

**Descriptions of New Hawaiian Coleoptera**

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(Presented by title by O. H. Swezey at the meeting of December 4, 1930)

I have here described three very interesting new species of *Proterhinus* collected recently by Mr. O. H. Swezey and also the remarkable form discovered in the Phoenix group by Mr. E. H. Bryan some years ago. To these I have added descriptions of a few species of other genera, three belonging to *Cis* and one to *Oodemas*, as well as another Hawaiian *Proterhinus*, all collected many years ago by myself.

In the descriptions of *Proterhinus*, the first paragraph gives such characters as would, I believe, be sufficient by themselves to separate each species from any already known and would facilitate identification. Unfortunately the very limited number of specimens leaves us in ignorance of the range of variability of the species described, though variation and aberration is of common occurrence in many of the Hawaiian forms of these difficult insects.

***Proterhinus kahanae* sp. nov.**

A large red species with the head and antennae black, eyes large and extremely prominent, elytra with oblong dorsal flattened area from the base to the strongly declivous posterior portion, bounded laterally by the third interstices, the sides subvertical, the basal tubercles and humeral angles strongly produced, clothed with white decumbent pubescence and elongate spinose erect setae.

Female with shining rostrum, smooth down the middle and on either side of this with strong, distinct punctures, the face with pale pubescence, the eyes large and extremely prominent; antennae stout, black, the club-joints more or less piceous or reddish, especially the apical one; scape stout, elongate, subtriangular, second joint robust and ovate, the third elongate, but this and the following joints, which decrease gradually in length, are all less slender than in most species and their surface is roughly sculptured; the club is very definite, its first joint being only about as long as wide and very different from the preceding. Pronotum very strongly narrowed in front, where it is only about half as wide as at the middle, and also greatly narrowed behind; the surface is very uneven, having a large vague median impression in front and a shallow median one posteriorly, which in some aspects appears continuous with the other, while on either side of the middle there is a conspicuous round depression; the clothing is not dense enough to conceal the punctures and consists largely of minute scale-like setae (as seen under a strong lens) with some pubescence, and erect, conspicuous, spine-like hairs, with bent tips, these hairs being most numerous anteriorly

and at the sides, while at the hind angles there is a patch of white woolly pubescence. Elytra subparallel-sided for the greater part of their length, the basal tubercles strongly developed, in dorsal aspect angulately produced forwards, the humeral angles very strongly produced; the flattened, oblong, dorsal area is well clothed with white, almost woolly, appressed pubescence, but between this and the lateral margins much less so, where minute appressed scale-like clothing is apparent; on these sides and on the apical declivous part long, spiniform, erect setae are very numerous, but on the dorsal flattened area they are shorter and sparser; the punctures are excessively coarse and the first interstice (extending back from the basal tubercles) is irregularly elevated, the raised parts more or less sinuate owing to the encroachment of the gross punctures of the first and second series; the next interstice is not thus elevated, but the third (which is continuous with the humeral prominence) is again raised unevenly and forms the edge of the flattened dorsal area. The legs are stout, and both femora and tibiae in addition to the appressed hairs are well clothed with erect setae, similar to the shorter ones on the elytra; the tarsal lobes are large. Beneath, so far as can be seen, the basal abdominal segment is densely, minutely granulate rather than punctured, as are the intermediate segments, while the apical one has some distinct, scattered, fine punctures. Length about 5 mm. The specimen is perhaps not quite mature and in older ones parts of the pronotum might be black, as the type shows evidence of partial infuscation.

Hab.—Oahu, Kahana, 22.ii.28, in dead twig of *Broussaisia* (Swezey).

***Proterhinus cristatus* sp. nov.**

Black or dark fuscous, irregularly clothed with golden squamosity and the elytra with long, erect, conspicuous, pale setae; antennae obscurely red, dark apically, legs for the most part blackish, but the tarsal lobes are conspicuously pale or red. Head so constricted that a very definite raised transverse ridge is formed behind the eyes, somewhat resembling that of *P. deinops*.

Female: rostrum shining, the spaces between the fine punctate grooves have an excessively minute sculpture, hardly visible under a very strong lens; antennae with the scape elongate and moderately robust, the second joint longer than wide, more robust but distinctly shorter than the third, all the following joints elongate, decreasing in length towards the apex, the eighth joint notably less wide than the basal club-joint; eyes moderately large and very prominent, in dorsal aspect of the insect subconical, with apparently no tendency to be produced into a point posteriorly in the manner of *P. deinops*. Pronotum with subelongate appearance, widest near the middle, the sides nearly straightly convergent thence to the front margin, behind the middle slightly sinuate inwardly as they converge towards the hind margin; there is no constriction or abrupt narrowing anteriorly, the lateral impressions are round and not large, but quite distinct, the anterior one represented by hardly more than a flattening of the surface; the golden clothing is wanting or nearly so on the areas of the depressions and along the middle line to near the front and hind margin; curved, suberect setae along the sides anteriorly which are evident in so many species are almost absent or very few and inconspicuous. The elytra are extremely similar to

those of the form described as var. *moestus* of *P. squamicollis*, which I now consider a species distinct from the latter; the basal tubercles are conspicuous and the humeral angles acutely produced; the clothing consists of irregular maculations and the elongate erect setae, though not dense, are very conspicuous; the surface generally, apart from the basal tubercles and the usual impression on either side of these, is simply convex, without ridges or other inequalities. Beneath, the basal segment of the abdomen bears quite distinct but shallow punctures on the disc and in some aspects appears distinctly shining. Length about 3 mm.

Hab.—Oahu, Mt. Kaala, a single female in dead twig of *Broussaisia*, 9.ii.30 (Swezey).

***Proterhinus xanthoxyli* sp. nov.**

Blackish fuscous, inclining to red in parts (especially the rostrum and along the basal margin of the elytra) the legs and antennae also more or less dull red; pronotum well clothed above with appressed golden scaly setae, but exteriorly to the well-defined, deep, round, impressions the surface is almost bare; elytra tuberculate on either side of the scutellum and with acute humeral angles, largely bare, having sparse golden maculations, the erect setae white, conspicuous but sparse, most numerous on the pale spots that are seen at about two-thirds of the length of the elytra from the base.

Rostrum very minutely punctured between the grooved punctate lines; the eyes by no means large for the size of the insect; antennae with distinct 3-jointed club, its first joint being notably longer and larger than the preceding one, all the funicle joints elongate, the second the longest, and appearing longer than the stouter first joint, at least in some aspects. Pronotum rather long, sulcate down the middle, the anterior end of the sulcation expanded to form the anterior depression, the lateral ones deep, round and distinct. Elytra as described above, and with at most faint evidence of longitudinal ridges due to the sides being a little compressed on the middle part, the outline only gently curved from the middle to the apex (as seen in profile) and not at all abrupt posteriorly. Basal abdominal segment beneath dull, with dense microscopic surface sculpture and on its middle portion with a very few uneven punctures. The tarsal lobes are large and a rounded ridge is formed at the meeting of the joint and vertex of the head, but the constriction is not comparable with that of *P. cristatus*. The specimen is probably not quite mature. Length about 3 mm. Swezey has suggested to me that this insect is allied to *P. dispar*, and I think this suggestion is correct, but the species are quite distinct. The golden clothing of the pronotum in *P. xanthoxyli* is very beautiful, and just those parts which are most densely clothed in *dispar* are almost bare in the other.

Hab.—Oahu, Waianae Mountains, Haleauau, bred from dead branch of *Xanthoxylum*, 9.ii. 1930 (Swezey), a single female.

***Proterhinus phoenix* sp. nov.**

A narrow, elongate species, blackish fuscous, becoming reddish in parts, the legs sometimes wholly red and the antennae paler red or testaceous; the clothing of pale depressed setae is of general distribution, but not dense.

Male with the basal joint of all the tarsi produced into a strong elongated spine; female with well-defined parallel-sided rostrum, as long as wide, and dull from the dense microscopic sculpture.

The head of the male is of remarkable form, being very broad anteriorly in front of the eyes and with rounded sides, so that the part in front of the antennae is nearly semi-circular in outline, and the short, more or less straight-sided rostral portion of ordinary species is not defined. In the female the rostrum is of ordinary form and with the usual longitudinal grooves, the surface quite dull, but bearing only scanty setae. Eyes small but prominent and, as usual, bearing setae. Antennae very short, second joint elongate-ovate, longer and much stouter than the third, which is sub-elongate, the more apical joints of the funicle being moniliform, the club 3-jointed, though the first much longer and stouter than the last funicle joint, though it is much smaller than the following club joint. Pronotum clothed like the head with appressed, curved, pale setae of general distribution, bearing no definite impressions and not conspicuously or abruptly narrowed or constricted in front. Legs clothed with similar appressed setae, but the tibiae lack the stout erect ones, seen in nearly all Hawaiian species; the tarsal lobes are ordinary and the legs present no remarkable feature except the great spine, directed backwards, into which the small basal joint of all the tarsi is produced beneath. Elytra long and narrow, about twice as long as the pronotum, nearly evenly convex, the humeral angles not produced, clothed with stout, depressed, curved, pale, glassy setae, which form no distinct pattern, but are usually more dense in some parts than others, e.g., on an area on either side of the scutellum, on another near the middle of the elytra on either side of the suture and on some more lateral parts. The more densely clothed areas are usually red, or at least redder than the adjoining surface. In addition to the appressed setae there are very sparse, short, erect, white ones, more noticeable towards the apex and along the side-margins of the elytra; the punctures, more clearly seen on the basal part, are coarse and close-set in their lines. The metasternum is strongly punctured, but the abdomen basally in the middle less so, the punctures more or less sparse or becoming obsolete. Length 2-3 mm.

Hab.—Phoenix Islands, Enderbury Id., March 19, 1924, from bunch grass (E. H. Bryan, Jr.). Described from ten carded specimens, and one or two dissected.

***Proterhinus debilior* sp. nov.**

A small, narrow, elongate species, varying from nearly black with only a small part of the elytra obscurely reddish, to a red color more or less darkened or infuscated in parts; the antennae with 2-jointed club, the ninth antennal joint being very little different from the eighth, and very different from the much wider tenth joint. Elytra with the humeral angles not acute and posteriorly bearing very short, stout, erect, white setae, which are very conspicuous.

Rostrum of female shining between the punctate lines, the head behind this well clothed with appressed flavescens setae, the antennae in the type red basally, but in one specimen entirely black; antennae rather slender, the scape stout subtriangular, second joint also robust as compared with the

following, the club 2-jointed; the eyes small. Pronotum subrotundate, clothed unevenly with curved appressed setae forming a denser band from the hind angles, while along the side margins some more outstanding strongly curved setae are apparent. Elytra irregularly or submaculately clothed with similar appressed, flavescens setae, which are denser basally on either side of the scutellum, on another area extending back from the humeral angles, and on the posterior declivous portion; the darkened parts of the elytra are very little clothed, though each puncture bears an extremely small pale seta; the erect pale setae of the hinder part of the wing-cases are short, but very stout and conspicuous. Length 2-2.5 mm.

There are few species in which the club can be called 2-jointed as in this one, which appears most like *P. debilis* Sh., but it is easily known by its longer, narrower elytra, blunter humeral angles, more slender antennae and differences in the clothing. Like *debilis* it is frequently covered with excretion which in my specimens was removed with difficulty.

Hab.—Maui, W. Maui Mountains; possibly in the stems of low-growing plants or ferns, on which *debilis* is found. Three specimens, all females, were taken in 1902.

**Oodemias striatipenne** sp. nov.

Aëneous-black, less metallic than most species, shining, elongate and not robust. The rostrum is slightly wider on its apical portion than behind the insertion of the antennae; the club and base of the scape being paler than the part between, the first funicle joint is very short, the second elongate and about as long as the next two together, these being globular. Pronotum very finely and remotely punctured. The elytra are conspicuously striate, the striae fine, but not shallow, their punctures fine and shallow, remote and nearly equidistant from one another, the interstices with fine and distinct punctures. The lobate joint of the front tarsi is large. Length 3-3.5 mm. This species is easily known by its very distinct and regular striation, the inner striae distinct and definite from (or very nearly from) the base of the elytra.

Hab.—Oahu, Mt. Kaala; two specimens of uncertain sex taken about thirty years ago.

**Cis nudipennis** sp. nov.

In form like *tabidus*; the elytra in typical specimens pale, yellowish or testaceous, black along the margins and with a band, broken or entire, near the middle, but there is often also black suffusion basally and along the suture behind the submedian band, while in extreme forms the pale color is confined to the apical declivous portion. Pronotum black, not distinctly metallic, pale along the front and hind margin, very finely but distinctly punctate, with fairly wide spaces between the punctures and without clothing. The elytra are also without clothing except for excessively minute setae, scarcely visible as minute pale specks under a very strong lens; the sculpture consists of extremely feeble or obsolete punctures, inclining to rugulosity, on the basal part, and becoming still less posteriorly, the apical declivous portion

being practically impunctate. As in other species the size is variable, some examples being twice as large as others.

This species lacks the conspicuous metallic color of the pronotum of *nesiotes* and *cognatissimus* and generally the elytra are much less strongly sculptured; from *tabidus* and others the total absence of outstanding hairs on either the pronotum or elytra sufficiently distinguish it. The puncturation of the pronotum seems much less variable than in several of the allied species. In my original collections specimens were probably mixed with *setarius* and *tabidus*.

Hab.—Hawaii, Maui, Lanai and probably some or all of the other islands. Most of those examined are from Kona and Kau, Hawaii.

***Cis gravipennis* sp. nov.**

Black, with the antennae and legs red, shining and without any evident clothing; the elytra are long and almost parallel-sided from the base to about the apical third of their length; the pronotum is entirely black or at most with a piceous tint of an obscure nature on the front and on the middle of the hind margin.

Pronotum finely but distinctly margined at the sides and behind, very distinctly and evenly, copiously punctured, the hind angles obtuse. Elytra more or less roughly punctured on the basal portion, so as to be subrugose, the punctures uneven in size, some being much coarser than others, and posteriorly the sculpture is finer and sparser, but is continued on to the apical declivous portion, though in the smallest example it becomes very indistinct and obsolete there, the surface being less black, perhaps from slight immaturity. This species is evidently somewhat larger than *setarius* and is remarkable for its black color, and differs from this and *tabidus* in the absence of any erect hairs and also in sculpture. Length about 2 mm.

Hab.—Hawaii, Kona District, 4000 ft., three specimens taken many years ago.

***Cis dracaenae* sp. nov.**

Black, or blackish fuscous, the front and the middle of the hind margin of the pronotum and also the suture of the elytra pale. Shape subfusiform, convex; oral region of face, antennae and legs, red or yellow, club of antennae dark. Pronotum densely and very evenly, distinctly, strongly punctured, shining, distinctly margined at the sides, but not posteriorly, clothed (like the elytra) with excessively minute hairs; elytra subacuminate from near the base, with gross, indefinite punctures on the basal portion, between which very minute ones are evident, the whole forming a more or less rugose sculpture; the apical portion is much more finely sculptured. In *halcaikalae* apart from other differences the punctures of the pronotum are so dense that practically no space is left between them, while in the present species there is considerable smooth shining surface. Length 1.2 mm.

Hab.—Oahu, Nuuanu Pali. Two specimens, one pale and immature, were obtained from a trunk of Halapepe (*Dracaena aurea*) when I was digging out a species of Xyleborus, which was attacking these trees.

**Cis haleakalae** Perk.

A single specimen of this series was taken at Kilauea, Hawaii, in July, 1906. The unique type was from Haleakala, Maui, 5000 ft.