

During the preparation of my manual "Insects of Hawaii", I have collected or identified several species of ectoparasites which have heretofore apparently not been mentioned in Hawaiian literature. Some of these are now placed on record for the convenience of local workers.

I understand that the spinose ear tick mentioned above has been found on Oahu, Molokai, Maui and Hawaii.

A mite which has caused some trouble to human beings, and which has been lately studied by Mr. Pemberton and me, has been identified by Dr. Ewing as *Liponyssus bursa* (Berlese), the tropical fowl mite. We have found the mite common in the nests of English sparrows and mynah birds. Honolulu physicians have reported several cases of mite bite irritation resulting from the invasion of houses (especially bedrooms) by this minute mite. The mites can blow through ordinary screen from nests under the eaves of dwellings.

The sucking louse *Polyplax spinulosus* (Burmeister) has not been listed from the Territory, but I have seen specimens collected from rats in Honolulu.

I collected the sucking louse *Linognathus africanus* Kellogg and Paine from goats at Kahala, Honolulu in May, 1943.

The biting louse *Gliricola porcelli* (Linnaeus) was collected from Guinea pigs in Honolulu in June, 1943.

The cow discussed above was heavily infested with the biting louse, *Bovicola bovis* (Linnaeus).

In 1920, Mr. Swezey collected *Bovicola caprae* (Gurlt) from a goat in Honolulu.

I have examined specimens of the biting louse *Felicola subrostrata* (Nitzsch) at the Hawaiian Sugar Planters' Experiment Station taken from cats in Honolulu.

The biting louse *Columbicola columbae* (Linnaeus) was recently collected from pigeons in Honolulu.

Pembertonia, A New Genus of Papuan Cossoninae (Coleoptera, Curculionidae)

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(Presented at the meeting of December 13, 1943)

To those who study the enormous family Curculionidae, or weevils, the seemingly endless array of forms and structural diversification becomes ever more remarkable and overwhelming. Peculiar

new species and genera still come to hand much faster than the overburdened taxonomists can possibly make them known to science. In spite of the fact that about 40,000 species have been described, the family is poorly known. There yet remain vast areas of the tropical world where most of the thousands of species are unknown. The difficulties of treating these myriads systematically need hardly be emphasized, and the amazing morphological diversity makes the task appear, at times, hopeless. The very characters which have long been used to separate genera and supra-generic categories have broken down time and time again, even in groups which we have long thought to be well characterized and stable. One is at a complete loss to anticipate what revolutionary new forms may come to light when the fruits of arduous field work are examined under the microscope. Mimetic-like forms may be assigned to certain genera after cursory examination, only to be found after detailed study to belong to widely separated subfamilies. Other forms which appear certainly to belong to different subfamilies prove to be only confusing members of a single genus. For these and other reasons, our literature for about the past 80 years has been largely devoted to recording and descriptive work, and comparatively little has been done on the larger problems of supra-generic classification. Because of the difficulties of the task, there are no synoptic diagnoses nor keys to the more than 70 subfamilies now recognized in the world. It is true, however, that there are local works which partially cover the comparatively impoverished European or North American faunas, but there is no world-wide monograph to aid the floundering worker. The great Schoenherr treated all the genera and species known to him a century ago—it took about 15 years of concerted effort on the part of him and his several collaborators to fill the several thousand pages of his *opus*. Today, a similar accomplishment is impossible.

This paper is written to place on record a strange new genus which I assign to the Dryophthori of the Cossininae. We have come to believe that the Dryophthori form a compact and distinct group which is peculiar in that its members have the tarsi 5-segmented, whereas the normal compliment in the Curculionidae is four. However, this new creature has all the essential attributes of the Dryophthori, yet the very character which signalizes that group is wanting, for it has 4- instead of 5-segmented tarsi! In spite of this structural anomaly, the insect is otherwise a typical dryophthorid, and to separate it from its obvious allies would be gross error.

It is with much pleasure that I dedicate the genus of this remarkable new weevil to its collector, Cyril E. Pemberton, Executive Entomologist, Hawaiian Sugar Planters' Experiment Station, an

economic entomologist who keenly appreciates the values of pure scientific research to the applied fields of his endeavor.

Pembertonia, new genus

Body Dryophthorus-like in form, sculpture and vestiture; lutose, dorsal vestiture sparse and velutinous.

Head with crown exposed from above; interocular area narrower than base of rostrum; eyes largely lateral, coarsely faceted, subcontinuous in outline with head.

Rostrum subcylindrical, longer than head, but not as long as pronotum; scrobes invisible from above, beginning behind middle and passing rapidly to under side.

Antennae with scape reaching only to fore edge of eye, longer than funiculus excluding club, funiculus 4-segmented, first two segments larger than distal two; club about as long as funiculus, mostly shiny and sparsely pubescent except for apex which is densely pilose (apical half conspicuously, obliquely truncated on genotype, but this may not prove to be a generic character).

Prothorax well developed, base convex, subapically constricted; post-ocular lobes absent.

Scutellum small, inconspicuous.

Elytra with distinct humeri, broader than prothorax, distinctly 10-punctate-striate.

Wings developed for flight.

Legs with femora not distinctly clavate, unarmed, not grooved beneath, hind pair reaching about to apex of elytra; tibiae comparatively straight, with a strong terminal uncus, but not mucronate, longitudinally carinate; tarsi 4-segmented, the true fourth segment invisible, first three segments pilose, the third entire at apex, fourth segment slender, elongate, bare; claws small, slender.

Sternum with anterior margin of prosternum emarginate at middle, much longer in front of than behind fore coxae; fore coxae contiguous; mesosternum sloping; mesocoxae separated by much less than breadth of a mesocoxa; metasternum about as long along median line as first two ventrites, distance between inner margins of metacoxae nearly equal to distance between outer edges of mesocoxae, outer edges of metacoxae very nearly touching elytra; met-episternum invisible.

Abdomen with ventrite I longer than II plus III along median line, on a plane distinctly ventrad of that of the remainder of abdomen; intercoxal piece subtruncate, but with an anterior median projection; ventrite II sloping, longer than III plus IV; ventrites IV and III narrow, together about as long as V.

Genotype: *Pembertonia seftoni*, new species.

This genus resembles *Dryophthorus*, but it can be distinguished principally because of its four-segmented rather than pentamerous tarsi and its contiguous fore coxae. Other characters which may prove to be useful as generic distinctions are the peculiarly oblique apex of the antennal club, the scape not passing behind the fore margin of the eye, and the fact that the hind edges of the eyes are narrowly hidden beneath the edges of the prothorax, although these latter characters may be subject to variation.

With the discovery of this aberrant genus, the possibility is brought forward that perhaps future collecting and study will reveal a number of variformed genera which are centered around *Dryophthorus* in addition to the few thus far known.

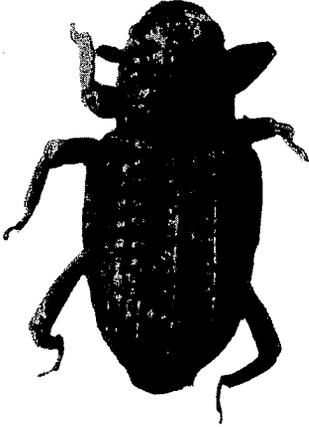


Fig. 1.



Fig. 2.

Figs. 1 and 2.—Dorsal and lateral views of holotype of *Pembertonia seftoni*, new genus and species (photographs by W. Twigg-Smith, courtesy of Hawaiian Sugar Planters' Association).

Pembertonia seftoni, new species (figs. 1-4).

Female. *Color*: derm coal-black, almost completely alutaceous and dull; tarsi piceous; vestiture gray and brownish-gray; incrustation brown.

Head with crown broadly convex, evenly set with well separated, medium sized, round punctures, the interstices as broad or broader than the punctures, without distinct setae; interocular area with a distinct median depression between dorsal edges of eyes, narrowest distance between eyes two thirds breadth of base of rostrum; eyes five facets broad at middle, about twice as high as broad, as widely separated beneath as breadth of base of rostrum, lower edges narrowly concealed by prothorax.

Rostrum about nine tenths as long as pronotum, arcuate, almost cylindrical, subequal in diameter at base, at antennal insertion and at apex; densely punctate from base to apical fifth, punctures toward sides subconfluent or confluent; punctures with the peculiar dryophthorid velutinous vestiture, which is longest and densest on sides beyond antennae; apical fifth bare, impunctate, moderately shiny, with a broad, shallow, rather obscure, median, apical impression; ventral surface with a prominent median carina from base nearly to oral cavity and flanked on either side by a narrow, incrustation-filled or pilose sulcus, and scrobes distinctly impressed beneath.

Antennae inserted at about basal two fifths of rostrum in female holotype; scape stout, clavate, about as long as funiculus plus one half length of club, as thick at widest part as length of funicular segments III plus IV; funicular segment I as broad as, but somewhat longer than II, rounded at apex, II subtriangular, about as long as broad, as long as III plus one half of IV, apex truncate, III and IV transverse and twice as broad as long; club about as long as funicular segments I and IV, three fourths as broad as long,

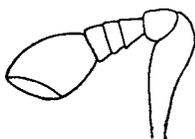


Fig. 3.



Fig. 4.

Figs. 3 and 4.—Outline diagrams of antenna and tarsus of *Pembertonia seftoni* Zimmerman.

obliquely cut off on side toward scape for nearly one half its length at a 45-degree angle, the truncated area densely pilose, elsewhere with scattered prostrate setae.

Prothorax nearly as broad as long (25:27 units in holotype), broadest very near base, and there hardly broader than at hind edge of subapical constriction (25:24 units in holotype), sides straight from base to hind margin of subapical constriction; subapical constriction abruptly incised, situated at about apical fifth of side as viewed from above, but extending obliquely caudad toward disk, not distinctly continued across dorsum, but marked on sides and sternum; longitudinal dorsal contour slightly, almost evenly convex; punctures large, rounded, distinctly smaller cephalad of subapical constriction, capped with thin, brown, parchment-like incrustation, but punctures beyond subapical constriction with velutinous vestiture, setae inconspicuous, intervals narrower than punctures.

Scutellum inconspicuous, much smaller than an adjacent prothoracic puncture.

Elytra fully three fourths as broad as long, somewhat more than twice as long as prothorax, broadest between humeri and middle, breadth across humeri about one and one half times as broad as base of prothorax; base broadly emarginate; humeri prominent and at angles of about 45 degrees; sides convergently arcuate to near apex where there is a distinct break in the contour caused by subapical constriction and a small tuberculiform process situated at position where intervals III to IX would join if extended; striae well and regularly marked, but not impressed between punctures, punctures subquadrate and similar in size to those on disk of pronotum, broader than intervals, stria IX joining X above metacoxa, setae inconspicuous; alternate intervals, especially I, III and V, appearing slightly more elevated than others, and I, III and V with almost continuous velutinous vestiture, vestiture of other intervals arranged in small spots, without distinct setae.

Legs with femora densely set with moderately coarse punctures bearing conspicuous compound setae or velutinous pile; tibiae densely clothed with rather matted pile, with the longitudinal carinae showing through; tarsi with segments I to III clothed with short velutinous pile with longer setae beneath, IV bare, segment I about as long as II plus one half of III, about one third longer than broad, II about as long as broad, somewhat shorter than III, III slightly longer than broad, as broad as II, IV as long as II plus III, imbedded nearly to middle of III and about one half as broad as III.

Sternum with anterior prosternal margin so emarginate that distance on median line from anterior margin to ventral extension of subapical constriction of prothorax is only about one third or less that on side as viewed from directly beneath, area in front of coxae sloping strongly upward, coarsely punctured, distance behind coxae hardly one fourth length of a fore coxa; mesosternum subtuberculiform between mesocoxae and at a level distinctly ventrad of that of metasternum, without conspicuous punctures at sides above

coxae, sutures of side pieces obscure; metasternum with punctures of disk rather small, separated by one and one half to more than twice their diameters, punctures along fore margins and at sides larger.

Abdomen with ventrite I tumid in female holotype, with a row of large marginal punctures, but those on disk similar to those on disk of metasternum; ventrite II with a row of dense, coarse punctures along fore margin and a well separated row at about middle; ventrites III and IV with their bounding sutures unusually broad, coarse and deep, sulciform, the sutures ending in marginal punctures and thus appearing to be turned slightly backward at sides, the ventrites costiform, with small punctures; ventrite V coarsely sculptured, subapically setose; pygidium shallowly impressed down middle, apex subtruncate.

Length (excluding head) : 4.0 mm.; breadth: 1.9 mm.

New Guinea. Holotype female, stored in the type collection of Bishop Museum, collected by Cyril E. Pemberton at Koitaki at 1,500 feet elevation in November or December 1928. (Koitaki is in a wet district about 30 miles into the mountains from Port Moresby on the Laloki River.)

This species, which appears to be a *Dryophthorus* at first sight, probably has habits similar to *Dryophthorus*, and future collectors may find it under damp, rotting bark or in rotting wood.

At Mr. Pemberton's request, I have dedicated this species to T. L. Sefton, manager of Koitaki Rubber Estates, Ltd., Papua, in appreciation of his cooperation and aid to the field researches of Mr. Pemberton, and on whose plantation it was discovered.

Two New *Amblycnemus* from Larat Island (Coleoptera, Curculionidae)

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(Presented at the meeting of December 13, 1943)

In 1931, Sir Guy Marshall described the anthonomine genus *Amblycnemus* to receive a Samoan species, and since then several other species have been described. Although many new species await description in the collections now before me, I have seen only two species from the Papuan subregion. This paper includes the descriptions of these two new species from the collection of the