same genus from Tahiti,13 and a species of a related but

Pierce, W. D., Miscellaneous contributions to the knowledge of the weevils of the families Attelabidae and Brachyrhinidae: U. S. Nat. Mus., Proc., 45, pp. 365-426, 1913.

Blackburn, Thomas, and Sharp, David, Memoirs on the Coleoptera of the Hawaiian islands: Roy. Dublin Soc., Sci. Trans., 3, pp. 176-177, pl. 5, fig. 28, 1885.

Harp, David, Studies in Rhynchophora, 5, The genus Rhyncogonus: Hawaiian Ent. Soc. Proc., vol. 4, pp. 77-82, 1919.

Perkins, R. C. L., Description of two new species of Rhyncogonus (Otiorhynchinae); Ent. Monthly Mag., 35, pp. 56-57, 1899. Coleoptera Rhyncophora: Fauna Hawaiiensis, vol. 2, pt. 3, pp. 122-130, pl. 7, 1900. Coleoptera (Various): Fauna Hawaiiensis, vol. 3, pt. 4, pp. 650-653, 1910. A new Hawaiian Rhyncogonus (Coleoptera-Rhyncophora): Hawaiian Ent. Soc. Proc., vol. 5, p. 379, 1924. Coleoptera, weevils: B. P. Bishop Mus., Bull. 31, pp. 53-66, 1926. Notes on Hawaiian Coleoptera (Curculionidae), Proterthinidae, and Cerambycidae) and descriptions of new species: Hawaiian Ent. Soc. Proc., vol. 6, pp. 465-468, 1927. Species of the Coleopterous genus Rhyncogonus Sharp (Curculionidae), from the Marquesas Islands: Ann. Mag. Nat. Hist., ser. 10, vol. 1, pp. 123-129, 1928.

Soc. Proc., vol. 6, Rhyncogonus submetallicus, new species, manuscript, Bernice P. Bishop Museum.

Museum.
* Pacific Entomological Survey Publication I, article 4.

new genus from the Marquesas. All of their material in the genus *Rhyncogonus* and the related *Microgonus* has been kindly referred to me by E. P. Mumford and A. M. Adamson of the Pacific Entomological Survey and forms the basis of this paper. To assist me further, O. H. Swezey of the Hawaiian Sugar Planters' Association Experiment Station has sent me numbers of the Hawaiian species which, with what I have from those islands, will give me a good series to serve as a basis for comparison. E. H. Bryan, Jr., of Bernice P. Bishop Museum, has furnished much important information.

Rhyncogonus appears to be one of the most characteristic genera of Polynesian Rhynchophora. The species comprise some of the largest of Polynesian weevils, and in the different archipelagos they vary or diverge in such different ways that they make a most interesting and instructive group to study. All of the Hawaiian species which I have been able to study have the following features which are more or less characteristic: the first and second funicular segments subequal in length, or, if unequal, the first longer; the elytral punctures generally arranged in rows, especially in the striae; the abdominal sculpturing quite similar in both sexes; and the pilosity also much the same in both sexes. The Hawaiian species fall into three rather distinct groups: first, large, somewhat elongate, and in general more or less glabrous species such as blackburni Sharp and nitidus Sharp; second, smaller, shorter, much more flattened or depressed, and slightly pilose species like vittatus Perkins; and third, short, very convex or bulbous, and quite pilose species like alternatus Van Dyke and extraneus Perkins. The species from Tahiti is of a generalized type, a moderately elongate, very convex species, simulating in general proportions the members of group three of the Hawaiian species. It has, however, certain characters that are peculiarly its own, such as submetallic elytra and a sharply defined and narrow elytral margin. In its antennae, where there is a longer second than first funicular segment, it simulates most of the Marquesan species, and it also resembles one of the Marquesan species, plumbeus, from Eiao, in its general shape and sparse yet uniformly dispersed pubescence, and duplex Perkins and certain other members of group B (p. 25) of Marquesan species in having somewhat reduced and slightly convex eyes. The Marquesan species as a whole have the first and second funicular segments unequal, the second generally much the longer, contrasting very definitely with the Hawaiian species. The elytral punctures are generally irregularly dispersed, and the basal abdominal segments in the male are definitely sulcate, glabrous, and granular or rather conspicuously studded with small tubercles, whereas in the female the same segments are flat or even convex and, in many, moderately hairy. This sexual dimorphism is never very marked in any of the Hawaiian species. In group B, the dominant group in the Marquesas, there is in

addition often a marked sexual difference as regards the color of the pile. In groups B and C there is also a double type of pile, a more or less dense, closely appressed pile with long and erect hairs somewhat serially arranged along the intervals. This serial arrangement, though evident in many of the Hawaiian species, is never so marked as it is in some of the Marquesan species. The Marquesan species thus show both as a whole and as individual species that they stand well apart from those of Hawaii. They have a common ancestry to be sure, but it hardly seems possible that one could have been derived from the other, though certain species of each assemblage show close resemblances here and there. These will be discussed later on. As to the origin of the Marquesan species as a whole little can be said with confidence. We need more knowledge with regard to the insect faunas of the islands to the west before we can speak with assurance. The probabilities are, however, judging from certain resemblances between the genus Rhyncogonus and other genera found in the western part of Polynesia, as brought out by Sharp, that the center of dispersal was at some point in western Polynesia. It is also barely possible that the ancestral home of the genus was Antarctica.

The Marquesan species of *Rhyncogonus* may be assembled into four rather well characterized groups:

- A. A group with what I would call generalized features, moderately elongate, moderately convex, and without any extremely divergent peculiarities, containing but one species.
- B. A group containing species which have a tendency to become quite elongate, often with somewhat prolonged elytral apices, with a rostrum that is generally longer than broad, eyes large yet often only slightly convex, and a marked degree of sexual dimorphism, containing fourteen species.
- C. A group containing species which are in general smaller than those of group B, with the upper surface generally more or less flattened and the margin of the elytra more decidedly carinate, the rostrum about as broad as long, the eyes of moderate size yet always very convex, in a few species obliquely flattened in front, and with the vestiture often scale-like rather than hairy, containing six species.
- D. A group of small, convex, and quite glabrous species, containing two species.

In addition, Microgonus is a genus containing one species which bears a superficial resemblance to the members of group D but is otherwise divergent from any members of the genus. In group A the single species, R. plumbeus new species, bears a superficial resemblance to R. submetallicus new species from Tahiti, being of moderate length and robustness, quite convex, and having well rounded outlines. It also resembles R. submetallicus in being generally clothed with a sparse yet rather uniformly distributed pile. This insect might also be compared with some of the members of the third group

of Hawaiian species as regards the general form, shape of prothorax, and somewhat uniform type of pilosity. The single species of group A has, of course, many definite characters of its own, but these will be mentioned later. Group B is not only the dominant but likewise the most characteristic group of the Marquesan species. Some of the larger species are in general shape much like blackburni Sharp of the first group of Hawaiian species, but widely separated as to details. In group B are found the most marked sexual dimorphism and sexual dichromatism, also the greatest development of the double type of pilosity, the narrowing and prolongation of the elytra, especially in the males, seen in the extreme in the males of navicularis Marshall (fig. 7, d), and the great lengthening of the second funicular segment. There is also a great variation as regards the size and convexity of the eyes within the group; this is to be noted in the blackburni group of the Hawaiian islands, though to a lesser degree. In group C are six known species which show a relationship to the second group of Hawaiian species. Rhyncogonus walkeri Perkins of the Marquesas very closely simulates in form and general appearance the rather small, broad, and flattened Hawaiian species such as R. vittatus Perkins. However it possesses to a well marked degree the dominant peculiarities of the Marquesan species: a pronounced sexual difference as regards the ventral segments, the long second funicular segment of the antennae, and the irregularly dispersed punctures of the elytra. R. planatus (fig. 7, e) is the most divergent of the species of group C, many males having the elytra absolutely flat, a condition which is not closely approached by any Hawaiian species. Group D is the most specialized group of the entire genus. The species are small, moderately convex, and almost entirely smooth, contrasting so greatly with the other members of the genus that I was at first inclined to believe that they did not rightfully belong in it. However, they have not only all of the essential characters of the genus but also most of the specialized features of the Marquesan group. The single species of Microgonus also superficially resembles the two species of group D. It has certain specialized characters, however, which widely separate it from all members of the genus, thus warranting the erection of a new genus for its reception.

The geographical distribution of the Marquesan species of *Rhyncogonus* within the Marquesas is somewhat parallel to that of the Hawaiian species in the Hawaiian islands and in general to that of most endemic Rhyncophora on oceanic islands. For instance, all species are restricted to single islands, many to certain small areas on the islands, and where many species are found on an island certain of the individual species may be more widely separated from each other than they are from some of the species to be found on the other islands. Table 1 shows the distribution of the Marquesan species.

Table 1. Distribution of Marquesan Species of Rhyncogonus and Microgonus.

Island	Species	Group	Island	Species	Group
Eiao	Rhyncogonus plumbeus	A	Hivaoa	Rhyncogonus mimus	В
Eiao	Rhyncogonus brunneus	C	Hivaoa	Rhyncogonus mumfordi	В
Hatutu [H			Hivaoa	Rhyncogonus navicularis	В
	Rhyncogonus perkinsi	C	Hivaoa	Rhyncogonus corvus	\mathbf{B}
Nukuhiva	Rhyncogonus walkeri	C	Hivaoa	Rhyncogonus lugens	C
Nukuhiva	Microgonus		Hivaoa	Rhyncogonus pygmaeus	D
	oodemaformis Nev	v genus	Tahuata	Rhyncogonus oppositus	В
Uahuka	Rhyncogonus planatus	C	Tahuata	Rhyncogonus uniformis	В
Uahuka	Rhyncogonus aeneus	D	Fatuhiva	Rhyncogonus eximius	\mathbf{B}
Uapou	Rhyncogonus griseus	\mathbf{B}	Fatuhiva	Rhyncogonus duplex	В
Uapou	Rhyncogonus lateralis	\mathbf{B}	Fatuhiya	Rhyncogonus cinereus	В
Hivaoa	Rhyncogonus ochraceus	В	Fatuhiva	Rhyncogonus cuneatus	\mathbf{B}
Hivaoa	Rhyncogonus adamsoni	$^{\cdot}$ B	Fatuhiva	Rhyncogonus brevis	C

By consulting Table 1 and the map (fig. 6) at the same time, a better understanding may be had of the true distribution of the various species and its significance. In group A the one species, plumbeus, a generalized species, does not seem to be closely related to any of its fellows in the Marquesas but shows a somewhat close affinity with the Tahitian species, submetallicus, and a more distant relationship to the third group of Hawaiian species. Species of group B, in which are to be found the greatest number, as well as the most characteristic Marquesan species, are limited to the southwestern islands: Uapou, two species; Tahuata, two species; Hivaoa, six species; and Fatuhiva, four species. On Uapou and Tahuata the members of group B are the only species so far found, but on Hivaoa and Fatuhiva other groups are represented. The flatter species of group C, those resembling to a considerable degree many of the Hawaiian species, are to be found only on the northern and eastern islands: Hatutu, one species; Eiao, one species; Nukuhiva, one species; Uahuka, one species; the most divergent of the group, Hivaoa, one species; and Fatuhiva, one species. Species of group D, the only two representatives and the most unlike the remainder of any of the groups, are to be found on Uahuka and Hivaoa. The only species of *Microgonus*, a species which simulates the species of group D, is limited to Nukuhiva. The island of Mohotani has no species. Thus, the distribution within the archipelago is not a haphazard one, which indicates that the islands have been settled in an orderly manner. That certain groups are more or less confined to rather definite parts of the archipelago would lead one to believe either that for each group there was a definite center of origin in one large primitive island or that the ancestor of each somehow found a lodgment upon one island and the various derivatives were dispersed from this location. The original settlement,

judging from the degree of specialization, must have occurred at a very early period, early Pliocene if not Miocene.

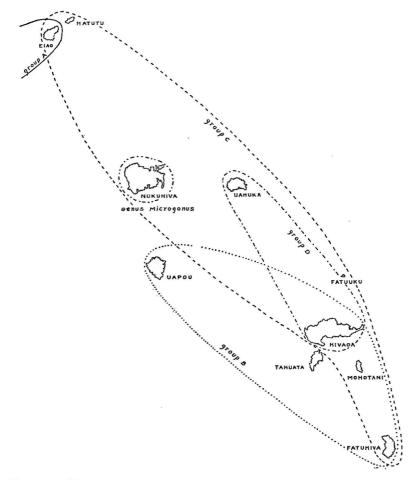


FIGURE 6. Map of Marquesas Islands showing distribution of *Microgonus* and of species of *Rhyncogonus* by groups.

RHYNCOGONUS Sharp

This genus, as indicated by Sharp,¹⁴ belongs to the subfamily Brachyrhininae (Otiorhynchinae) of the family Curculionidae, and has the following peculiar or differentiating characters: a robust and short rostrum, as broad as long or but slightly longer, dilated apically, with the scrobes confined to pterygia; the antennae very long, the scape much elongated, and the club

¹⁴ Blackburn, Thomas, and Sharp, David, Memoirs on the Coleoptera of the Hawaiian islands Roy. Dublin Soc. Sci. Trans., 3, pp. 176-177, 1885.

elongate fusiform; the submentum broad and quite flat, widely separated from sides of head by deep buccal cavities thus exposing the outer portion of the maxillae for their entire length, the buccal cavities also extending backwards beyond base of submentum enabling the latter to have a distinct gular peduncle; the anterior coxae approximate, the middle rather narrowly separated, and the posterior very widely separated; the hind tibiae with apical truncature broad, not interrupted or prolonged above and with corbels not cavernous.

According to Sharp this genus should be placed in a new tribe of weevils, that of the Rhyncogonini (Rhyncogonides of Sharp), and in this I concur. It differs from the tribe "Otiorhynchides vrais" of Lacordaire 15 and all other tribes associated with it by the deep buccal cavities and exposed maxillae, resembling in this regard the members of the tribe Celenthetides of Lacordaire. It, however, differs from this tribe as well as from those associated with it by not having the corbels of the posterior tibia cavernous. Its position is well summed up by Sharp 16:

Some of the Celeuthetides have the mouth not completely Adelograthous (e.g., Elytrurus), and it is probably to these that Rhyncogonus is nearest, but the Celeuthetides have also the corbels more or less modified whereas they are quite simple in the Hawaiian genus. The Celeuthetides are specially characteristic of the Polynesian area, and we shall not be far wrong I believe if we consider that Rhyncogonus is a Celeuthetid form, with more simple (or primitive) conditions of the mouth and tibiae.

The general and special characters useful in separating the species are: the general size, shape, and proportions; the shape of head; rostrum, and proportionate length of the various segments of the antennal funicle; the size of eyes, degree of convexity, and curvature; the shape, ornamentation, and sculpturing of prothorax; the shape, type of margin, degree of convexity, sculpturing, and pilosity of elytra; and the modifications of the abdomen and legs. The males are in general smaller and narrower than the females and as a rule flatter; they have the apices of the elytra more sharply pointed; a certain proportion of males have the base of prothorax but little wider than apex, whereas it is distinctly wider in the female; the pilosity of upper surface of males is generally sparser and in many males is of a grayish tint, in contrast to a rather dense, more or less fulvous pubescence in the female, and the male abdomen beneath is more glabrous, the anterior segment of many is quite sulcate, and the general surface is studded with granules, the females on the other hand having the surface flattened at the most, generally finely pubescent, finely punctured, and often somewhat scabrous.

vol. 4, pp. 77-82, 1919.

¹⁵ Lacordaire, J. T., Hist. nat. d. Ins. Genera des Coléoptères, Paris, 6, Curculionides, p. 145, 1863.

18 Sharp, David, Studies in Rhynchophora 5, The genus Rhyncogonus: Hawaiian Ent. Soc. Proc.,

Synoptic Key to Species

1.	Moderate or rather large, 10-19 mm. in length, and generally more or less pilose	2
_	Smaller, less than 9 mm. in length, very convex, smooth and shining	24
2.	The disk of elytra rather evenly convex, not markedly flattened toward sides The disk of elytra more or less flattened, especially toward sides and in males;	3
	rostrum as broad as long; pile often scalelike	20
3.	Elytra quite convex from side to side; sides evenly arcuate from humeri to	
	apices; apices but little produced; sparsely pubescent	4
	Medium or large; the elytra but moderately convex at center, somewhat flat-	
	tened toward sides in females, and apices distinctly narrowed; often quite densely pubescent	-
4.	Black; sides of elytra not margined, and disk densely, somewhat irregularly	5
	punctured with large and small punctures; eyes prominent; the surface	
	sparsely and evenly pilose; Eiao	eus
5-	Larger, less convex, 13 mm. or more in length; pile more or less dense at	,
	least laterally in females	6
	what uniformly pilose	15
6.	The pile of fresh specimens more or less uniformly dispersed over upper surface,	-3
	in females generally denser and more fulvous in contrast to the gray pile	
	of males	7
	The pile even in fresh specimens more or less localized to the sides of upper sur-	
	face; the sutural region of elytra quite glabrous; the pile of some females somewhat fulvous	13
7.	Base of prothorax distinctly narrower than middle in males; funicular segments	-3
	robust, the outer not more than one and one-half times as long as broad;	
	eyes but moderately prominent; black; more or less rugose; moderately	
	clothed with depressed fulvous pile and sparser, longer, erect white hairs; Fatuhiva	ine
	Base of prothorax hardly if at all narrower than middle even in males; funicu-	
	lar segments elongated, the outer about twice as long as broad	8
8.	Eyes prominent, standing well out from head	9
	Eyes not prominent, less convex, projecting but little beyond lateral margins	
0	of head	11
9.	of elytra very distinct; female upper surface rather densely clothed with	
	ochraceous pile; Hivaoa	us
	Anterior tibiae armed on inner face with series of serrations or small sharp	
	spines; the eyes prominent but not hemispherical; sides of elytra hardly	
10	more than carinate, the margin vague	10
10.	sparsely clothed with long, erect and short, depressed, cinereous pile; fe-	
	males more densely clothed with light, fulvous depressed pile and longer	
	erect cinereous pile; Tahuata	tus
	Anterior tibia armed on inner face near apex with series of small, acute spines; both males and females clothed with cinereous pile, the depressed hairs	
	arranged roughly in a vittate manner, the longer erect hair rather shorter	
	than in the preceding species and irregularly dispersed; Hivaoa5. adams	oni
11.	Eyes evidently convex; head broader through eyes than posterior to eyes	12
	Eyes very slightly convex; head narrower through eyes than posterior to eyes; prothorax with sides gradually convergent forward in both sexes; males	
	clothed with double type of cinereous hairs, the long erect hairs almost as	
	abundant as the depressed; the females more densely clothed with fulvous,	
*	depressed pile, the semi-erect hairs short and sparse; Fatuhiva	ex

12.	Prothorax gradually narrowed forward in both sexes; both sexes also clothed with fulvous pile, slightly more dense in females, the erect hairs short and sparse; Hivaoa	ıs
	Prothorax broadest at center in both sexes, though narrower at apex than base; both sexes clothed with cinereous pile, the depressed hairs moderately dense, the erect hairs long and abundant but slightly shorter and less evident in females; Fatuhiva	
13.	Sides of elytra distinctly carinate and margin narrow but well marked from base to apex; pile sparse, slightly more evident at sides; Hivaoa	di 14
14.	Elytra much prolonged and narrowed behind in males, broader and less arched toward sides in females; the disk of elytra irregularly punctured and scabrous; the pile limited to sides in males, extending toward suture in females; Hivaoa	
	Elytra more broadly cordate in males as well as females, slightly less arched laterally; the disk serially striate, the intervals smooth in males, less so in females as result of minute punctures on fourth and fifth intervals; pile dense at sides more closely approaching suture in both sexes; Uapou	
15.	Species all somewhat narrow and elongate, the rostrum always slightly longer than broad	16
16.	Eyes large and prominent, standing well out from the head; second funicular segment almost a fourth longer than first; the elytral punctures numerous and irregularly distributed; general surface slightly rugose or scabrous;	17
	elytral punctures more or less serially arranged, the intervals moderately	8ء
17.	Upper surface uniformly though rather sparsely clothed with moderately long gray or, as on sides of prothorax, gray and fulvous pile; apex of prothorax but little narrower than base; Tahuata	
18.	Diameter of each eye more than one half breadth of interocular space, the eyes themselves not prominent; second segment of funicle fully a fourth longer than first; elytra cordate; Fatuhiva	ıs
	Diameter of each eye hardly one half breadth of interocular space, the eyes small but quite convex; second segment of funicle barely longer than first; elytra elliptical; Uapou	
19.	The disk of elytra very convex, side margin alone compressed, elytral punctures serially arranged; pile sparse and uniformly dispersed, the erect setae almost as evident; Fatuhiva	
20.	No species more than 14 mm. in length and even females only moderately broad; upper surface somewhat convex; eyes never nearly hemispherical; vestiture of upper surface more or less scalelike	21
	Large and broad, more than 13 mm. in length, generally 15 mm.; upper surface very flat, almost horizontal in males; eyes prominent, almost hemispherical; vestiture composed of very fine, short, and sparsely though evenly dispersed hair; Uahuka	

22	 Small, 9 mm. in length; eyes obliquely flattened in front giving a trialine; depressed vestiture dense, rather uniformly dispersed; large, somewhat serially arranged punctures
	Somewhat larger, 12 mm. or over in length; eyes rather evenly conture less dense and not uniformly distributed; elytra without tures; general surface irregularly granulate
eus	22. Brown; densely clothed with short, golden brown scales and with erect, stiff setae; the alternate elytral intervals more or leapically; Eiao
insi	Black; densely clothed above with elongate white scales and with a semierect setae near the elytral apices; elytral intervals all f [Hatutaa]
ceri	23. Vestiture, long hairlike scales moderately well disposed over the up and with a slight tendency to form vittae; males as well as fem ately broad; Nukuhiva
ens	Vestiture, short scales, very sparsely disposed, in males only at post of prothorax above, in females, somewhat scattered over the el very narrow, hardly more than half as broad as females; Hivao
eus	24. Black, the upper surface aeneous; apex of prothorax distinctly nar base; punctures of elytra coarser, more numerous and more re tributed; pilosity sparse but evident; Uahuka
	Rufopiceous with red legs and antennae; apex of prothorax but litt than base; punctures of elytra shallowly impressed and each v
in ce	Black; densely clothed above with elongate white scales and with a semierect setae near the elytral apices; elytral intervals all f [Hatutaa]

1. Rhyncogonus plumbeus, new species (fig. 7, a, b, c).

Moderately elongate, robust, dull black, rather uniformly clothed with very short decumbent and longer, more numerous, erect hairs. Head slightly convex above and coarsely punctured and somewhat strigose, the apex of rostrum triangularly flattened and more finely, shallowly punctured; eyes moderately large and prominent; rostrum about as broad as long; antennae with scape reaching middle of prothorax, the second funicular segment slightly longer than first, third somewhat more than twice as long as broad, the following gradually shorter. Prothorax distinctly broader than long, the apex 1 mm. narrower than base, the sides arcuate and convergent forward, the disk evenly convex and coarsely, closely, somewhat cribrately punctured, more finely at sides. Scutellum clothed with white hairs. Elytra one-third longer than broad and three times as long as prothorax; sides evenly arcuate to posterior third, thence straight and convergent to rounded apex, no evident side margin; the disk evenly convex, rather coarsely punctured with well spaced punctures, between which are finer punctures, slightly rugose. Beneath rather finely punctured and scabrous; males with abdomen very sparsely pubescent, more or less shining, the first and second segments flattened and with numerous well spaced granules distributed over the surface; females with abdomen more evidently pubescent, less shining, the first and second segments somewhat concave and furnished with granules as in males but of smaller size. Legs moderately long, front tibiae very finely, middle and hind rather coarsely serrate on inner margin. Male (average): length, 14 mm.; breadth, 6 mm. Female: length, 16 mm.; breadth, 6.5 mm.

Holotype male, allotype female, and numerous designated paratypes, collected by LeBronnec and H. Tauraa, on Eiao, Marquesas, at an altitude of 1700 feet, April 21-24, 1931. Taken on *Sida* species, *Ageratum conyzoides*, and *Abutilon* species. Other specimens were found, most of them under

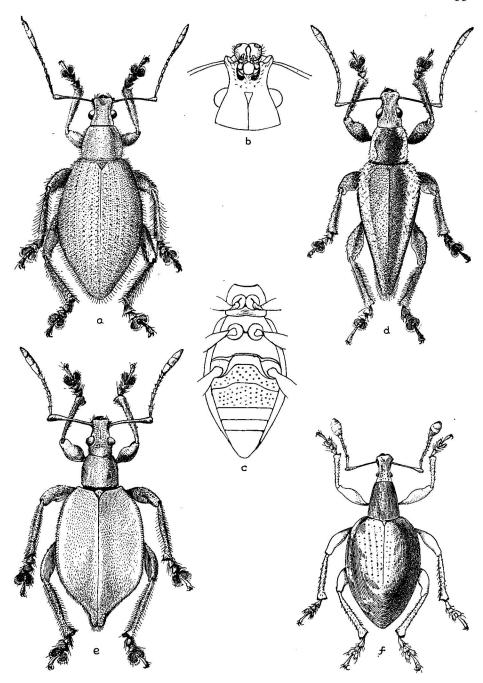


FIGURE 7. Rhyncogonus and Microgonus. a-c, Rhyncogonus plumbeus new species, from Eiao: a, male, \times 4; b, underside of head showing mouthparts; c, underside of body of male. d, Rhyncogonus navicularis Marshall, male, from Hivaoa, \times 4½. e, Rhyncogonus planatus new species, male, from Uahuka, \times 3¾. f, Microgonus oodemaformis new species and new genus, from Nukuhiva, \times 9.

stones, near the center of the island at an altitude of 1200 feet, September 28 to October 1, 1929, by A. M. Adamson. The entire lot examined consists of 222 mounted specimens. There is also a large series preserved in alcohol.

This species is very distinct from other species found in the Marquesas, differing chiefly in the even convexity of the upper surface and general degree of robustness, also in the fine and evenly distributed pile. In these regards it resembles the Tahitian species. It is, however, quite different from that species in other respects, and also quite different from the generally shorter and stockier members of the third group of Hawaiian species. I consider it the most generalized of the Marquesan species. The size is also quite variable, the length varying from 10 mm. to 17 mm. and the breadth from 4 mm. to 8 mm., the largest specimens averaging in bulk four times that of the smallest specimens. Most of the specimens are of a dull black, the erect pile, though quite conspicuous when seen from the side, only giving the insect a slight grayish or pruinose appearance when seen from above. There are, however, a number which are very densely pilose, and these appear quite gray.

2. Rhyncogonus eximius Perkins.

Rhyncogonus eximius Perkins, Ann. Mag. Nat. Hist., Ser. 10, vol. 1, pp. 126-127, 1928.

Elongate, moderately robust; black, shining where abraded, and rather densely clothed above with dark fulvous decumbent hairs and longer and finer, erect, very light fulvous hair, the sides more densely clothed and the hair of the underside sparser and more or less cinereous. Head flattened above, coarsely punctured and distinctly strigose, the rostrum above broadly and shallowly sulcate; eyes moderately large and prominent; rostrum longer than broad; antennae with scape reaching just beyond anterior third of prothorax, second funicular segment very long, one-fourth longer than first, the following robust, not quite twice as long as broad. Prothorax broader than long, broadest at middle, the apex slightly narrower than base, sides arcuate, the disk convex and coarsely rugose, slightly strigose and with the strigae somewhat radially arranged. Scutellum clothed with light fulvous, almost white pile, contrasting strongly with the darker pile of the elytra. Elytra more than one-third longer than broad and three times as long as prothorax, elongate cordate, the sides evenly arcuate to beyond the middle, then straight and divergent to rounded apices. Side margin vaguely defined toward base; the disk convex yet somewhat flattened, moderately coarsely, irregularly punctured and somewhat scabrous. Beneath rather shining, finely, irregularly punctured, the first and second abdominal segments slightly sulcate in the male and granulate-scabrous. Legs moderately long, the front and middle tibiae not noticeably serrate on inner margin, the hind distinctly so. Length, 15 mm.; breadth, 5.5 mm.

The original description of the species was based upon a single specimen, presumably a female, collected by C. L. Collenette, at an altitude of 1500-2000 feet, Fatuhiva, January, 1925, on pepper. The only specimen which the Pacific Entomological Survey secured was an undoubted male, collected by LeBronnec at Vaikoao, Omoa [Oomoa] Valley, Fatuhiva, at an altitude of

1500 feet, August 30, 1930, and taken on Canthium barbatum. This specimen was in good condition and not at all abraded and agreed exactly with the excellent description given by Perkins. The species because of its long pile and generally hairy condition stands removed from all of its fellows with the exception of cinereus (8), which it simulates in size, general shape, and degree and type of pilosity. The latter, however, differs primarily by having less prominent eyes and the pile of a uniform gray color in both sexes.

3. Rhyncogonus ochraceus, new species.

Elongate, robust, and more or less depressed; black, and densely clothed with orange red or ochre colored, moderately long depressed hair, which is lighter along the suture and on the disk of the pronotum and very sparse on the head and median portion of the body beneath, and a moderate amount of erect hair, which is longer and denser toward the elytral apex. Head somewhat flattened above, coarsely irregularly punctured, and evidently strigose on the front; the eyes large and prominent, almost hemispherical; the rostrum about as broad as long; antennae with scape reaching the middle of prothorax, the second funicular segment evidently longer than first, the third segment about twice as long as broad, the two following gradually shorter and the sixth and seventh still shorter. Prothorax broader than long, the apex much narrower than base, the sides arcuate and gradually convergent, the disk coarsely punctured and rugose. Scutellum densely clothed with ochraceous pile. Elytra one-third longer than broad and three times as long as prothorax, sides evenly arcuate at humeri, slightly arcuate, almost straight at middle, thence straight and convergent to rounded hind angles, and with a narrow yet well defined lateral margin from humeri almost to apex, the disk convex yet moderately depressed, finely, irregularly punctured apically and granulate basally. Beneath, abdominal segments finely scabrous, and the first abdominal segment slightly concave. Legs of moderate length, the front and middle tibiae without noticeable serrations on inner face and the hind tibiae finely serrate on inner face. Length, 14 mm.; breadth, 6 mm.

Holotype, a unique female, collected by Mumford and Adamson at Matauuna, Hivaoa, Marquesas, at an altitude of 3700 feet, August 1, 1929.

This species is well defined by its ochraceous color, prominent eyes, rugose pronotum, granulate basal area of elytra, well developed elytral side margin, and simple front tibiae. When it is compared with any of the other eight species to be found on Hivaoa this sum of characters will enable it to be readily separated, even from such as adamsoni, mimus, and mumfordi, its closest relatives.

4. Rhyncogonus oppositus, new species.

Elongate, the male narrow, the female rather broad and robust, and somewhat depressed; the males black, legs often reddish, sparsely clothed with short depressed and longer erect gray hairs; the females reddish brown and rather densely clothed with short depressed, fulvous pile and slightly longer erect hairs; the underside of entire abdomen in male and last ventral in female quite glabrous. Head flattened above, coarsely punctured behind, a fine longitudinal crista sometimes also evident; the eyes large and moderately prominent; the rostrum slightly longer than broad; antennae with scape reaching beyond middle of prothorax, the second funicular segment very long, about one-fourth

longer than first, the third over twice as long as broad, the following gradually shorter. Prothorax very slightly broader than long in males; distinctly broader in females, the apex much narrower than base, the sides arcuate and gradually narrowing forwards; the disk with mixed fine and coarse punctures in males; more finely, less closely punctured in females. Scutellum covered by a patch of white pile in male and a fulvous patch in female. Elytra over a third longer than broad in male, under a third in female, and in both sexes about three times as long as prothorax, sides evenly arcuate in front, straight and convergent posteriorly to rounded hind angles, the males without definite lateral margin but the females with narrow and well marked margins except near apex; the disk in males with series of large serially arranged punctures and with smooth intervals, in the females with smaller, more numerous and less regularly arranged punctures, also somewhat asperate and with patches of very fine punctures placed about where the alternate intervals should be. Beneath with abdomen irregularly granulate and first and second segments somewhat excavated in male, finely punctured and faintly scabrous in female. Legs rather long in male, of moderate length in female, all tibiae rather finely serrate on inner margin. Male: length, 13 mm.; breadth, 5 mm. Female: length, 14 mm.; breadth, 6.5 mm.

Holotype male collected by LeBronnec and H. Tauraa at Amatea, Tahuata, Marquesas, altitude 2000 feet, June 28, 1930, on *Piper latifolium*; allotype female collected by the same collectors at Vaitupaahei, Tahuata, altitude 1750 feet, July 9, 1930, also on *Piper latifolium*; and several designated paratypes from a series of 43 specimens all collected at the above mentioned locations and at Hanamiai Valley, altitude 1200 feet, June 3, 1930.

The species is one of several which are sexually both markedly dimorphic and dichromatic, the males being rather narrow, black, and sparsely clothed with very long erect and short depressed somewhat grayish pile as well as having the abdomen almost naked but studded with pronounced granules; the females on the other hand broad, depressed, generally brownish in color, rather densely clothed with short depressed fulvous pile and more sparsely with semierect, short hairs, the underside finely pilose and with granules obscurely indicated at most. From duplex Perkins and mimus Perkins which most closely simulate it and share with it the extreme sexual peculiarities it differs in the main by having large and rather prominent eyes, a shorter and broader rostrum, and the erect hairs longer and more abundant than the females of duplex and mimus, as well as the males of mimus.

5. Rhyncogonus adamsoni, new species.

Males elongate and narrow, females broader and more robust, black, legs sometimes rufous in fresh specimens, and sparsely clothed with cinereous pile, the decumbent hairs more dense along the sides of prothorax and arranged in a somewhat vittate manner on the elytra, particularly in the female, the erect hairs sparse and more or less irregularly dispersed. Head rather finely, closely punctured above and the rostrum broadly, shallowly sulcate and with a faint longitudinal carina at middle; eyes large and moderately prominent; rostrum longer than broad; antennae with scape reaching the middle of prothorax, second funicular segment slightly longer than first, the third more than twice as long as broad, the following gradually shorter. Prothorax broader than

long, apex much narrower than base, sides almost parallel near base and evenly arcuate and narrowed to apex, the disk moderately coarsely, somewhat irregularly punctured. Scutellum concealed by a patch of white pile. Elytra considerably over a third longer than broad in male and not quite three times as long as prothorax, three times as long as broad in females and three times as long as prothorax, sides evenly arcuate to beyond middle in males, almost to apex in females, thence straight and convergent to rounded apex, the side margin sharply carinate but not otherwise defined; the disk convex, rather coarsely, serially punctured near the suture, more irregularly at the sides, in the males, and more or less irregularly punctured over entire surface in the females as well as with the addition of very minute punctures on the intervals. Beneath, the males with abdominal segments smooth at middle and studded with pronounced, well spaced granules, the females with the abdominal segments finely pubescent and very finely closely granulate. Legs rather long in male, of moderate length in female, the anterior tibiae armed on inner face near apex with small, acute spines, serrate above, the middle and posterior tibiae merely armed with well marked serrations on inner face. Male: length, 13 mm.; breadth, 5 mm. Female: length, 13 mm.; breadth, 6 mm.

Holotype male, allotype female, and two paratype males from Vaiepoepo, Hivaoa, Marquesas, collected at an altitude of 2300 feet, June 2, 1929, by Mumford and Adamson on *Piper latifolium*.

This species is rather closely related to *oppositus* and to a lesser degree to *ochraceus*, differing in having the pile of a uniform cinereous color in both sexes and in having the serrations on the inner face of the anterior tibiae developed into well marked spines. The rostrum is also definitely sulcate in *adamsoni*, flat in the others, and in *ochraceus* also shorter and broader.

6. Rhyncogonus duplex Perkins.

Rhyncogonus duplex Perkins, Ann. Mag. Nat. Hist., Ser. 10, vol. 1, p. 124, 1928.

Large and elongate, the males narrow and females moderately broad; the males black, clothed with conspicuous yet not dense depressed pile, and longer, very fine, erect hair, the females brown, somewhat densely clothed with fulvous depressed pile and a few short, erect hairs. Head flattened above, rather coarsely punctured, somewhat strigose between the eyes, and the rostrum broadly, shallowly sulcate above, with an obsolete median longitudinal carina in some specimens, and slightly longer than broad; eyes of normal diameter but very flat, not projecting beyond the side margin of head, the head posterior to the eyes also of greater breadth than through the eyes; the scape not quite reaching middle of prothorax, second funicular segment long, longer than first, the third about three times as long as broad, the following gradually shorter. Prothorax barely broader than long, the males with apex slightly narrower than base, broadest at middle and sides rather evenly arcuate, the females with apex decidedly narrower than base, broadest at base, sides gradually arcuate and narrowed forwards; the disk closely, somewhat reticulately punctured with punctures of varying size. Scutellum clothed with white pile in the male and fulvous in the female. Elytra over a third longer than broad, the female slightly the broader, and over three times as long as prothorax, sides in male moderately rounded near base, thence arcuate and gradually narrowed to posterior third and straight to rounded apex, in female more broadly arcuate from base to posterior third and straight to rounded apex, the side margin narrow and well defined near base in male, almost to apex in female; the disk coarsely, somewhat serially punctured near suture, more irregularly and densely at sides, and with minute punctures between, the general surface as a result rather finely granulate. Beneath in male very finely, sparsely pubescent, the abdomen with basal segments concave and with marked, well spaced granules, finer toward apex, the female more evidently pubescent, the basal abdominal segments merely flattened, finely punctured and scabrous. Legs long in male, shorter in female, and all tibiae distinctly serrate on inner surface, the anterior with serrations somewhat spinous near apex. Male: length, 17 mm.; breadth, 6 mm. Female: length, 16 mm.; breadth, 7 mm.

This is in general the largest species of the archipelago. From mimus it differs primarily in that the males are clothed with white pile and by being generally larger; from cinereus, in that the females are clothed with fulvous pile; and from oppositus and adamsoni in that the eyes are much less prominent. These species all agree in being of large or moderate size and in having the elytra in the males much elongated and cuneiform, the females with more definitely cordate and broader elytra. The expedition secured ten males and four females, from the following localities: Ihiota, Hanavave Valley, altitude 4500 feet, Fatuhiva; Vaikoao, Omoa [Oomoa] Valley, altitude 1500 feet, Fatuhiva; Teaotu, Hanavave Valley, altitude 700 feet, Fatuhiva and Ahuava, altitude 1800 feet, Fatuhiva, collected in August and September, 1930, LeBronnec, on Piper latifolium and Canthium barbatum.

7. Rhyncogonus mimus Perkins.

Rhyncogonus mimus Perkins, Ann. Mag. Nat. Hist., Ser. 10, vol. 1, p. 125, 1928.

Moderately elongate and robust; reddish brown to black and in both sexes irregularly clothed with depressed light fulvous hairs, denser at the sides of the elytra and with a tendency to be somewhat vittate, the males in addition with a few short, semierect hairs. Head flattened above, rather coarsely punctured and strigose on the front, with an elongate fovea between the eyes and the rostrum broadly, shallowly sulcate; eyes moderately large but not prominent, hardly projecting beyond the side margin of the head, the head, however, broader through the eyes than behind; rostrum longer than broad; antennae with scape extending slightly behind middle of prothorax, the second funicular segment elongate, slightly longer than first, the third over twice as long as broad, the following gradually shorter. Prothorax slightly broader than long in male, evidently so in female, the apex distinctly narrower than base, the male broadest in front of base and with sides slightly arcuate, the female broadest at base and with sides arcuate and convergent forward, the disk rather coarsely, irregularly punctured and rugose. The scutellum covered with a patch of fulvous pile. Elytra in male over a third longer than broad and less than three times as long as prothorax, in female onethird longer than broad and over three times as long as prothorax, the sides sharply carinate and with narrow margin only near base, the disk with coarse or but moderate punctures in female, somewhat serially arranged and with numerous very minute punctures between, giving a dull aspect. Beneath, the male with abdomen almost naked, somewhat flattened in front and studded with fine granules, the female with abdomen distinctly pubescent, finely punctured, and slightly convex. Legs of moderate length in both sexes, all tibiae rather coarsely serrate on inner face. Male: length, 12.5-13 mm.; breadth, 5-5.5 mm. Female: length, 14.5-17 mm.; breadth, 6-7.5 mm.

In this species, which is in general slightly smaller than duplex, both sexes are somewhat similar as to vestiture, the males therefore easily separated from all close relatives by the fulvous color. The females, which simulate the females of oppositus and duplex, have the eyes about intermediate in prominence between the two, oppositus having the eyes very prominent, almost hemispherical, and duplex with its eyes much flattened, not projecting beyond side margins of head. Twenty-three specimens were obtained by the Survey from Hivaoa, Marquesas, mainly by Mumford and Adamson: Kopaafaa, August 2, 1929; ridge northwest of Taaoa, altitude 2800 feet, June 3, 1929; Tepuna, August 1, 1929; and slope north of summit of Mount Temetiu, altitude 2000-2500 feet, December 27, 1930.

8. Rhyncogonus cinereus, new species.

Large, elongate, the males narrow, the females broad, black and both sexes about equally and rather densely clothed with shorter depressed and longer erect gray pile. Head moderately finely punctured behind, coarsely punctured and somewhat strigose between the eyes, the rostrum broadly and shallowly sulcate, eyes large but flattened, hardly projecting beyond side margins of head; the rostrum slightly longer than broad; the antennae with scape not quite reaching middle of prothorax, second funicular segment very long, about a fourth longer than first, the third about two and a half times as long as broad, the following gradually shorter. Prothorax broader than long, broadest slightly in front of base in female and about at middle in male, the apex narrower than base, sides evenly arcuate in male, arcuate and narrowed forward in female, the disk closely, irregularly punctured and with more or less evident median, longitudinal carina. The scutellum covered by a patch of very white pile. Elytra four-tenths longer than broad and over three times length of prothorax, cordate cuneate, broader in female, the sides evenly arcuate to posterior third in male and fourth in female, thence straight to rounded hind angles, the side margin only carinate near base in male but distinctly yet narrowly margined almost to apex in female, the disk with coarse or moderate (female) somewhat serially arranged punctures and very minute punctures between. Beneath with abdomen moderately smooth and shining in male, the first segment concave, and ornamented with pronounced, well spaced granules; the female with abdomen finely pubescent, anterior segments merely flattened, and finely punctured and scabrous, especially basally. Legs long in male, of moderate length in female, front tibiae finely serrate on inner face, the middle and hind more coarsely serrate. Male: length, 14 mm.; breadth, 5 mm. Female: length, 17 mm.; breadth, 6.5 mm.

Holotype male, allotype female, 6 paratypes, all except one collected at Vaikoao, Omoa [Oomoa] Valley, altitude 1600 feet, Fatuhiva, Marquesas, August 27, 1930, LeBronnec, on *Piper latifolium*. One female, collected at Ihiota, Hanavave Valley, altitude 450 feet, Fatuhiva, September 10, 1930, by LeBronnec.

This large species, only slightly smaller than duplex, can generally be readily separated by its size, rather dense gray pile in both sexes, the erect hairs as abundant as the depressed, and character of eyes. The only chance for confusion is between the males of duplex and cinereus. In duplex the eyes do not project beyond the side margin of head, and the prothorax is

hardly narrowed at base. In *cinereus* the eyes project definitely beyond side margin of head and the prothorax is narrowed almost as much basally as it is apically. It is rather interesting to find two such closely related species as *cinereus* and *duplex*, not only on the same island but often in the same regions. It is an exception to the general rule as regards Marquesan species of this genus. The eyes are so definitely different between the two species that one would not be justified in considering them varieties of the same species.

9. Rhyncogonus mumfordi, new species.

Of moderate size, elongate, the males narrow, females somewhat robust, moderately flattened above, black or pruinose with legs and antennae reddish (probably slightly immature) and sparsely clothed with depressed pile, most evident around eyes and at sides of prothorax and elytra, and a limited number of semierect hairs on elytral apices. Head rather finely punctured on vertex, coarsely irregularly punctured and somewhat strigose in front, a distinct fovea between eyes, the rostrum broadly, shallowly sulcate; eyes large, moderately prominent, projecting moderately beyond side margins of head; rostrum slightly longer than broad; antennae with scape reaching middle of prothorax, second funicular segment very long, at least a fourth longer than first, the third almost three times as long as broad, the following gradually shorter. Prothorax broader than long, broadest near middle, apex slightly narrower than base in male, markedly so in female, the sides moderately arcuate and somewhat narrowed in front, the disk rather coarsely, closely, and in places confluently punctured and with a more or less obsolete median longitudinal carina near apex. Scutellum covered by a patch of white pile. Elytra in male nearly twice as long as broad, in female one-third longer than broad and in both sexes over three times as long as prothorax. Sides arcuate or somewhat straight near middle and straight and convergent at posterior third to rounded apices, the sides also carinate and with moderately well defined but narrow margin, the disk with coarse punctures somewhat serially arranged and intervening areas minutely punctured and rugose. In one male the large punctures have been to a great extent obliterated; their anterior margins have been elevated in the form of well marked granules, which are rather generally distributed over the surface. The elytra in this specimen are also without definite lateral margins and the sides are non-carinate. Beneath, male with abdomen sparsely pubescent, the metasternum and first abdominal segment concave, all abdominal segments studded with granules, well spaced on second and following segments; female more evidently pubescent, metasternum and first abdominal segment merely flattened and rather finely scabrous. Legs long in male, of moderate length in female, all tibiae rather finely serrate on inner margin. Male: length, 15 mm.; breadth, 5 mm. Female: length, 15 mm.; breadth, 6 mm.

Holotype male, allotype female, and seven paratypes collected at Teava Uhia i te Kohu, Hivaoa, Marquesas, altitude 2000 feet, February 15, 1930, Mumford and Adamson.

This interesting species is quite distinct. Its pruinose appearance, sparse pubescence, in the main limited to the sides, well defined though narrow side margin in both sexes, and somewhat flattened upper surface will enable it to be readily recognized. The single divergent male with dorsal granules and simple side margins agrees so well in all other regards with its fellows

that I can consider it as nothing more than an individual variant. It is a most interesting specimen, though, for it shows how even within the limits of a species one type of sculpturing can replace another and opposite type. A careful examination brings out the fact that it has been accomplished merely by a slight suppression of one set of characters and the exaggeration of others.

10. Rhyncogonus navicularis Marshall (fig. 7, d).

Rhyncogonus navicularis Marshall, Ann. Mag. Nat. Hist., ser. 10, vol. 6, pp. 553-554, 1930.

Elongate, narrow, much attenuated behind especially in males, and sparsely clothed with fulvous or white pile, the fulvous pile most evident at sides and on legs, the white pile generally restricted to males and best seen on sides of disk and here and there on legs. Head punctate and markedly strigose, not sulcate in front; eyes large and quite prominent; rostrum about as broad at base as long; antennae with scape reaching middle of prothorax, second funicular segment about a fourth longer than first, third slightly more than twice as long as broad, the following gradually shorter. Prothorax broader than long, apex considerably narrower than base, sides almost parallel at basal half or slightly convergent forward in female and rounded to apex, disk coarsely, closely punctured and irregularly cribrate. Scutellum with a tuft of white pile in male, fulvous in female. Elytra considerably more than one-third longer than broad in male, slightly more than one third longer in female, over three times as long as prothorax, the sides neither carinate nor margined in male, slightly margined and carinate near base in female, disk somewhat coarsely and shallowly punctured, in male also quite closely punctured and distinctly rugose, especially near base. Beneath, the male with the abdomen shining, shallowly, broadly sulcate in front and sparsely studded with small well spaced granules; the female with abdomen subglabrous, flattened in front, and sparsely, finely punctured or somewhat subscabrous in front. Legs long, front and middle tibiae obscurely serrate on inner face, the hind tibiae distinctly serrate. Male: length, 14 mm.; breadth, 5 mm. Female: length, 15 mm.; breadth, 6 mm.

A series of more than 350 specimens was collected at an altitude of 2000 to 3000 feet, on the slope of Mount Temetiu, Hivaoa, Marquesas, December 29, 1930, and January 9, 1931, by H. Tauraa. Other series were taken in the same localities by Mumford and Adamson. Taken feeding mainly on *Piper latifolium*.

This species, as shown in figure 7, d, is a long and narrow species with the elytra much attentuated behind and the pubescence to a great extent limited to the sides of both prothorax and elytra. It is somewhat simulated by *lateralis* from the island of Uapou, but *lateralis* is in general larger and more robust, with the elytra far less narrowed behind, the elytral pilosity covering a greater area, and the elytral punctures never continguous and generally more or less serially arranged and the interspaces non-rugose.

11. Rhyncogonus lateralis, new species.

Elongate, moderately robust, black, the sides of prothorax and elytra densely clothed with depressed fulvous pile, each elytron having in addition a covering of white pile extending from the sides to beyond the middle (in a few specimens this is also fulvous), and a limited amount of fine, semierect pubescence scattered over the surface, the median portion of both prothorax and elytra glabrous and shining. Head flattened in front, coarsely punctured, and in most cases markedly strigose especially in males; the rostrum longer than broad and at times shallowly bisulcate; eyes large and moderately prominent; antennae with scape reaching middle of prothorax, second funicular segment very long, one-half longer than first, the third nearly three times as long as broad, the following gradually shorter. Prothorax slightly broader than long, apex somewhat narrower than base, broadest at middle, the sides subparallel behind or somewhat arcuate and narrowed to apex, the disk irregularly and rather closely pitted with coarse and fine punctures and with a vague median carina anteriorly. Scutellum with a small patch of white pile. Elytra over one-third longer than broad and three times as long as prothorax, elongate cordate, the sides arcuate in front, straight and convergent behind to rounded apices; the disk rather numerously punctured with moderately coarse, somewhat serially arranged punctures, the female in addition with the intervening areas densely and minutely punctured. Beneath, the male shining at middle, the anterior sternites sulcate, and all abdominal segments studded with well marked and well spaced granules finer and denser on last segment; the female with abdomen finely and sparsely pilose and punctured. Legs long, front and middle tibiae obscurely serrate on inner margin, hind tibiae rather coarsely serrate. Male: length, 15 mm.; breadth, 6 mm. Female: length, 16 mm.; breadth, 6 mm.

Holotype male, allotype female, and numerous designated paratypes from a series of 47 specimens collected at Papaika (holotype), and elsewhere in Hakahetau Valley (allotype), 1000-2000 feet, Uapou, Marquesas, December 6-11, 1929, A. M. Adamson and R. R. Whitten.

This species is somewhat related to the preceding. It differs by being considerably more robust, more convex above, the elytra less narrowed behind, the disk not granulate-rugose, and with the pilosity denser and covering nearly two-thirds of the outer portion of each elytron, as well as sharply limited within, the eyes also slightly less prominent. Fresh specimens are very distinct, the sharply defined, shining, black glabrous sutural area contrasting most decidedly with the densely clothed white or pale fulvous sides.

12. Rhyncogonus uniformis, new species.

Elongate, the males quite narrow, the females broader and generally more robust, black, and sparsely yet uniformly clothed with light fulvous depressed pile and here and there a short, semierect hair on the elytra. Head flattened, coarsely punctured, somewhat strigose, a well defined fovea between the eyes; the rostrum a bit longer than broad, non-sulcate but with a vague, median longitudinal carina; the eyes large and moderately prominent; antennae with scape reaching middle of pronotum, second funicular segment at least one-fourth longer than first, the third slightly more than twice as wide as long, the following gradually shorter. Prothorax slightly broader than long, apex a bit narrower than base in male and evidently so in female, broadest at middle or slightly behind in female, the sides arcuate and narrowed in front, the disk coarsely, irregularly punctured and somewhat strigose. Scutellum covered with a patch of light fulvous pile.

Elytra slightly over a third longer than broad in male, just a third longer in female, and over three times as long as prothorax, elongate cordate, the sides arcuate in front, straight and convergent from middle in male, posterior third in female, to rounded hind angles, the disk irregularly punctured and finely scabrous. Beneath, male with abdomen shining, anterior sternites sulcate, and abdomen in general studded with well spaced granules; female sparsely finely pubescent and punctured. Legs long, front tibiae simple, middle finely serrate, and hind rather coarsely serrate on inner margin. Male: length, 12 mm.; breadth, 4.5 mm. Female: length, 11 mm.; breadth, 5 mm.

Holotype male, allotype female, and several designated paratypes from a series of fourteen specimens collected at Amatea, altitude 2620-2700 feet, Tahuata, Marquesas, July 7-10, 1930, by LeBronnec and H. Tauraa, from *Metrosideros collina* and *Weinmannia* species.

This is one of the rather narrow and medium sized species and may be readily separated by the cordate elytra, rather large and moderately prominent eyes, sparse and uniformly distributed depressed pubescence. Certain related species are separated from it as follows: corvus by being somewhat proportionately shorter and almost entirely glabrous; cuneatus by having the eyes less prominent, the prothorax much larger posteriorly, the elytra more cuneate posteriorly, and the pile, though sparse, about equally divided between the depressed and long erect hairs; and griseus by having very small though prominent eyes, the elytra quite elliptical and with somewhat serially arranged punctures, and with sparse gray pubescence, partly depressed and partly short and semierect.

13. Rhyncogonus corvus, new species.

Rather narrow and moderately elongate, glabrous above except for patches of white hairs on scutellum and at humeri and very short hairs on elytral disk, hardly protruding above margins of punctures, the propleurae and anterior portion of epipleurae with a limited number of rather long ochraceous hairs. Head flattened, coarsely punctured, somewhat strigose, and with deep fovea between eyes; the rostrum as broad as long and non-sulcate; eyes large and moderately prominent; antennae with scape reaching middle of prothorax, the second funicular segment not a fourth longer than first segment, the third slightly more than twice as long as broad, the following gradually shorter. Prothorax about as long as broad, broadest at middle, apex one-fifth narrower than base, sides shallowly arcuate posteriorly, narrowed in front, the disk coarsely, irregularly and somewhat confluently punctured. Elytra somewhat more than a third longer than broad and over three times as long as prothorax, the sides arcuate and gradually narrowed from behind humeri to rounded apices, the side margin more or less carinate and distinctly margined near humeri, the disk coarsely, regularly but not serially punctured and more or less granulate especially near base. Beneath, with abdomen deeply sulcate in front and studded with rather closely placed granules, almost smooth behind. Length, 11 mm.; breadth, 4.25 mm.

Holotype, a unique male collected at Tepuna, altitude 3000 feet, Hivaoa, Marquesas, August 1, 1929, by Mumford and Adamson.

This medium sized, black, and almost completely glabrous species is quite readily distinguished. Comparative characters will be noted in the description of the previous species and those which follow.

14. Rhyncogonus cuneatus, new species.

Of moderate size, somewhat narrowed, black, clothed above with scattered longer erect and short depressed gray pile, the pile at sides beneath denser and quite fulvous. Head coarsely punctured, somewhat strigose and with a deep fovea between the eyes, the rostrum shallowly sulcate (bisulcate in female) and slightly longer than broad; eyes of moderate size and prominence, antennae with scape reaching middle of prothorax, the second funicular segment long, fully one-fourth longer than first, the third two-thirds length of second and about twice as long as broad, the following gradually shorter. Prothorax slightly broader than long, broadest at middle, the apex one-fifth narrower than base, the sides gradually divergent to middle then narrowed and somewhat constricted forwards, the disk convex and coarsely, irregularly punctured. Scutellum with a tuft of white pile in female (probably rubbed off in male). Elytra almost twice as long as wide, over three times as long as prothorax, amphora shaped, the sides broadly rounded to before the middle, thence straight and convergent to rounded hind angles, the sides slightly carinate anteriorly in female but not so in male, the disk moderately convex, with moderate sized punctures, somewhat serially arranged near suture but irregularly outwardly, and rather finely rugose especially near base. Beneath, the male with abdomen evidently sulcate in front and studded with granules, finer and more numerous in front, coarser and sparser behind; the female with abdomen merely flattened at middle in front and finely sparsely punctured, vaguely scabrous in front. Legs moderately long, the anterior tibiae obscurely serrate on inner margin, the middle and hind distinctly serrate. Length, 12 mm.; breadth, male, 4.75 mm., female, 5 mm.

Holotype male and allotype female collected at Ahuava, altitude 1800 feet, Fatuhiva, Marquesas, August 19, 1930, by LeBronnec, beaten from *Metrosideros collina*.

This medium-sized species shows its distinctness in regard to the shape of its prothorax and elytra, the distinct amphora-like shape of the elytra readily separating it from the other medium-sized species, all of which have the elytra much more elliptical.

15. Rhyncogonus griseus, new species.

Elongate, of moderate size, black, sparsely clothed above with depressed and a limited number of semierect gray hairs, the propleurae and epipleurae more densely pilose, the hairs of the epipleurae somewhat fulvous. Head coarsely punctured above, somewhat reticulate, with a large shallow fovea between the eyes, the rostrum longer than broad, shallowly sulcate above and with the sulcus more or less smooth; the eyes not large but prominent; the antennae with scape not quite reaching middle of prothorax, second funicular segment about four times as long as broad and hardly longer than first, the third about one-half its length and the following gradually shorter. Prothorax slightly broader than long, broadest at middle, the apex a bit narrower than base, sides feebly arcuate forward to middle then gradually narrowed and slightly constricted just before apex, the disk coarsely, irregularly punctured and with a few strigosities at middle. Scutellum with a patch of gray pile at apex. Elytra about a third longer than broad, slightly less than three times as long as prothorax, somewhat elliptical in shape

though pointed behind, the sides arcuate from base to posterior third then gradually narrowed to rounded apices, subcarinate; the disk slightly convex, rather coarsely, more or less serially punctured and rather finely, irregularly asperate, especially toward base and suture. Beneath rather finely, sparsely punctured and obscurely scabrous in front. The legs with all tibiae rather finely serrate on inner margin. Length, 11 mm.; breadth, 4.5 mm.

Holotype, a unique female, collected in Hakahetau Valley, altitude 1000-2000 feet, Uapou, Marquesas, December 11, 1929, by R. R. Whitten, beaten from shrubs.

This species is readily separated from its fellows by its size, dull appearance, shape of prothorax and elytra, and antennal characters. It is a species of intermediate type linking the members of the group just described with the flatter, duller species which are to follow, the members of Group C.

16. Rhyncogonus brevis, new species.

Small, short, robust, black, sparsely clothed with short depressed and a limited number of longer, semierect hairs, the pile of prothorax denser at sides, head coarsely punctured and distinctly strigose above, with a small fovea midway between the eyes, the rostrum as broad as long, flattened above and quite smooth though finely, sparsely punctured; eyes prominent but rather small; antennae with scape reaching the middle of prothorax, the second funicular segment elongate, at least four times as long as broad and slightly longer than first, the third segment almost two-thirds length of second, the following gradually shorter. Prothorax broader than long, broadest at middle, the apex somewhat narrower than base, the sides but slightly arcuate, the disk coarsely, closely, irregularly and somewhat cribrately punctured, in one specimen a narrow carina at middle. Scutellum with but a few hairs at apex. Elytra less than a third longer than broad and over three times as long as prothorax, the sides evenly rounded from base to first third, then somewhat straight and parallel and from behind the middle arcuate, narrowed and then slightly sinuate and straight to rounded hind angles, the margin well defined though narrow and carinate; the disk very convex, rather coarsely yet not deeply and serially punctured, somewhat aciculate and more or less rugose. Beneath, the abdomen finely, sparsely punctured, and obscurely scabrous. The legs with anterior tibiae not evidently serrate within and the middle and posterior pair but slightly serrate. Length, 10 mm.; breadth, 4.5 mm.

Holotype female and paratype female, collected on the ridge east of Omoa [Oomoa] Valley, altitude 3100 feet, Fatuhiva, Marquesas, August 28, 1930, by LeBronnec, swept from a species of Vaccinium.

This species is the shortest and proportionately most robust species of the Marquesas. It shows certain relationships to *cuneatus* on one hand and through *griseus* to the members of Group C on the other. The type of eyes and shape of prothorax are quite definitely those of Group C while its convex elytra and general facies more that of Group B.

17. Rhyncogonus brunneus, new species.

Small, rather short and narrow, brown, somewhat densely clothed with small, yellowish brown scales, in addition the head supplied with a few semierect hairs, the prothorax with very short, inclined setae and the elytra with rather long, coarse and erect setae. Head coarsely punctured and distinctly strigose even close to apex of rostrum, and with a small, deeply impressed fovea between the eyes, the sostrum about as broad as long; the eyes rather small, obliquely flattened in front and prominent; the antennae with scape reaching middle of prothorax, the second funicular segment slightly more than three times as long as broad and about a third longer than first, the third a bit more than twice as long as broad and as long as first, the following gradually shorter. Prothorax slightly broader than long, broadest near base, the apex narrower than base, the sides slightly arcuate, almost parallel forward to beyond the middle then gradually narrowed to apex; the disk moderately coarsely, sparsely punctured. Scutellum smooth and naked. Elytra somewhat elliptical, distinctly over a third longer than broad and not three times as long as prothorax, the sides arcuate from base to posterior third thence convergent and slightly sinuate to rounded hind angles, carinate and with margin narrow and poorly defined; the disk slightly convex, the punctures of moderate size, deeply impressed and in general irregularly placed though here and there serially arranged, the third, fifth, and seventh intervals feebly elevated behind. Abdomen beneath more or less smooth and finely, sparsely punctured. All tibiae without distinct serrations within. Length, 9 mm.; breadth, 2.25 mm.

Holotype, a unique, presumed female, collected on the east side of the middle of Eiao, Marquesas, at an altitude of 17 feet, September 28, 1929, by A. M. Adamson. It was taken on *Hibiscus tiliaceus*.

This small species is most distinct, not alone because of its size and brown color, but also because of its peculiar vestiture, the small yellowish-brown scales and rigid setae. It, of course, though slightly convex, belongs with the more or less flattened species of Group C, and shares with the more typical members of the group like *perkinsi*, *walkeri*, and *lugens* the tendency to have the shorter pile scale-like. This character, not developed elsewhere among the Marquesan species, is carried to the extreme degree in *brunneus*, though in *lugens* the vestiture is almost as typically scale-like but here it is very sparse.

18. Rhyncogonus perkinsi, new species.

Rather small, somewhat narrowed and considerably flattened, black; rather densely clothed above with small, elongate, white, decumbent scales, with a few, short, decumbent white hairs intermixed, and a small number of short, semierect setae, chiefly evident on the apical portion of the elytra. Head coarsely punctured, markedly strigose almost to apex of rostrum and with shallow fovea between the eyes; the rostrum fully as broad as long; the eyes rather small, prominent, and anteriorly obliquely flattened; the antennae with scape reaching beyond middle of prothorax, second funicular segment over one-fourth longer than first, the third over twice as long as broad and about three-fourths length of first, the following gradually shorter. Prothorax about as broad as long, broadest at middle, the apex narrower than base, the sides slightly arcuate, almost parallel at middle, the disk sparsely irregularly punctured. Scutellum glabrous. Elytra almost

twice as long as broad and three times length of prothorax, the sides obliquely divergent, hardly arcuate, from base, almost straight and parallel for median third, thence straight and convergent to rounded apices, subcarinate, and indistinctly margined near base; the disk slightly convex, rather coarsely, irregularly, and more or less serially punctured. Beneath, with abdomen rather smooth, finely sparsely punctured and minutely alutaceous. All tibiae without distinct serrations within. Length, 9 mm.; breadth, 3.75 mm.

Holotype, a unique female, collected on the small and most northern island of the Marquesas, Hatutu [Hatutaa], altitude 1000 feet, by LeBronnec and H. Tauraa, on a species of *Pisonia*. It is named in honor of R. C. L. Perkins, who has contributed so much to our knowledge of Polynesian insects.

This species is intermediate in size and general appearance between brunneus and walkeri. With brunneus it shares the short and robust beak, markedly strigose above, the somewhat angulately shaped eyes, and rather dense scaly vestiture. In brunneus the scales are almost as broad as long, and golden brown, whereas in perkinsi they are narrow, several times as long as broad and silvery white. Also, perkinsi is somewhat flatter than brunneus. In walkeri the scales are very elongate, almost hair-like, and of a very yellowish white color. In addition, the scutellum has a tuft of white hairs posteriorly, whereas it is absolutely naked in perkinsi and brunneus.

19. Rhyncogonus walkeri, Perkins.

Rhyncogonus walkeri Perkins, Ent. Monthly Mag., 25, p. 56, 1899. Rhyncogonus walkeri Perkins, Ann. Mag. Nat. Hist., ser. 10, vol. 1, pp. 128, 129, 1928.

Of moderate size, somewhat dilated and considerably flattened, black, the upper surface partially clothed with white or yellowish white (especially in females) hair-like scales and a few, short, semierect setae, the sides of prothorax beneath, epipleurae and to a certain extent the legs more densely clothed with ochraceous pile. Head coarsely punctured, more or less strigose between the eyes; the rostrum about as broad as long; the eyes of moderate size and prominent; the antennae with scape reaching middle of prothorax, the second funicular segment almost a third longer than first, the second over twice as long as broad and but slightly shorter than first, the following gradually shorter. Prothorax barely broader than long, broadest at middle, apex slightly narrower than base, sides moderately arcuate, at times sinuate behind; the disk coarsely, irregularly punctured and more or less rugose. Scutellum with a tuft of white hair behind. Elytra one-third longer than wide and not three times as long as prothorax, the sides arcuate from base to posterior third, thence straight and convergent to rounded hind angles, strongly carinate, narrowly and somewhat distinctly margined in female; the disk but slightly convex, surface markedly granulate in male and with punctures not defined, the punctures well defined and serially arranged in female, the granules less evident. Beneath, the abdomen in male almost glabrous, shallowly sulcate in front and irregularly studded with small granules, the abdomen in female finely, sparsely pubescent, merely flattened in front, and finely punctured and scabrous. All tibiae very finely serrate on inner margin. Males: length, 8.5-12 mm.; breadth, 3-5 mm. Females: length, 13 mm.; breadth, 6 mm.

This species is definitely sexually dimorphic and dichromatic, the females not only more robust than the males and with the usual abdominal differences but with the pile evidently fulvous. This species of all the Marquesan species superficially more closely resembles certain Hawaiian species like vittatus Perkins and kauaiensis Perkins, than do any of the others. The Pacific Entomological Survey collected 92 specimens on Nukuhiva: Teuanui, Tovii [Toovii], altitude 1000 feet, October 27, 1929; Ooumu, altitude 4000 feet, November 12, 1929; Puokoke, altitude 3500 feet, October 22, 1929; all collected by Mumford and Adamson. An additional lot was taken at Tapuaooa Hill, altitude 3500 feet, July 20, 1931; Tovii [Toovii], altitude 3000 feet, June 20, 1931; Tekao Hill, altitude 3020 feet, July 23, 1931; Ooumu, altitude 3000 feet, May 29, 1931; on the north side, Muake, altitude 2500 feet, July 3, 1931; Keahaatiki, altitude 2000 feet, July 6, 1931, Le-Bronnec and H. Tauraa. All from Nukuhiva and collected from the following plants: Vaccinium cereum, Hisbiscus tiliaceus, Metrosideros collina, Weinmannia species, Piper latifolium, Styphelia tameiameiae, Angiopteris species, and Cyperus species.

20. Rhyncogonus lugens Perkins.

Rhyncogonus lugens Perkins, Ann. Mag. Nat. Hist., ser. 10, vol. 1, pp. 127-128, 1928.

Of moderate size, the males narrow, females rather broad, considerably flattened, black, the upper surface almost naked, the few white or yellowish-white scales being distributed along the sides of head and prothorax, more concentrated at hind angles of prothorax, and in females somewhat generally distributed over the elytra, especially posteriorly, the scales being more or less assembled to form vittae, and the discal scales always much smaller than the lateral, in addition a tuft of white hair covering the posterior part of the scutellum. Head flattened, coarsely punctured and strigose almost to apex of rostrum; the latter as broad as long; eyes moderate in size, prominent, slightly obliquely flattened in front; antennae with scape reaching middle of prothorax, the second funicular segment about one-fourth longer than first, the third three times as long as broad and three-fourths length of first, the following gradually shorter. Prothorax as broad as long in male, broader in female, broadest at middle, the apex slightly narrower than base in male, considerably narrower in female, sides sinuate in front of base in male and arcuate and narrowed towards apex, in female arcuate from base and definitely narrowed from middle to apex; the disk coarsely, closely punctured and rugose, and with a narrow crista at middle. Elytra about a third longer than broad and less than three times as long as prothorax in male, about three times in female; sides arcuate and gradually narrowed from anterior third to apex in male, from posterior third in female, and sinuate towards apex, sharply carinate and evidently margined; the disk but slightly convex, more so in female; and coarsely granulate, the punctures not evident. Beneath, the abdomen in male slightly sulcate in front, almost glabrous and finely punctured and alutaceous, obscurely scabrous; the abdomen in female merely flattened in front, finely, sparsely pubescent, and finely punctured and alutaceous as well as obscurely scabrous. The tibiae not distinctly serrate. Male: length, 10 mm.; breadth, 3-4 mm. Female: length, 11-12 mm.; breadth, 4.5-5 mm.

This species stands out among its fellows because of its dull black, sparsely pilose, and much flattened appearance. It is separated from walkeri, its closest relative, in being narrower, less pilose, more flattened, and in having the elytra uniformly granulate and without trace of the larger punctures evident in the female of walkeri. The Pacific Entomological Survey collected 86 specimens of this species and from the following localities on the island of Hivaoa: Mount Temetiu, at an altitude of 2000-3000 feet on the slope north of summit, December 27, 1930 to January 9, 1931; Vaiepoepo, altitude 2300 feet, June 2, 1929; and the ridge northwest of Taaoa, altitude 2800 feet, June 3, 1929, all taken by Mumford and Adamson. They were all taken on Piper latifolium.

21. Rhyncogonus planatus, new species (fig. 7, e).

Robust, broad, very much flattened, black, upper surface rather evenly clothed with very fine, short, well spaced, depressed yellowish white pile, the margins of elytra in females fringed with semierect setae. Head coarsely punctured, somewhat strigose, in general with a more or less evident median longitudinal crista, making the upper surface of the rostrum more or less bisulcate; the rostrum as broad as long; eyes of moderate size and prominent; antennae with scape reaching middle of prothorax, the second funicular segment one-fourth longer than first, the third about three times as long as broad and about three-fourths length of first, the following gradually shorter. Prothorax broader than long, broadest at middle, apex almost one-third narrower than base, sides straight or sinuate from base to middle thence arcuate to apex; the disk coarsely, closely punctured, also somewhat reticulate and rugose. Scutellum finely punctured and with a tuft of white pile at apex. Elytra one-third longer than broad and over three times as long as prothorax; sides broadly rounded at base, slightly arcuate or almost straight at middle, arcuate and narrowed from posterior third and sinuate just before very much narrowed yet rounded apices, markedly carinate and with margin narrow and poorly defined; the disk very flat and horizontal or but slightly elevated near suture in male, in female flat yet gradually elevated towards suture, rarely arcuate, the entire surface granulate, more evidently so in male and with a certain proportion of the granules more prominent so that they show through the pile. The abdomen beneath quite glabrous in male and with the anterior segment sulcate and the first two studded with granules, in the female with the anterior segments merely slightly flattened, very sparsely pilose, finely punctured and scabrous. The middle and hind tibiae only distinctly serrate within. Male: length, 15.5 mm.; breadth, 7 mm. Female: length, 15 mm.; breadth, 7 mm.

Holotype male, allotype female, and several designated paratypes from a series of 56 specimens collected on Penau Ridge, altitude 2000-2200 feet, and Hitikau Ridge, various altitudes from 2000-3000 feet, Uahuka, Marquesas, March 2-4, 1931, by LeBronnec and H. Tauraa, on *Weinmannia* species, *Freycinetia* species, and also on the crest of North Range, altitude 2400 feet, on *Piper latifolium*, A. M. Adamson.

This species is one of the most distinct in the entire genus, its proportionate breadth and very great flatness, especially in the males, readily

separating it. Its general flatness, markedly carinate elytra on outer margin, broad and rather short rostrum, medium sized yet prominent eyes, and prothorax, broadest at middle, place it without a doubt in group C. Its general facies would also put it here, some of the more convex females looking very little different from some of the females of walkeri. It might, therefore, be considered as the most divergent of its group and shows this well by not having the pile at all scale-like.

22. Rhyncogonus aeneus, new species.

Small, moderately robust, subglabrous, shining, black, upper surface bronzed, more or less alutaceous, the vestiture consisting of minute, scattered hair arising from the various punctures and only evident upon close examination. Head coarsely, shallowly punctured, obscurely strigose, and somewhat flattened and depressed in front; the rostrum very short, broader than long; the eyes small, just perceptibly obliquely flattened in front, and prominent; the antennae with scape reaching the middle of prothorax, the second funicular segment narrower and slightly longer than the first, the third about three-fourths length of first, the following gradually shorter. Prothorax about as broad as long, apex one-fourth narrower than base, the sides slightly arcuate and narrowed toward apex, the disk very convex, shallowly, more or less regularly and somewhat distantly punctured. Scutellum glabrous. Elytra cordate, about a fifth longer than broad and two and a half times as long as prothorax, sides broadly rounded to anterior third, then less arcuate and gradually narrowed to rounded hind angles, obscurely carinate near base but not margined, the disk evenly convex, somewhat regularly though not closely punctured, the punctures at times serially arranged. Abdomen beneath somewhat concave in front and moderately, sparsely punctured. The tibiae not evidently serrate. Length, 8 mm.; breadth, 3.75-4 mm.

Holotype and three paratypes collected on Hitikau Ridge, altitude 2900 feet, Uahuka, Marquesas, March 4, 1931, LeBronnec and H. Tauraa, from *Weinmannia* species and *Freycinetia*. The four specimens are apparently all females though one is somewhat smaller and narrower than the others.

This small, shining species is quite unlike any of the species which have been previously described. It is quite closely related to the species which follows and superficially very much resembles the single species of *Microgonus*.

23. Rhyncogonus pygmaeus, new species.

Small, rather narrow and somewhat elongate, subglabrous, shining, rufopiceous, the antennae and legs rufous, the vestiture consisting of very minute and sparsely placed hairs, each arising from the elytral punctures as well as from the underside. Head closely punctured behind, more sparsely in front; rostrum as broad as long, eyes of moderate size and prominent; the antennae with scape reaching midde of prothorax, second funicular segment one-fourth longer than first, the third slightly more than twice as long as wide and about three-fourths length of first, the following very gradually narrower. Prothorax barely longer than broad, broadest at middle, apex slightly narrower than base, sides rather broadly arcuate, somewhat sinuate toward base, the disk

rather coarsely punctured with a narrow median longitudinal smooth line. Scutellum glabrous. Elytra two-fifths longer than broad and two and a half times as long as prothorax, sides evenly arcuate from base to behind middle, then gradually narrowed to rounded hind angles, without either carination or defined margin; disk quite convex and with rather small, shallow punctures, well spaced over the surface. Elytra beneath quite glabrous, with anterior segment shallowly sulcate, and sparsely, finely punctured. Tibiae without evident serrations on inner face. Length, 8 mm.; breadth, 3 mm.

Holotype, an apparent male, collected at Teava Uhia i te Kohu, altitude 2100 feet, Hivaoa, Marquesas, February 15, 1930, Mumford and Adamson, from dead stipes of tree fern, *Cyathea* species.

This small species, though rather closely related to the preceding, is in every way distinct. The color, more robust antennae, elongate and apically dilated rostrum, and quite fusiform prothorax enable it to be readily separated.

MICROGONUS new genus

This genus is related to *Rhyncogonus*, agreeing with it as regards the mouthparts and most of the other general characters. It differs in having the head basally more conical, the eyes very small yet prominent, the rostrum distinctly longer than broad, the antennae with the funiculus and club both proportionately shorter, the latter hardly three times as long as broad; the prothorax quite cylindrical and much longer than broad; and the lobes of the third tarsal segments moderately narrow or somewhat elliptical in shape.

In general appearance the only known species superficially suggests Rhyncogonus aencus and pygmaeus, the two smallest and smoothest of their genus. Genotype: Microgonus oodemaformis, new species.

24. Microgonus oodemaformis, new species (fig. 7, f).

Small, slightly elongate, very convex, somewhat aeneous, with reddish legs and antennae and practically glabrous. Head slightly flattened above, coarsely, sparsely punctured and somewhat strigose, the rostrum distinctly longer than broad and narrowly sulcate at middle; eyes small, moderately prominent, somewhat obliquely flattened in front, the interocular space about six times the breadth of eyes; the scape of the antennae long, almost reaching the middle of prothorax, the funicle of about equal length, the first and second segments subequal, about three times as long as broad, the third about twice as long as broad and two-thirds length of second, the following of about the same length as second but gradually broader and all from the third to seventh somewhat moniliform, the club elliptical, not quite three times as long as wide and less than one-third length of funicle. Prothorax subcylindrical, at least one-seventh longer than broad, the apex about one-third narrower than base, the sides slightly arcuate and convergent forward, the disk distinctly punctured with numerous large and a few finer punctures, alutaceous. Scutellum small, triangular and glabrous. Elytra subcordate, very convex, and over one-fourth longer than broad, the sides rather evenly arcuate from base to posterior third then gradually convergent to acute apex, and neither carinate nor margined, the disk rather coarsely punctured with rounded punctures, serially arranged, the striae not evident, and with a few very minute setae on apical declivity. Beneath, the first and second abdominal segments flattened, faintly alutaceous, finely, sparsely punctured and with minute hairs arising from the same. The tibiae simple, without serrations. Length, 5 mm.; breadth, 2.5 mm.

Holotype, a unique specimen, collected at Ooumu at an altitude of 4000 feet, Nukuhiva, Marquesas, November 12, 1929, by Mumford and Adamson.

This species superficially very much resembles many of the species of the well known Hawaiian Cossonid genus *Oodemas*, and for that reason is given its specific name.