

## COLEOPTERA, WEEVILS

By

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This paper deals with the Rhyncophorus beetles, also with a single species representing each of the families Cerambycidae and Cioidae. The collection, though consisting of only 23 species, is of great interest. It is evident that nearly all these species are intimately related to forms already known on the larger Hawaiian islands. The few species described as new from Wake Island are, however, entirely different in character, as might be expected, for neither the highly abnormal Rhyncogonus nor the minute Acales found there is in any way related to Hawaiian species, while Sphaerorhinus, which is also found in Samoa, is unknown in Hawaii.

One of the most interesting conclusions to be drawn from a consideration of the Curculionid fauna of these small outlying islands is that the very extensive areas of coast and lower mountain country of the main islands—areas which now have practically no such native fauna, although such factors as vegetation appear most favorable, must have possessed a very extensive and important series of species before foreign importations had exterminated them.

Of the 23 species, here considered, 16 appear to be undescribed, while 2 other endemic species have been previously described, *Dryotribus wilderi* Perk. and *Oodemus laysanensis* Fullaway. A Rhyncogonus (*R. bryani* Perk.),<sup>16</sup> previously collected on Laysan Island, was not found by the Tanager Expedition. It is known only from a single specimen, and *R. exsul*, described here from many specimens collected on Nihoa Island, might, if we had a series of the Laysan insects, prove to belong to the same species.

## CERAMBYCIDAE

**Plagithmysus nihoae** new species

Rufous; the antennae, slender bases of the femora, tibiae and tarsi paler, or testaceous.

Head mostly covered with whitish ochreous, decumbent hairs, leaving a median facial line bare. Apical joint of the antennae a little longer than the preceding. Pronotum with the medium crest broad, divided into an anterior and posterior part, the former with a curved or subangulated elevated line in front, the latter with a

<sup>16</sup> Perkins, R. C. L., A new species of Otioryhynchine beetle of the genus Rhyncogonus Sharp from Laysan Island: Ent. Mo. Mag. p. 4, 1919.

slightly curved one in front, and a second one behind this. The surface of the crest has only a scanty clothing, especially in the more elevated portions, and on each side of it the pubescence becomes dense, so as to form two distinct longitudinal vittae on the outer edge of which it again becomes less dense and then externally to this again more dense. The hairs of the scutellum are dense round the margins, the rest with sparse, fine hairs. Elytra, on about the apical two-thirds of their length, flat along the suture, so that two slight ridges are formed between the flattened part and the deflexed outer surface, the former densely clothed so as to form two vittae, broad at the base and gradually narrowing to the apex, the latter (or deflexed) part much less regularly and densely clothed and almost bare along the defining ridges. The basal part of the elytra is copiously but irregularly flecked with the same whitish ochreous hairs as form the rest of the clothing. At the sides the abdominal segments are marked by a large, dense, quadrate patch of pale appressed hair, each containing a smooth glabrous area, which on the more anterior segments divides the patch except at the base. Hind femora widening gradually from the slender base, being nearly parallel sided for a distance about equal to the length of the adjoining abdominal segments, but of a pallid color for a still further distance, the tibiae well clothed with pale hairs, the tarsi above still more densely clothed. The metepistoma are hidden beneath dense clothing which is continued forward on to the mesopleura. The abdominal segments are continued almost in the plane of the metasternum, as is usual in females, but sometimes occurs in males, and I am not certain as to the sex of the specimen without dissecting it.

Length: 8.5 mm.

Habitat: Nihoa Island. A single specimen on Euphorbia, June 15, 1923 (Bryan).

Type: Cat. No. 235 in the Bishop Museum.

## CURCULIONIDAE

### *Dryophthorus distinguendus* Perk.

This common Hawaiian species was found by Fullaway on Laysan Island, where it may have been introduced from Honolulu. It is often abundant in boards and in the wood of boxes in which small plants are raised. Whether it is really endemic in Hawaii is very doubtful.

## DRYOTRIBUS

This genus is of great interest apart from its structural characters on account of the wide distribution of its typical species, which is found on the coast of Florida, in the West Indies, in driftwood in Hawaii, including its remote outlying islands. It will probably be found throughout the Pacific, as it has been reported from Australia and China.

In Hawaii the species was first found by me<sup>17</sup> about 30 years ago on the island of Lanai—not Kauai as stated by Kirkaldy,<sup>18</sup> or Kanai as printed by Champion<sup>19</sup>—and described as a new genus and species under the name *Thalattodora insignis*. The insect at that time was unknown to Dr. David

<sup>17</sup> Perkins, R. C. L., Coleoptera: Fauna Hawaiiensis, Vol. 2, p. 146, 1900.

<sup>18</sup> Kirkaldy, G. W., Note on the synonymy of two Hawaiian beetles: Hawaiian Ent. Soc. Proc. Vol. 2, p. 84, 1909.

<sup>19</sup> Champion, H. G., Notes on Cossonidae: Ent. Mo. Mag., pp. 103-104, 1909.

Sharp to whom I submitted it. Rather more than twenty years ago I again came across this beetle on the coast of Oahu beyond Diamond Head, but I seem no longer to have specimens from this locality, though a small colony was found there. In 1906 the species was found in driftwood on the coast of Oahu at Waianae, also in a small colony, and three examples of these, which I still have, and which were compared with a specimen from the West Indies, have been used for comparison with the specimens from the outlying islands of Hawaii. In 1915 I briefly described a new species,<sup>20</sup> *D. wilderi*, for a single specimen captured on Midway Island, by Gerrit P. Wilder. In an earlier list<sup>21</sup> this specimen had, without an opportunity for comparison with others, been listed as "*T. insignis*" (i. e. *D. mimeticus*).

The series of the two species recently captured by the Tanager Expedition in my opinion fully confirms the validity of *D. wilderi* as a distinct species, though both are variable. *D. wilderi* is generally easily distinguished by its more elongate and narrow form, and, when cleaned, by the different sculpture of the elytra, which in *D. mimeticus* is rougher, so that the interstices viewed from the side have a strongly shagreened or even subserrulate outline. In *D. wilderi* the antennae are more slender and elongate, the scape of *D. mimeticus* being evidently stouter.

How far the two species are found in actual company is not evident from the specimens collected, but it is certain that either may occur in some numbers apart from the other. Thus Fullaway collected about 18 examples (which I have critically examined) on Pearl and Hermes Reef, all belonging to *D. wilderi* except one very remarkable specimen, which appears to be a third species. On Laysan he collected 10 examples on April 11th, all *D. mimeticus*; and on April 9th, 5 examples, all *D. wilderi*. His few specimens from Ocean Island are also all *D. wilderi*. On French Frigate Shoals, Bryan found both species; on Johnston Island and Wake Island only *D. mimeticus*. The specimens from Wake Island have shorter elytra than those from the other islands.

#### ***Dryotribus mimeticus* Horn**

Habitat: Laysan Island, April 11, 1923 (Fullaway); French Frigate Shoals (Bryan); Johnston Island (Bryan); Wake Island (Bryan). Naturally the species might occur on any of the islands in drift logs.

#### ***Dryotribus wilderi* Perkins**

Habitat: Not yet obtained on the larger Hawaiian islands, so far as I know. It was originally described from Midway Island. Laysan Island,

<sup>20</sup> Perkins, R. C. L., Some new Hawaiian Coleoptera; Hawaiian Ent. Soc. Proc. Vol. 3, p. 250, 1915.

<sup>21</sup> Perkins, R. C. L., Hawaiian Ent. Soc. Proc. Vol. 1, p. 33, 1905.

April 9, 1923 (Fullaway); Ocean Island (Fullaway); French Frigate Shoals (Bryan); Pearl and Hermes Reef (Fullaway).

**Dryotribus solitarius** new species

The single example here distinguished was probably found dead, as when relaxed the head and prothorax became separated from the rest of the body. Its red color may be due to exposure to strong sunshine after death and before it was found, rather than to immaturity. The sculpture of pronotum and elytra is much as in typical *D. wilderi*, the serial punctures of the elytra very coarse and very clearly defined, the interstices distinct and nearly smooth. The rostrum is shorter than in the other species, hardly narrower behind the antennae than in front of these, which have the scape much shorter and stouter than in *D. wilderi*.

Habitat: Pearl and Hermes Reef, April 27, 1923 (Fullaway).

Type: Cat. No. 236, Bernice P. Bishop Museum.

**Pentarthrum halodorum** new species

Black, or almost black, the rostrum more or less reddish, the legs red or dark red, as also the antennae, the funicle joints generally darker than the scape and club. In general somewhat like *P. obscurum* Sharp of the main islands, but a smaller and less elongate species.

Head with the rostrum a little wider at the tip than basally, and extremely finely punctured, the punctures become comparatively large between the eyes, which are convex and coarsely faceted. Antennae with the scape almost as long as the funicle, of which the first joint is larger than the second, the latter being also subtriangular, appearing subelongate, though hardly longer than its apical width, much longer than the short transverse third joint, the two following also strongly transverse and increasing slightly in width, the club at least as long as the three preceding joints together.

Pronotum shining (but the sides dull) usually conspicuously flattened and often evidently depressed on the disc, the sides rounded to the anterior constriction, which is marked in the middle by a change from the coarse deep punctures of the disc to a fine puncturation. At the sides in some specimens fine, decumbent, pale hairs may be seen under a strong lens.

Elytra shining, rather more than twice as long as the pronotum and also more than twice as long as wide, the striae bearing close and coarse punctures, the interstices with a subelongate, though hardly longer than its apical width, much longer than the short transverse third joint, the two following also strongly transverse and increasing slightly in width, the club at least as long as the three preceding joints together. Basal ventral segments of abdomen with large, deep and remote punctures, the sutures of the three last segments deep and as if costate from a row of coarse punctures in the grooves, the two small intermediate segments not otherwise visibly punctured (under a strong lens), the apical segment finely punctured and pilose.

Length: about 3 mm.

Habitat: Midway Island, April, 1923, a few specimens, and Ocean Island, 17 or 18 specimens, in the same month (Fullaway).

Type: Cat. No. 237, Bernice P. Bishop Museum.

**Pentarthrum blackburni** Sharp

Two or three specimens of this species, which occurs in and near Honolulu and has the appearance of an introduced form, were found on Laysan by Fullaway, April, 1923.

**Pentarthrum pritchardiae** new species

Very narrow and elongate, depressed, testaceous or ferruginous in color. The rostrum widens conspicuously to the apex, where it is notably wider than near the base, and is very finely punctured, the head in front with larger and more remote punctures, the eyes very little convex. Antennae with the first funicle joint subtriangular, being much narrower at the base and about as long as its apical width, notably larger and longer than the second, which is also narrowed at the base so as to be subtriangular and longer than the third; the latter and the two following very short and transverse and of increasing width (towards the apex) the club about equal to the four preceding together.

Prosternum elongate, smooth, shining, with distinct, fine punctures which are moderately evenly distributed and though copious leave much smooth surface between them; the sides are rounded and subconvergent so that the width at the front angles is only about half the greatest width; along the front margin narrowly the surface is smooth and impunctate in the middle, but toward the sides punctured right to the actual margin and at the front angles there are some short outstanding setae.

Elytra more than twice as long as the pronotum and about three times as long as wide, rather narrower than the widest part of the pronotum, the serial punctures fine and with a row of closely set finer punctures along each side of the sutural margin; the interstices not, or hardly, convex and traversed by extremely fine grooves or wrinkles. Long, fine, pale, erect setae clothe the apical fourth or fifth of the elytra, and at the sides may extend still further toward the base. On the basal segments of the abdomen beneath the punctures are very distinct and usually rather closer towards the small intermediate segments than basally; the apical segment is dull and densely clothed with erect hairs.

Length: (rostrum included) 3-4 mm.

This species has little resemblance to the preceding species, but appears more related to the well known *P. prolixum* Sharp, so common in tree ferns on the main islands. Probably like the latter it is subject to the same large development in the male sex, since one specimen (probably found dead and discolored, the hind legs being absent) exceeds all the others in size, and has the rostrum much larger. Only five examples were obtained and without dissection I am unable to be certain whether the smaller ones are females or less developed males, but I think both sexes are present.

Habitat: Nihoa Island on Pritchardia; two on June 13th and three on June 15th, 1923 (Bryan).

Type: Cat. No. 238, Bernice P. Bishop Museum.

**Macrancylus immigrans** Perkins

This species, which is found, sometimes in numbers, in drift logs on the coasts of the main Hawaiian islands was captured on Laysan Island (Fullaway) and on Johnston Island (Bryan).

**Oodemias neckeri** new species

A narrow, oval and elongate species of dull brassy color with red legs and antennae.

Rostrum with the sides parallel or almost so, finely and distinctly punctured, but to a greater or less extent tending to run into one another, usually considerably less close on the basal part. Eyes convex but not strongly so. Antennae with the scape about as long as the width of the rostrum between the points of their insertion, first funicle joint elongate and when fully seen longer than the second, which is subelongate, the third and following all very short, nearly round. Pronotum dull, with fine and distinct, but shallow, nearly even puncturation. Second joint of front tarsi in the male much larger than in the female, but not equal in width to the lobate third joint. Elytra dull from the very dense microscopic sculpture of the surface, the punctures in the rows not at all coarse, the interstices with very feebly impressed fine punctures, flat in some examples and at most only slightly convex, the convexity more marked towards the ends of the rows of punctures, which on the apical portion are evanescent or subobsolete; the minute white setae which spring from the interstitial punctures are very short, and not at all dense, but easily seen under a strong lens.

Apical ventral segment of the male (viewed from the apex) with a slight median emargination on each side of which is a very short erect seta, differing from the minute hairs which clothe the general surface.

Length: 4-5 mm.

Habitat: Necker Island. Apparently rare. June 18, 2; June 19, 3; June 20, 2 (Bryan); June 17, 1 (Thaanum), and June 17, 1 (Cooke and Thaanum).

Type: Cat. No. 239, Bernice P. Bishop Museum.

**Oodemias breviscapum** new species

Long-oval, aeneous, the elytra often with a coppery tint, dull or only slightly shining, owing to the very fine microscopic sculpture of the surface.

Rostrum short, the sides slightly convergent, so that it becomes evidently narrowed toward the apex, finely, more or less confluent or strigosely punctate. Eyes only slightly convex, so that they are hardly at all prominent. Antennae very short, the scape only about half as long as the width of the rostrum between the points of their insertion; the second joint short and stout, the third slender basally and usually appearing subelongate, the following joints all very short, the club as long as the four preceding joints and not much shorter than the scape.

Pronotum copiously, finely and regularly punctured. Elytra with the series of large punctures placed in shallow, but evident grooves, and becoming finer or subobsolete on the apical portion, the interstitial punctures very fine and shallow, but in most specimens distinct and numerous, the pale setae which they bear are very minute. Front tarsi with the second joint small, transverse or at least as broad as long, only about half as wide as the lobate third joint measured across the apex of the lobes. Metasternum with coarse punctures, the intercoxal process of abdomen with similar or rather less coarse punctures, behind this the punctures become finer, shallower and remote. The apical segment has a fine and dense puncturation.

Length of pronotum and elytra: 4-5.25 mm.

Like all Hawaiian *Oodemias* this species is somewhat variable, and in one or two examples the scape is abnormally short, the basal slender portion being shorter than the thickened apical part.

Habitat: Nihoa Island, in June. Many specimens collected from bunch grass (Cooke and Thaanum) others from *Euphorbia* (Bryan), and some without special habitat.

Type: Cat. No. 240, Bernice P. Bishop Museum.

**Oodemias laysanensis** Fullaway

This species was originally described from specimens captured on Laysan Island, where apparently it was not found in 1923. On Nihoa Island it was taken in some numbers from Euphorbia (Bryan) in June and one from bunch grass (Thaanum). Two or three specimens were found on Midway Island (Fullaway) and the same number on Necker Island (Bryan).

The species is quite variable, but only in the manner usual in other species of the genus. Probably the range of the species once extended to the lowlands of the main Hawaiian islands, or at any rate to the more northern of these.

Habitat: Laysan Island (Fullaway), Midway Island (Fullaway), Nihoa Island (Bryan and Thaanum), Necker Island (Bryan).

**Oodemias erro** new species

Robust, brassy black, or in very fresh specimens brassy brown, legs and antennae more or less rufescent, at least the tibiae and tarsi of the former.

Rostrum distinctly widened on the decurved apical part, densely, finely and rugulose punctured, the punctures becoming more remote basally. Eyes distinctly convex, the antennae with the scape long, longer than the width of the rostrum at the intersection of the antennae, the two first joints of the funiculus subequal, the first being the wider at the apex, the following joints all very short and subglobular.

Pronotum sometimes quite shining in the male, generally duller in the female, very distinctly, almost evenly, copiously and finely punctured; second tarsal joint of the front and middle tarsi dilated in the male, being as wide as the lobate third joint, in the female much narrower and less wide than this joint. Elytra shining in the male, probably as a rule dull in the female, with series of very coarse punctures, which become fine toward the apex, the interstices more or less convex and with conspicuous fine and remote punctures, which bear very short, but quite evident, pale setae. In the male the elytra posteriorly are vertical or slightly inflexed. Beneath, the basal abdominal segment has at the base large, somewhat deep punctures like those of the metasternum, but posteriorly these become feeble or obsolete, as are those of the second segment, which is nearly impunctate.

Length: 4-5 mm. (rostrum included).

This species is allied to *O. nivicola* Blackburn, so common on the upper open country on Haleakala, Maui, but is readily distinguished by the more convex eyes, shorter third antennal joint, and much coarser serial punctures on the elytra.

Habitat: Nihoa Island. Apparently rare, as only 7 specimens were obtained: 1 dead and discolored from Euphorbia on June 16, a fresh pair on June 14, also from Euphorbia, and 1 from the body of a dead bird on June 14 (Bryan). On June 11 3 were obtained from bunch grass (Cooke).

Type: Cat. No. 241, Bernice P. Bishop Museum.

**Rhyncogonus exsul** new species

Black, the scaly clothing varying from white to yellowish or ferruginous, the male much flattened in form, the female more convex. The clothing is similar in the sexes, but as the sculpture is more striking in the female, one of this sex has been chosen as the type and the description is mainly drawn up from a fresh and normal specimen, since

there is much variation in size and other characters in the long series that has been examined.

Head including the rostrum clothed with scale-like hairs mixed with fine ones, forming a denser patch around the inner margin of the eyes which are strongly prominent. In abraded examples the sculpture is seen to be strigose-punctate, the punctures becoming more distinct, but dense, posteriorly. The second and third joints of the antennae do not differ greatly in length, the former seen at its full length rather longer, the fourth shorter than the third. The pronotum is densely squamose on each side, the middle part with scattered scales and minute setae, rugosely punctured and with a smooth median line sometimes extending throughout the whole length or more or less broken, sometimes reduced to a small discal spot or almost obsolete. Scutellum marked with a very dense spot of appressed pale setae, plainly visible to the naked eye as distinct from the rest of the clothing. Elytra well covered with scales in fresh examples, and with the fourth and eighth interstices and pseudopleural margin elevated (the fourth generally less strongly) the latter in dorsal aspect subangulate some distance behind the base. The second and sixth interstices are also sometimes slightly raised, the tenth more conspicuously so, the elevation beginning at a point near where the angulation of the edge of the elytra is placed. Between the pseudopleural margin and the raised 8th interstice at the base a deep depression is formed. The pseudopleura are densely squamose, at least on the basal half; the femora very densely clothed to the tips on the apical half. In abraded specimens the interstices of the elytra are granulate or furnished with series of small tubercles. Basal segments of the abdomen with copious large punctures and some fine ones intermixed, the two small intermediate segments strongly inclined, so as to form deep sutures between each other and with the adjoining segments; apical segment subtriangular, densely, finely and subrugosely punctured, not very densely hairy.

The male differs usually in its flatter elytra, the interstices sometimes hardly noticeably raised (though in other specimens more like the female), the much less depressed area at the base adjoining the pseudopleural margin, the basal abdominal segment beneath is more concave, the first of the two small intermediate ones is flat, not inclined, and the apical segment wider at the apex and much more densely hairy.

Length: 9-13 mm.; most specimens not less than 11 mm.

Habitat: Nihoa Island, June, 1923 (Bryan, Cooke, and Thaanum). Most of the specimens were taken in bunch grass.

This species is certainly very closely allied to *R. bryani* from Laysan, and may prove to be not really distinct. The latter is known only by the unique type, which is much smaller than any except one or two dwarfed examples of *R. exsul*, and does not altogether agree in other characters with any individual of the large series of the latter.

Type: Cat. No. 242, Bernice P. Bishop Museum.

#### **Rhyncogonus biformis** new species

Black or dark blackish-fuscous, antennae or at least the club joints and the tarsi and often the legs to a large extent red or reddish. Male conspicuously flattened in form, the female more convex, the elytra in fresh specimens densely clothed with pale scales and with erect setae which are longer in the male. In this sex in dorsal view the thorax and elytra are fringed on each side with long outstanding fine hairs in a very conspicuous manner, while in the female there is no approach to this clothing.

Rostrum rugosely punctured, the punctures of the head adjoining the pronotum usually finer and more distinct, the clothing denser between the strongly prominent eyes than in front of them; second joint of the antennae longer than the third, and



this distinctly longer than the fourth. Pronotum coarsely and rugosely punctured, its extreme front margin smooth and the smooth surface generally slightly extended in the middle, while in the middle of the disc there is usually another smooth space, as if formed by the absence of one or two punctures. The clothing is conspicuously denser along the sides than on the middle portion, and consists largely of hairs more or less dilated at their base, those towards the sides being generally coarser or more approaching a scale-like form than the others. In most specimens the fourth and eighth interstices of the elytra are slightly raised either throughout or posteriorly; the scutellum bears only very minute, fine hairs and appears bare compared with the elytra, the pseudopleura in fresh specimens are well clothed and not maculate, the dividing edge forming a sharp keel. In the male, the femora and tibiae are clothed with long, fine, outstanding hairs, while the femora of the female bear a covering of depresses pale setae, and the hairs of the tibiae are much less developed. On the ventral surface the two basal segments are copiously and as a rule densely punctured, the first more depressed in the male, in which sex the first of the two small intermediate segments is almost in the plane of the preceding, the second strongly inclined; in the female both these intermediate segments are very strongly inclined. Apical segment in the male wider at the apex than in the female, clothed thickly with erect or suberect hairs, but these are not dense enough to conceal the sculpture, which is much finer than on the basal segments.

Length: 9-12 mm.

Habitat: Necker Island in June, 1923 (Bryan, Cooke, Thaanum, and Judd).

One very fine male has the squamosity of the elytra more maculate, the tibiae more densely hirsute and the sculpture of the head and pronotum somewhat different. Owing to its fresh condition and absence of excretions, the 12 or 14 rows of punctures on the dorsal surface of the elytra for the most part stand out very distinctly.

In abraded specimens the punctures in the rows appear coarse and are each furnished with a small seta; externally to the eighth or ninth row from the suture they become more or less confused to form irregular depressions and it is probable that the carinate edge really represents the twelfth interstice.

In the sereis of specimens examined there are about twice as many females as males.

Type: Cat. No. 243, Bernice P. Bishop Museum.

#### **Rhyncogonus fallax** new species

Entirely of a sordid red color, with the antennae and legs, especially the latter, of a brighter red. Of narrow, elongate form, clothed with fine, pale hairs, the pseudopleural portion of the elytra not marked off by a distinct sharp ridge at any point.

Head including the rostrum thinly pubescent, the hairs about the inner orbits rather more conspicuous, subrugosely punctured, the punctures finer towards the pronotal margin, the eyes strongly convex; second antennal joint rather longer than the third, and subequal to the fourth and fifth together, the club slender, its first joint about twice as long as wide, the second also elongate and hardly shorter than the first in some aspects, narrower on its basal portion. Pronotum almost evenly clothed with pale hairs, distinctly shining, with shallow and copious punctures, which are uneven in size and with a bare, smooth space on the disc. On the scutellum the

hairs are thicker than the general clothing and form a pale spot, distinct to the naked eye. Elytra evenly pubescent over the whole surface, with rows of shallow punctures which are finer than is usual in this genus, the sides almost evenly curved, not at all suddenly or conspicuously attenuated toward the apex. Legs with pale pubescence, that on the femora not very different from the elytral clothing. Abdomen beneath shining, the basal segment irregularly depressed, the punctures coarser than on the second, but mostly ill-defined; the third and fourth segments finely and remotely punctured, not at all uptilted, so that there are no deeply impressed sutures, and together much longer than the second segment, the clothing sparse. Apical segment shining, feebly and not densely punctured, thinly clothed with pale hairs.

Length: 8 mm.

Habitat: Wake Island, Aug. 4, 1923. The unique example was collected by Bryan, on Tournafortia.

Without dissecting it, I am uncertain of the sex of this very abnormal species, which has a facies quite different from any of the Hawaiian forms and at first sight appeared to be another genus. On critical examination, however, no important differences from *Rhyncogonus* could be found, all of its peculiarities being approached by one or other of this genus. The specimen was submitted to Dr. Guy A. K. Marshall, who very kindly examined it with me, and also came to the conclusion that in spite of its different facies, the species presented no salient character to distinguish it from the Hawaiian genus.

Type: Cat. No. 244, Bernice P. Bishop Museum.

#### ***Sphaerorhinus pallescens* new species**

Almost the whole insect is covered with dense, pale, appressed scales, the color of the type is red, with the legs and antennae paler, but in some fragmentary specimens the color is much darker or nearly black, perhaps from discoloration.

Rostrum in front punctured, between the antennae and posteriorly covered with pale scales which clothing is continued on to the head behind the rostrum. Scape of antennae covered with pale scales and bearing also fine, but not very conspicuous hairs, about equal in length to the rest of the antennae, the first and second funicle joints elongate and subequal (the first rather stouter) and the second about equal to the two following joints together, which are short, and the more apical ones nearly globular.

Pronotum gently rounded at the sides, about as long as its basal width, densely covered with mostly pale yellowish scales, which appear somewhat shining, the puncturation coarse and fairly even over the whole disc, the punctures well separated by the scaly intervals; viewed from the side, some extremely short setae can be seen. Elytra widening to a point about a quarter of their length from the base, densely clothed with pale, dull yellowish scales, with here and there a few whiter and some dark ones; the punctures in the fine striae appear considerably finer than those of the pronotum; posteriorly some lines of rather long, fine setae (shorter ones also being present) are quite conspicuous, while a few similar ones may be seen much farther forward. The femora and tibiae are covered, at least for the most part, with pale scales, the latter also with short erect setae. Metasternum and basal abdominal segments covered with pale, round scales, among which rather large remote punctures can be seen, and fine pale setae are also evident. The small intermediate segments

apparently bear only a few fine setae, the wide apical segment is truncated and covered with small scales of unequal size.

Length of type specimen: 4.5 mm.

Habitat: Wake Island, found dead under stones and debris (Bryan); type specimen, July 31st, 1923. Other specimens apparently referable to this species, "Wilkes I." (of Wake Island group).

Other fragmentary specimens agree more or less with this type and the longer setae of the elytra are sometimes more numerous than in the latter. Others possess hardly a trace of setae, which may have been abraded. Some that in superficial appearance are apparently alike, are much narrower than others.

Type: Cat. No. 245, Bernice P. Bishop Museum.

#### **Sphaerorhinus sordidus** new species

Like *S. pallescens*, but much darker, the pronotum and elytra covered mostly with sordid yellowish or blackish fuscous scale. At the base of the pronotum on each side is a patch of much whiter scales. The erect setae on the hinder part of the elytra are numerous, but all short. The scape of the antennae and the tibiae are clothed with dark scales, the former conspicuously pilose, the femora for the most part covered with whitish scales so as to be conspicuously different in color from the general clothing.

The type is wider than any other individual of this genus collected by Bryan and its elytra are very notably flattened on the dorsum. A second example, which in the dark scaling and short elytral setae seems to agree with it, is very much narrower, but it was found in much broken condition, while the type, when cleaned, formed a very good specimen.

Length of type: 5 mm.

Habitat: Wake Island, found dead under a stone, July 29, 1923 (Bryan).

Type: Cat. No. 246, Bernice P. Bishop Museum.

#### **Acalles wilkesii** new species

Two examples of this minute species were found, one of which is in very perfect condition, but with the appendages unexpanded; the other was largely abraded, exhibiting the sculpture of the integument in part, but even after relaxation the condition of the limbs, etc., was so wiry and the parts so difficult to expand, that I did not care to interfere with the natural appearance of the other.

The insect is covered with a muddy or somewhat scaly pale yellowish excretion, through which the numerous erect setae project. On the front of the pronotum these are numerous and conspicuous, but elsewhere few and very short; on the elytra they are fairly numerous and generally distributed, but on the declivous apical portion they become longer and very conspicuous and practically white in color. The head and legs bear a white, appressed, pruinose covering, and on the legs the short, projecting, white setae are very conspicuous.

The following characters are taken from the abraded specimen: The color is dark reddish, the legs and antennae paler. Rostrum widening considerably to the apex, about twice as long as its greatest width, seen from the side its outline is gently curved above; from the middle it is impunctate, smooth and shining and appears somewhat carinate, on each side of the smooth part distinctly punctured.

Pronotum not wide and without longitudinal elevations, but a little uneven from the fact that more than the posterior half is of greater convexity than the anterior part; the punctures under a very strong lens are somewhat large, with a tendency to rugosity. The elytra are ovate, with the humeral angles rounded off, the serial punctures very coarse, none of the interstices forming elevations, though the inner series of punctures and the one next to this appear to be placed in deeper grooves than the outer series. The first funicle joint of the antennae is much longer and stouter than the second, fully as long as the next two together, the second longer than the third, and these are more closely connected together at the articulation, than are the others, which are short and transverse, increasing in width to the apical one, the club about equal to the five preceding joints.

Length of pronotum and elytra about  $1 \frac{2}{3}$  mm.

Habitat: Wake Island, July 27, 1923, 2 specimens found on *Sida* (Bryan).

Type: Cat. No. 247, Bernice P. Bishop Museum.

#### ANTHRIBIDAE

##### *Araocerus fasciculatus* (de Geer)

A few specimens of this abundant insect, no doubt imported into Hawaii, were included amongst the *Proterhinus* from Nihoa.

#### PROTERHINIDAE

##### *Proterhinus bryani* new species

A small narrow species, rufescent, the squamosity white, the antennae short and black, only the two basal segments red or reddish and sometimes obscurely so.

Eyes small, antennae short, with the two first joints strongly incrassate, clothed with white scales or thickened setae, in the female a little less wide than in the male, the following joints comparatively very slender, the club two-jointed since the ninth is not at all conspicuously different from the eighth. Rostrum of the female a little narrower basally, shining, with the punctate line on each side of the middle distinct.

Pronotum more or less unevenly clothed, a denser patch extending forward from the hind angles, and often a longitudinal stripe on either side of the middle line. Elytra narrow, simple, the squamous covering broken up into spots or patches, generally most extensive on the basal portion especially towards the sides; round the margins and on the posterior part erect setae, which are white and short, are conspicuous. The color of the elytra is red with parts more or less infuscated. The tibiae bear erect setae similar to those on the wing-cases.

In one evidently immature specimen the clothing is flavescent rather than white or silvery. Several examples were entirely covered with a muddy excretion which was removed with difficulty.

Only seven or eight examples of this species have been examined, but after comparison with all the others of the difficult *deceptor-navita* group it appears to be really distinct from any of these.

Length: about 2 mm.

Habitat: Nihoa Island, a few specimens (June 12, 14, 15, 1923) on *Euphorbia* (Bryan).

Type: Cat. No. 248, Bernice P. Bishop Museum.

**Proterhinus abundans** new species

Color varying from piceous to ferruginous, the antennae entirely red. The species is broad in form with the elytra wide at the base, as in several of the Kauai species and a few others.

Head wide, clothed with golden squamosity, with a fine median line bare, the eyes prominent and of moderate size, the rostrum of the female smooth, and with a fine clear longitudinal punctate line on each side of the middle; antennae slender, the basal joint elongate, subtriangular, not differing much in the sexes, second short and stout, roundish or ovate, the next two or three elongate but decreasing in size, the following joints moniliform, the ninth larger than the eighth, but not so noticeably as the tenth is larger than the preceding, so that the antennal club is not conspicuously three jointed.

Pronotum strongly rounded at the sides and without conspicuous impressions, often subcircular, unevenly clothed with golden squamosity, which tends to form a pattern, densely punctured and rugulose or roughly sculptured between the punctures. Elytra wide at the base, with the lateral angles distinct, subrectangles, almost simply convex, without longitudinal ridges, but sometimes with more or less of an elevation or tuberculation on either side of the scutellar region. The color is generally red with a number of dark areas or spots, which are free from the pale squamosity, so that the latter tends to form more or less numerous maculations and often a number of whitish spots posteriorly. Erect setae are almost or altogether absent both from the elytra and the legs.

Abdomen beneath with the basal segment strongly punctured, more densely in some specimens than in others. Lobes of the tarsi of moderate size, not differing much in the sexes.

Length: 2-4 mm.

The size is variable, the smallest individual appearing to be about one quarter the bulk of the largest and in the very large series of examples there are, as usual in the genus, specimens eberrant in various parts of structures. Nevertheless the species appears to be quite distinct from any other, the wide elytra and the absence of erect setae greatly facilitating its recognition.

Habitat: Nihoa Island, June, 1923, a very large series collected by Bryan, from Euphorbia.

Type: Cat. No. 249, Bernice P. Bishop Museum.

## CIOIDAE

## CIS

The Hawaiian species of *Cis* are many of them notably variable and difficult and I describe below the individuals found on Nihoa as a new species with some diffidence. It is evidently closely allied to the form determined as *C. setarius* Sharp. Blackburn sent to Sharp three specimens from the island of Hawaii under one number considering them to belong to a single species. Sharp described each of these as a distinct species and Blackburn then agreed that there were two. I<sup>22</sup> adopted Blackburn's original idea that all belonged to one variable form, from which opinion Sharp, who saw all the specimens, did not dissent. *C. tabidus* Sharp very closely ap-

<sup>22</sup> Perkins, R. C. L., Coleoptera: Fauna Hawaiiensis, Vol. II, p. 260, 1900.

proaches some of the specimens I referred to *C. setarius*, but is entirely distinct from *C. bicolor* Sharp under which it was sunk (with doubt) as a variety in the final catalog drawn up by these authors. Some years ago I revised my own collection of this genus, finding many specimens, as I consider, wrongly determined, but *C. concolor* and *C. apicalis* were left as varieties of *C. setarius*. I now think, however, that *C. setarius* may really include more than one species, but as I hope to again revise this genus and describe one or two new species in my collection, I need state only that the Nihoa form approaches most closely to a specimen from Kauai referred by me to *C. setarius*. The types of Sharp's three allied species all came from the island of Hawaii and I do not think, after a careful examination of many specimens from that island, that the Nihoa specimens can be considered the same as any of these, though further material from Kauai might show that it occurs there. Unfortunately, a large amount of material of *Cis*, *Proterhinus* and *Brachypeplus*, especially collected by me by hand with the object of comparing the variation of individuals found in company, was dispersed in mounting and labelling before I arrived in England. Specimens so collected are naturally of great value to any one working with these difficult genera.

#### ***Cis vagans* new species**

Black, the legs and antennae red, the pronotum more or less reddish black or pitchy, paler on the front margin, the elytra apically also more or less red.

Head dull, with a dense microscopic sculpture and feebly impressed punctures. Pronotum broad, seen from above with well-rounded sides and obtuse hind angles, as long in the middle as its width at the base, but considerably shorter than its greatest width. The surface is densely microscopically sculptured almost all over, as is easily seen with a very strong lens, this sculpture extending to the side margins and it is also almost evenly punctured, the punctures being very shallow, but quite distinct. Viewed from the side it can be seen to bear excessively short, erect hairs. Elytra convex, broad and shining, about twice as long as the basal width, the sides somewhat rounded; the sculpture varies, but consists of shallow punctures and rugulosity, which become evanescent posteriorly. Around the margin, at least apically, there are sparse and excessively fine hairs, which no doubt are very easily abraded.

I have seen only four examples of this species, one quite immature and much paler when mature.

Habitat: Nihoa Island on *Euphorbia*, June, 1923 (Bryan).

Type: Cat. No. 250, Bernice P. Bishop Museum.