Mr Koebele, in honour of whom the species has been named, secured a small series at various dates.

HAB. Oahu, mountains near Honolulu. D. S.

### Callithmysus cristatus Sharp.

Plagithmysus cristatus Sharp, huj. op. 11., p. 113, pl. vi. fig. 21.

A series of 21 additional examples of this interesting but little known species. I remarked, in 1896, on the similarity in shape of the femora of this species with those of the genus *Callithmysus*, and now that *C. koebelei* has been discovered, it is clear that *cristatus* must be transferred to *Callithmysus* notwithstanding the slender femora of its female.

In the 21 specimens recently acquired there are six females; the slender femora is a constant character of this sex of *C. cristatus*, and the female is also generally much darker in colour than the male; this distinction is, however, variable, one individual being but little darker than the other sex. The male varies little, except in size.

Although the dense black hairs at the apex of the hind femora found in *C. microgaster* are absent in *C. koebelei* and *C. cristatus*, yet there is a peculiarity in this spot in both the species in question. In *C. koebelei* the pubescence there is dark brown instead of whitish, as on the rest of the femur: and in *C. cristatus* 3 the pubescence in the same place is finer, darker and closer.

#### COPTOPS Serville.

Coptops Serville, Ann. Soc. ent. France 1835, p. 64.

## (1) Coptops aedificator Fabr.

Lamia aedificator Fabr., Ent. Syst. 1. pt. 2, p. 275.

Three specimens of this species were found on Oahu by Mr Perkins in 1900 and 1901. It is widely distributed in the East and, as it is of large size, has probably been recently introduced. It is only like *Prosoplus bankii*, but is more than twice the size.

HAB. Oahu (Perkins). Java, Aden, etc. etc.

### Fam. CURCULIONIDAE<sup>1</sup>.

# (1) Rhyncogonus sharpi, sp. nov.

Black or pitchy black, shining, legs often more or less reddish, tarsi always rufescent, antennae black or reddish, whole insect with appressed squamous hairs, in fresh specimens flavescent about the eyes and at the sides of the pronotum.

<sup>1</sup> By R. C. L. Perkins.



Head rugose-punctate beneath the clothing, eyes convex, prominent, first funicle joint of antennae notably longer than the second. Pronotum smooth and shining between the punctures and with a median smooth line not extending the whole length. Elytra shining but rough between the series of punctures, in very fresh specimens the surface nearly concealed beneath the squamosity, pseudepipleura regularly clothed all over.

Male with the apical ventral segment broad at the apex and, like the three preceding, densely clothed with hairs; the two preceding and the metasternum with denser patches at the sides, less dense between these and very closely punctured. Length 9—14 mm.

HAB. Molokai, mountains.

### (2) Rhyncogonus simplex, sp. nov.

Black or piceous, the antennae and legs generally more or less obscurely rufescent in parts, the tarsi always so, clothing not dense, of pale and fine appressed hairs, denser along the sides of the pronotum, forming an entire band or broken into a denser anterior and posterior spot. Pseudepipleura clothed like the dorsal surface of the elytra. Head punctate strigose, first and second funicle joints of antennae nearly equal. Pronotum shining between the punctures, which differ in size. Elytra with about 13 rows of regular punctures dorsally, between these very minutely tuberculate.

Male beneath with the apical ventral segment truncate or widely rounded at apex and with the preceding densely pubescent, in the female these segments are also more pubescent than the others, the apical one narrowly rounded at apex; third segment excessively densely punctured, much more finely than the second. Length  $3 \stackrel{?}{\cdot} 7$ —11 mm.

There appear to be two forms of this species, the one more densely pubescent on the elytra and with the hairs more approaching a squamose condition. This is much the rarer and the two are found in company, while there appears to be no other point of distinction. The species is (like most others of the genus) variable, and while the males are usually more depressed than the females, this is not always the case.

HAB. Molokai, mountains, below the forest, 700—1000 ft.

### (3) Rhyncogonus extraneus, sp. nov.

Female sordid black or fuscous inclining to red, the antennae and legs sometimes more or less of this colour. Clothing pale, in part subsquamous, very dense all over in fresh examples, in less fresh ones denser on the legs and sides of the pronotum, with a tendency to form maculae, especially on the pseudepipleura. Head roughly sculptured, antennae with the first funicle joint hardly as long as the second, which is much longer than the third. Eyes strongly prominent and convex. Pronotum with distinct punctures not very dense, but with finer interstitial ones connecting them, lateral lines of

clothing distinctly squamose. Elytra with series of punctures, which are finer than is usual in the genus, the clothing of depressed pubescence with a tendency to become maculate, and with numerous short erect setae. Basal abdominal segment beneath densely punctate, some of the punctures deeper and larger than the others.

Length 8 mm. In very fresh and densely clothed specimens the sculpture is almost entirely hidden.

HAB. Oahu; lower slopes of the mountains, below the forest.

# (4) Rhyncogonus oleae, sp. nov.

Black or piceous, probably sometimes red, clothed with fine pale hairs.

Head between the eyes rugose-punctate, the rostral portion in front of this usually more sparsely punctate. Eyes moderately convex. Two basal joints of the funicle of the antennae slender and strongly elongated, the first a little longer than the second, but in one 3 they are of equal length, third and following much shorter than the second, but all of them elongate, basal joint of club distinctly longer than the last funicle joint.

Pronotum generally closely and sometimes rugosely punctured, generally more densely in the 3 than the female, sometimes quite dull, sometimes smooth and shining between the punctures, which are usually uneven in size; a median smooth line is distinct, except sometimes posteriorly; sides of thorax with denser and more conspicuous pubescence in the female, usually less clothed in the 3. Elytra finely pubescent, with about 12 rows of punctures on the dorsal surface, the pseudepipleura also pubescent, but not maculately so. Two apical segments of the abdomen beneath in the 3, with somewhat dense pubescence, at least much denser than on the preceding segments; in the female the segments are more thinly clothed, the clothing of the penultimate segment not much different from that of the preceding, the metasternum at the sides much more conspicuously pubescent than in the middle.

Most similar to R. freycinetiae, which is a much blacker insect and otherwise different in detail.

HAB. Oahu, Waialua 1200 ft.; on Olea, Euphorbia, etc.

### (5) Rhyncogonus fuscus, sp. nov.

Fusco-niger, setis appressis rufescentibus vestitus, opacus, antennis tibiis (plus minusve) tarsisque rufescentibus. Caput minus dense punctatum, oculis fortiter prominentibus. Pronotum inaequaliter punctatum, peropacum, latum, lateribus fortiter rotundatis. Elytra vix maculatim ubique rufo-setosa, pseudepipleuris dorso minus dense vestitis, opaca, interstitio tertio subelevato. Antennarum funiculi segmentum primum et secundum aequilonga, sequentibus, quae aequilonga sunt, multo longiora. Long. 7.5 mm.

HAB. Oahu; Waianae mountains.

### Rhyncogonus koebelei Perkins.

R. koebelei Perkins, huj. op. 11., p. 126, pl. v11., fig. 5.

What I believe to be the above species is common on Oahu from Manoa valley to the south-eastern extremity of the Koolau range. It occurs as high as 2000 ft. in the mountains, but is found at much lower elevations—under 1000 ft. Like others of the genus, it is quite variable. The apical ventral segment of the female is pointed and much less densely hairy than that of the male. Varies very greatly in size.

# Pantomorus fulleri Horn.

Pantomorus olindae Perkins, huj. op. 11., p. 130 (1900). Aramigus fulleri Horn, Proc. Amer. Phil. Soc. xv. 1876, p. 94.

This species was originally introduced into the island of Maui; subsequently it spread to Oahu, and still more recently to Hawaii. It does great damage to cultivated plants and forest trees in the mountains, but does not become abundant on the lowlands, at any rate in the drier districts. It is polyphagous. It is the *Pantomorus olindae* of my earlier paper on the weevils. Seeing that it was evidently introduced into Hawaii from the warmer parts of America, I did not look for its description amongst the N. American fauna, it being no doubt an introduction also into California and other parts from the same region. It seems to me not separable generically from true *Pantomorus*.

### (1) Acalles pusillissimus, sp. nov.

Nigricans, antennis, rostro, tarsisque rufo-testaceis. Antennarum articulus secundus subovatus et elongatus, sequentibus brevissimis et transversis. Pronotum elongatum anterius posticeque angustatum, setis brevissimis nigris inconspicue vestitum. Elytra parum lata, lateribus aequaliter rotundatis, interstitiis (primo excepto) aequaliter convexis, haud irregulariter elevatis, plaga pallida squamosa post humeros versus suturam oblique utrinque currente. Long. 1.75 mm.

This is the smallest species of Hawaiian Acalles, and is distinguished by its small size, narrow form and the patch of pale squamosity, which tends to form a fascia on the elytra and the extremely short joints of the funicle of the antennae. Unfortunately the type is not in good condition. A specimen, which I am not able to find in the collection, was much more perfect, when taken, and not abraded like the one described. I have met with it still more recently in the mountains near Honolulu.

HAB. Oahu; mount Tantalus; occasionally met with, but not common.

F. H. III.

Hosted by Google

# (1) Nesotocus giffardi, sp. nov.

Very closely allied to the other species of the genus, but more shining. Pronotum with some scanty pubescence laterally, otherwise almost bare, very smooth and shining and with fine and rather remote puncturation. Anterior femora more swollen than in well-developed *N. munroi*. Elytra with the pubescence more scanty than in the other species. Scape of antennae rather strongly dilated at the apex; funicle joints longer and slenderer than in *N. munroi*.

A very fine species, of which the male only is known.

HAB. Oahu; Tantalus in December.

### Oodemas parallelum Perkins.

Oodemas parallelum P., huj. op. 11., p. 162.

A series of specimens of both sexes, which I refer to the above species, exhibit considerable variation in the shape and sculpture of the pronotum, the punctures being much stronger in some than others, and the surface in some is dull. Females are usually larger than the males, and the second tarsal joint is much smaller. The puncturation of the elytra is variable, the interstitial punctures being very strongly developed in some examples, in fact almost sufficiently so as to be confused with those of the striae. Some individuals are much narrower than others.

#### Oodemas halticoides Bl.

Oodemas halticoides Blackb., huj. op. 11., p. 169.

This species is not rare in the mountains round Honolulu, and is not only found in the dead wood of various forest trees, but also in the stems of low-growing plants.

### Oodemas robustum Bl.

Oodemas robustum Blackb., huj. op. 11., p. 169.

I have referred a single example to this species, without, however, having examined the type. I did not meet with it during my earlier visits to the islands.

#### (1) Oodemas solidum, sp. nov.

Brassy-black, the elytra more or less shining, ovate. A large species, very similar to O. grande of Kauai, from which it is easily distinguished by its conspicuously metallic colour, and the rows of punctures on the elytra are placed in distinct grooves owing to the more or less convex interstices.

Rostrum not densely nor coarsely punctate, apically at least strigose-punctate. Pronotum broad, generally dull and very finely but distinctly punctured. Elytra with the interstices conspicuously punctured, the punctures much more fine than the rather coarse and deep serial ones. The antennae vary a little, the second joint usually appearing stouter and shorter than the third, but when the basal constricted part of the former is fully exposed, it is sometimes as long as the latter. Length 4.5—6 mm.

Closely allied also to *O. corticis*, but at once distinguished by the coarseness of the serial punctures of the elytra.

HAB. Maui; Haleakala; a common species, I believe, previously confounded with the very abundant *O. corticis* of Maui, Molokai and Lanai.

### (2) Oodemas hawaiiense, sp. nov.

Brassy, robust, the tibiae and tarsi testaceous, rostrum dilated apically, second and third joints of the antennae subequal when the second is fully exposed.

Allied to *O. punctulatissimum* of Oahu by the second joint of the funiculus being much less elongate than is usual in the group of the genus, but very distinct by the larger serial punctures of the elytra, which are coarse as compared with the very feeble interstitial ones. The punctures in the series are remote, and the inner series fail at about the middle of the length of the elytra or before this. There is no striation, except posteriorly, where the interstices become convex. The eyes are hardly at all convex. Length about 3.5 mm. I have not seen the male of this species.

HAB. Hawaii, Mauna Loa at 4000 ft. Probably common, but overlooked.

#### Orothreptes callithrix Perkins.

O. callithrix Perkins, huj. op. 11., p. 147.

Originally described from Kona, Hawaii, this species has now occurred on mount Tantalus near Honolulu. Though I did not take many specimens, I found it quite common in the month of November. It will probably be found on the other windward islands.

HAB. Hawaii. Oahu; mount Tantalus, not rare.

#### Pentarthrum blackburni Sharp.

Pentarthrum blackburni Sharp, huj. op. 11., p. 147.

On several occasions I have seen imported boxes, with the wood largely destroyed by a *Pentarthrum*, which appears to be the above species. It is no doubt an imported insect.

84---2



### Pseudolus hospes Perkins.

P. hospes Perkins, huj. op. 11., p. 149.

This has now become one of the commonest of Hawaiian beetles and has extended far into the forests, apparently largely supplanting *P. longulus*. It was originally found in boards of foreign timber in Honolulu, and I have since found it in the wood of crates freshly landed from Fiji. In the latter country *P. longulus* and *Phloeophagosoma tenuis* also occur with it, and have also been imported into Honolulu.

#### Fam. PROTERHINIDAE<sup>1</sup>,

# (1) Proterhinus podagricus, sp. nov.

Niger aut sordide rufescens, elytris rufescentibus, femoribus nigricantibus, antennis rufis, apices versus nigris vel obscurioribus. Caput cum pronoto parum dense aureosquamosum, hoc ad angulos posticos plaga parva pallide-squamosa densiore ornato. Elytra fere aequaliter griseo-squamosa, postice setis erectis albidis sparse vestita. Antennae fortius elongatae, articulo primo elongato et incrassato, clava distinctissime 3-articulata, articulis elongatis. Femora maris fortissime incrassata. Long. 2·5—3·25 mm.

A very distinct species by the enormously thick femora of the male, the more than usually elongate antennae, with long robust scape and long and distinctly three-jointed club. Eyes rather small, thorax rather long and more or less distinctly tri-impressed. Elytra simply convex, rather parallel-sided, and with the humeral angles strongly produced. In form it greatly resembles *P. kamptarthrus*, but the male is easily distinguished by the simple third antennal joint, the female by the rather less slender antennae, the shorter and less thin third joint, which is quite simple, while in *P. kamptarthrus* it shows a trace of the form observable in the male. In the latter species too, the pronotum appears to be rather narrower and more elongate.

HAB. Oahu; Waianae range.

#### Proterhinus leiorhynchus Perk.

P. leiorhynchus Perk., huj. op. 11., p. 200.

I have now obtained a male of this species, which is very closely allied to *P. rufi-cornis*. Like the female, it may be easily distinguished from that species by the much larger antennal scape, but the character of the thoracic impressions is variable in both species.

<sup>1</sup> By R. C. L. Perkins.



### Proterhinus ruficornis Perk.

# P. ruficornis Perk., l. c.

Varies in size, length of pronotum and elytra, and in colour, but the antennae appear to be always unicolorous. In *P. adelus*, which has the same habits as *P. ruficornis*, the antennae vary in colour, sometimes they resemble those of the latter, but sometimes the apical joints are dark. The species are easily separated by the differences in the pronotum and the greater development of the antennae in *P. ruficornis*.

HAB. Oahu; mountains round Honolulu, 1500 ft. and upwards, in company with P. adelus.

### Proterhinus deinops Perk.

# P. deinops Perk., huj. op. 11., p. 201.

The variation in this remarkable species is of the same nature as that exhibited by many others of the genus. The rostrum of the female varies slightly in length and form, the pronotum and elytra are much narrower and more elongate in some than in others, and large examples are fully twice the bulk of small ones. Nevertheless it remains always easy of recognition by the peculiarities of the head and eyes.

### Proterhinus squamicollis Perk.

# P. squamicollis Perk., 1. c.

A small series of examples were taken in the mountains near Honolulu and other parts of the Koolau range. They agree well with the original specimens and the species is quite distinct from any other.

HAB. Oahu; widely distributed in the Koolau range, but apparently not abundant. I have taken it on *Bobea elatior*, but do not know whether it is confined to this tree.

# Proterhinus adelus Perk.

# P. adelus Perk., huj. op. 11., p. 202.

I have examined a fine series of this species. In its commonest form it is remarkable for the very strong and abrupt constriction of the pronotum anteriorly, and the very well-marked three-jointed antennal club. The eyes are large and prominent, the basal abdominal segment coarsely punctate even on the disc.

It varies in colour, clothing and size, in the relative length and width of the elytra and of the pronotum, and in the length and colour of the antennae. In some examples the constriction of the thorax is much less abrupt, and in extreme varieties almost or quite wanting.

The form with unicolorous red antennae and extremely abrupt constriction of the thorax may be distinguished as var. adeloides.

### Proterhinus adelus var. chrysadelus var. nov.

Thorax and elytra evenly and similarly clothed all over with golden or greyish-golden squamosity, the whole insect reddish, except for some fuscous spots on the elytra, these spots being free from the appressed clothing. Antennae red at the base, dark apically. Thorax depressed in front and narrowed, sometimes more abruptly constricted, the posterior impressions faint or absent. Erect setae on elytra fine, white, long and conspicuous.

# Proterhinus adelus var. constricticeps var. nov.

Head strongly transversely constricted behind the eyes. In other respects apparently not differing from some other specimens of *P. adelus*, some of which also show a tendency to constriction.

HAB. Oahu; this variable species occurs throughout the Koolau range.

### (2) Proterhinus maurus, sp. nov.

Magnitudine grandi, robustus, niger, lobis tarsorum piceis aut obscure testaceis. Antennae subrobustae sed fortius elongatae, clava distincte 3-articulata; oculi permagni et fortiter prominentes. Pronotum parum squamosum, setis curvatis conspicue vestitum, antice fortiter impressum, post medium utrinque fortiter rotundatim foveatum, postice ad medium impressum, angulis posterioribus prominulis et macula albida ornatum. Elytra fusco-setosa, utrinque juxta scutellum ad basim tuberculata, post media setis albis bisignata, pergrosse punctata, parum squamosa, angulis humeralibus fere rectis. Long. circiter 5 mm.

A most distinct species which cannot be confused with any other of the genus.

HAB. Oahu; Koolau range, 1800 ft. On Pelea.

### (3) Proterhinus echidna, sp. nov.

Rufescens aut ferrugineus, elytris mediis utrinque nigro- vel fusco-notatis, antennarum clava nonnunquam obscuriore. Minus dense aureo- vel griseo-squamosus, elytris pedibusque setis gracillimis et perelongatis vestitis. Antennae graciles, elongatae, clava distincte 3-articulata, oculis prominentibus, magnitudine mediocribus. Pronotum antice fortissime impressum. Elytra latiuscula, lateribus rotundatis, angulis humeralibus acutis. Long. 2—3.25 mm.

A very distinct species by the extremely long, fine setae of the elytra and legs, the red colour of almost the whole insect, the deep thoracic impression and the shape of the elytra. Like other species of the genus, it varies in the development of the antennae, eyes, &c.

HAB. Oahu; mountains near Honolulu on Gouldia.

# (4) Proterhinus myrsineus, sp. nov.

Rufescens, pronoto saepe infuscato, sive piceo, elytris nigro-notatis. Antennae longitudine mediocres, rufae, clava distincte 3-articulata. Pronotum parce squamosum, setis curvatis ad latera distinctis, antice constrictum et fortiter impressum, juxta medium impressionibus duabus rotundis distinctis, circa has impressiones densius squamosum. Elytra submaculatim pallide squamosa, setisque perconspicuis albidis et crassiusculis vestita, angulis humeralibus acutis et fortiter productis. Pedes et antennae rufi. Long. 2—3 mm.

The general red colour, the antennae and legs being red, the pronotum with a dense patch of appressed squamosity adjoining the circular impressions, the remainder being sparsely clothed, the very conspicuous erect white setae of the elytra, which have the humeral angles strongly produced, distinguish the species rather easily.

HAB. Oahu; mountains near Honolulu, 1500 ft., on Myrsine.

# (5) Proterhinus myrsineoides, sp. nov.

Extremely similar to *P. myrsineus*, but the club of the antennae and sometimes some of the preceding joints are black or nearly so, the posterior round impressions of the pronotum are obsolete or very faint, their position being indicated by absence of squamosity, the femora are more infuscate, and the erect setae of the elytra are more elongate and slenderer. This insect also has a smoother appearance than the preceding.

One of the examples is larger than the others and the joints of the antennae are, as is often the case in other forms, longer and thinner than those of the smaller examples.

HAB. Oahu; Koolau range, 1500 ft., Waialua district.

# Proterhinus angularis Sharp.

P. angularis Sharp, huj. op. 11., p. 243.

It is now quite clear to me that the specimens from Oahu and all the windward islands that I referred to *P. angularis* S. are quite distinct from that species. *P. angularis* appears to be almost, if not entirely, confined to the mountains in the neighbourhood of Honolulu and is not very common. It is of depressed form, the elytra bear abundant and conspicuous fuscous erect setae. The antennae are always moderately elongate.

HAB. Oahu; mountains near Honolulu.

### (6) Proterhinus subangularis, sp. nov.

To this form, for which I propose the specific name *subangularis*, belong nearly all the series of examples referred by me to *P. angularis* in F. H. II., 243. It is of narrow form, often extremely narrow, and is not so depressed as *angularis* and *subplanatus*. The elytra are conspicuously clothed with long white and dark erect setae. The antennae normally are long and slender and conspicuously setose. There is much variation in the shape of the thorax and the humeral angles differ in form in different examples. I suspect it will prove to be divisible into several distinct species or subspecies. It is a narrower insect than *P. obscuricolor* and the dark setae on the elytra are more developed. I have chosen a Molokai specimen as the type.

HAB. Oahu, Molokai, Maui, Lanai, Hawaii.

#### Proterhinus obscuricolor Perk.

P. obscuricolor Perk., huj. op. 11., p. 202.

This form is no doubt exceedingly close to those which I assigned to P. angularis in my earlier collections. The limits of the species are at present uncertain and I assign to it diminutive examples, which certainly approach P. subplanatus, but I am not at all certain that careful study in the field will not show that these are distinct from either. From notes attached to some of these small examples I find that they were collected in the bark of twigs of Pelea, whereas P. obscuricolor, P. angularis, P. subangularis and P. subplanatus are certainly all attached to Straussia. In examples taken from Pelea the base of the elytra is usually dull red. The variation in the length of the antennae is very great.

HAB. Oahu; mountains near Honolulu.

#### Proterhinus subplanatus Perk.

P. subplanatus Perk., huj. op. 11., p. 205.

Another very variable species of the *angularis* group, generally easily recognized by its depressed form, much less setose than true *angularis* and the entirely black or at least very dark antennae. It is very variable in the structure of the antennae, the joints having a strong tendency to become shortened.

HAB. Oahu; Koolau range, common beneath bark of Straussia.

#### Proterhinus longulus Sharp.

P. longulus Sharp, huj. op. 11., p. 208.

Varies greatly in size, and in some examples the elytra are largely black. I have examined many examples, the species being very common on tree-ferns in the mountains throughout Oahu.

HAB. Oahu generally, from 1200 ft. upwards.

Hosted by Google

#### Proterhinus denudatus Perk.

P. denudatus Perk., huj. op. 11., p. 203.

This may prove to be a variety of *P. longulus*. It differs chiefly in the white, not flavescent, erect setae of the elytra and in the darkened apical joints of the antennae, sometimes nearly all the joints are black. This species is extremely variable in size and structure, and it is almost impossible to decide as to its distinctness from *P. longulus*. It too is a fern feeder, and while not affecting tree-ferns, is found in the thin wiry stems of the so-called stag-horn fern. I have seen a few examples that I cannot certainly assign to either species.

HAB. Oahu; common in both ranges.

# (7) Proterhinus platygonioides, sp. nov.

P. platygoniadi persimilis, sed capite post oculos haud fortiter constricto distinguendus.

Extremely like *P. platygonias*, but at once distinguished by the absence of the constriction behind the eyes. The species varies in size and colour. The antennae are sometimes entirely dark, sometimes entirely dull red, sometimes red at the base and black apically.

HAB. Oahu; Waianae mountains at 2000 ft.

#### Proterhinus seticollis Perk.

P. seticollis Perk., huj. op. 11., p. 207.

I have examined a series of this species, of which none exactly resemble one of the original examples, which is available for examination, but, as they only differ slightly in colour and form, I believe I have assigned them correctly.

#### (8) Proterhinus heterostictus, sp. nov.

Further study and many additional specimens of the two species show that *P. heterostictus* considered in Vol. II., p. 205, as a variety of *P. vestitus* Sharp, is quite distinct from that species. The antennae are never of the clear red colour of true *vestitus*, but are either entirely black, or piceous, or have the basal joints only distinctly or obscurely red. Large examples of the species considered by me as *P. simplex* are excessively like some specimens of *P. heterostictus*, but the strong puncturation of the middle of the basal abdominal segment will distinguish the latter. Superficially some specimens are almost exactly like certain varieties of *P. adelus*, but the less marked club of the antennae will separate them.

HAB. Oahu; in the mountains behind Honolulu and elsewhere. The original specimens were from the Waianae mountains, where also I have since seen it.

F. H. III. 85

### Proterhinus vestitus Sharp.

P. vestitus Sharp, huj. op. 11., p. 205.

This is a very distinct species with the antennae always unicolorous red, or at most a little darker apically and the pronotum generally abruptly constricted in front. It varies considerably in size, the antennae are sometimes shortened, and the proportion of black and red colour of the elytra is also variable. I have seen some specimens entirely red with only faint fuscous markings on the elytra. The species is very easily recognized.

HAB. Oahu; in the mountains around Honolulu, but I did not take it elsewhere on the island. It chiefly affects *Aleurites*, *Pipturus* and *Pisonia* and is not found on the highest peaks.

### (9) Proterhinus transversalis, sp. nov.

Rufescens, thorace plus minusve infuscato, elytris nigro-maculatis, antennarum clava nigricante. Antennae graciles, fortius elongatae, clava 3-articulata; oculi minores. Pronotum parum latum, aureo-squamosum, antice fortissime transversim impressum, impressionibus posterioribus rotundis, minus profundis. Elytra latiuscula, remote punctata, setis albidis erectis perparce sed conspicue vestita, humeris fortiter acute productis. Long.  $\circ$  circiter 2 mm.

This species is very distinct from any other on Oahu. The example examined is not quite mature and I suspect undersized; so that the characters observed are likely to be accentuated in larger individuals.

HAB. Oahu; Waianae mountains 2000 ft.

#### (10) Proterhinus excrucians, sp. nov.

Under the name of *P. simplex* Sharp I formerly placed a number of specimens, which I considered might be referred to that species as large and well-developed individuals. *P. simplex* was originally described from two apparently immature males, and other specimens afterwards sent over by Mr Blackburn were referred to it by Dr Sharp, though superficially at least they did not resemble the type. Whether Mr Blackburn ever obtained additional examples agreeing with the type is doubtful, and I have never myself seen any. I therefore propose the above name for the specimens which I formerly considered to be *P. simplex* S., as I no longer believe that the two are the same species. In any case *P. excrucians* remains so variable, even if the small and narrow examples be removed and considered as varieties of true *P. simplex*, that I am at a loss to characterize it better than I have already done under *P. simplex* in the earlier part of this work.

HAB. Oahu; abundant near Honolulu and throughout both mountain ranges.

### (11) Proterhinus facilis, sp. nov.

Nigro-fuscus, thorace minus dense aureo-squamoso, antennarum articulis basalibus rufis. Oculi parvi; pedes graciles; pronotum antice tantum impressum. Elytra perparce squamosa, sed setis erectis albidis conspicue vestita, fortiter elongata, angulis humeralibus distinctis, fere rectis, vel leviter productis. Long. & circiter 2 mm.

A very obscure species chiefly remarkable for its narrow form and the elongate elytra, which are nearly devoid of squamosity, but bear conspicuous white erect setae. The base of the elytra and sometimes some spots behind are obscure reddish in colour. The antennae are of moderate length, the club three-jointed, but its first joint is much less stout than the second. The legs are more slender than is usual in the genus.

HAB. Oahu, in both ranges, apparently rare.

# Proterhinus dispar Sharp.

P. dispar Sharp, huj. op. 11., p. 243.

Attached to Wikstroemia foetida and distributed all over the Koolau range of Oahu.

### Proterhinus obscurus Sharp.

P. obscurus Sharp, huj. op. 11., p. 210.

There is some doubt as to the identity of the type of this species with the examples, which I originally referred to it. It was described originally on a single female. As I understand it, after paying very special attention to the matter in the field, *P. obscurus* is a very variable species. The commonest form is a dark insect, the antennae being often entirely black or very dark red and the legs of the same colour or the basal joints of the former may be red, more frequently in the female. The elytra are usually obscurely red at the base and generally with other red markings posteriorly. These spots bear grey or golden squamosity. This form is extremely abundant on the 'Olomea' trees in the mountains round Honolulu and may be known as var. perobscurus,

Specimens collected from the 'Kalia' (*Elaeocarpus*) are altogether more rufescent and the legs are red, but I think they are the same species as the above, as intermediate forms occur. They may be known as var. *elaeocarpi*.

At higher elevations and on another tree, which in the absence of my notes I cannot at present name, the insect becomes entirely or almost entirely red and is clothed all over with golden squamosity in fresh examples. The antennae are usually red on the basal joints only, or may be piceous throughout. The squamous clothing of the elytra is sometimes grey. This form may be known as var. *chryseis*.

HAB. Oahu; very abundant in the mountains round Honolulu, and widely distributed.

85--2

# Proterhinus oscillans Sharp.

P. oscillans Sharp, huj. op. 11., p. 210.

This species is not very variable and is rather easily recognized, though very closely allied to *P. deceptor*, *P. subdeceptor* and others. It is generally distributed over Oahu in both ranges and is attached to *Acacia koa*.

# Proterhinus pachycnemis Perk.

P. pachycnemis Perk., huj. op. 11., p. 211.

The female of this species, which was not contained in my earlier collections, resembles the male in general appearance, but lacks the enormous development of the femora. It may, however, be easily recognized by the long second joint of the antennae, which is as long as or longer than, the third and is much stouter than the latter.

# Proterhinus deceptor Perk.

P. deceptor Perk., huj. op. II., p. 245.

This species is common in the Koolau range of Oahu, near Honolulu and elsewhere and, no doubt, in my earlier collections I referred examples of other species to it. It affects the lower altitudes in the mountains and is abundant on the Hau tree (Hibiscus tiliaceus). I have now examined many examples and the variation does not seem to be excessive.

HAB. Oahu; common and generally distributed.

### (12) Proterhinus subdeceptor, sp. nov.

This species is almost similar to *P. deceptor*, but having examined a very fine series, I find that it is evidently more elongate; the elytral clothing has not the same tendency to form spots and the erect setae are less developed, less numerous, and almost confined to the posterior parts of the elytra.

The colour of the elytra is usually red or reddish, with black or fuscous marking each side, often forming a median band. In small dark specimens nearly the whole of the elytra is occupied by this black colour except the basal third. The pronotum is very densely clothed at the sides with appressed pale squamosity, and very rarely it is almost equally dense between these areas. Usually a number of the basal joints of the antennae are clear red, but sometimes only the scape is of this colour, while in others the antennae are entirely black.

HAB. Oahu; widely distributed in the Koolau range. I have taken it commonly from stems of Alyxia.



# (13) Proterhinus pipturi, sp. nov.

Rufescens vel sordide rufus, elytrorum marginibus et saepe maculis dorsalibus nonnullis nigricantibus aut fuscis, pedibus rufis, nonnunquam sordidioribus, antennis clare rufis, apices versus nigris. Pronotum aureo-squamosum, lateraliter plaga densiore utrinque vestitum. Oculi minores; antennae graciles, fortius elongatae, articulo primo robusto et elongato, tertio gracili, elongato, quam quartus multo longiore, clava distincte 3-articulata. Articulus tarsorum anticorum lobatus sat magnus. Elytra plerumque maculatim squamosa, setisque erectis albidis subconspicue vestita, angulis humeralibus haud productis. Long. 1.75—2.25 mm.

This small species is best distinguished by the more than usually elongate antennae, with clear red basal joints. The elytra in fresh examples bear more or less distinct roundish spots of pale squamosity and in most individuals, especially of the male sex are rather wider towards the base than in most species. These characters and the rufescent colouring render this species rather easy to distinguish.

HAB. Oahu; mountains near Honolulu 1200—1800 ft. Attached to Pipturus.

#### Proterhinus vicinus Perk.

# P. vicinus Perk., huj. op. 11., p. 212.

I have examined many additional specimens of this small species. It varies in colour, in the shape of the prothorax and in the length of the antennae, while very rarely these are entirely black. The series now before me were all taken in the same locality and at the same time. Whether the species is really distinct from some of the allied species on Kauai is at present uncertain owing to the great variability.

#### Proterhinus pusillus Sharp.

#### P. pusillus Sharp, huj. op. 11., p. 212.

I have considered a long series of specimens, collected from all parts of Oahu, to be the above species. The variation is considerable; the legs may be entirely black or entirely red, or red in parts. The antennae are often wholly black or dark-coloured, or they may be black, with the base red. The beetle itself varies in colour from black to reddish. The pronotum has always a dense patch of squamosity along the sides, and is much wider in some examples than others, as is also the case with the elytra.

### P. pusillus var. subpusillus var. nov.

This form may be a distinct species; it is usually narrower than the typical form, the elytra are generally for the most part dull red, and the dense patches of squamosity at the sides of the pronotum are dilated or curved inwards at about the anterior third of its length and may even meet there. This variety is common in the Waianae range.

HAB. Oahu; in all localities from 1500 ft. upwards. Attached principally, if not solely, to *Pelea*.

### (14) Proterhinus minimus, sp. nov.

Rufescens, elytris utrinque saepius nigro- vel fusco-notatis, antennis apices versus nigricantibus, elytris setis erectis gracilibus parce vestitis. Antennae crassiusculae, clava 3-articulata. Pronotum antice impressum, lateribus plaga densiore squamosa ornatis. Elytra parce squamosa, angulis humeralibus distinctis, sed haud acute productis. Long. 1.5—2 mm.

One of the smallest species of the genus, best recognized by the red colour, small eyes and tarsal lobes, the sparse and rather fine erect setae of the elytra, the dense patch of squamosity on either side of the pronotum, and the form of the antennae. The scape in the male is large for the size of the insect and the funicle joints are thicker than usual, giving the antennae a rather stout appearance. Two abraded specimens with entirely red antennae may also belong to this species.

HAB. Oahu; mountains near Honolulu; probably rare.

### Proterhinus blackburni Sharp.

P. blackburni Sharp, huj. op. 11., p. 246.

Common throughout both ranges of Oahu on many kinds of forest trees as well as ferns.

#### Proterhinus archaeus Perk.

P. archaeus Perk., huj. op. 11., p. 209.

In both mountain ranges of Oahu; common in the Koolau range near Honolulu and elsewhere. Often under bark of *Straussia* with *P. subplanatus*, but also on *Pelea* and other trees.

