

OCCASIONAL PAPERS
OF
BERNICE P. BISHOP MUSEUM
HONOLULU, HAWAII

Volume XVII

June 10, 1942

Number 8

New Caledonian Microcryptorhynchus
(Coleoptera, Curculionidae)

By **ELWOOD C. ZIMMERMAN**

ENTOMOLOGIST, BERNICE P. BISHOP MUSEUM

The large cryptorhynchine genus *Microcryptorhynchus* Lea, 1908, has previously been recorded from New Caledonia; the record was based on a single specimen collected and described by Lea in 1928. Dr. F. X. Williams, who collected two new species in 1940 during his expedition to New Caledonia under the auspices of the Hawaiian Sugar Planters' Association, has given the specimens to me for description and has kindly permitted me to deposit the holotypes in the type collection of Bishop Museum.

The species of *Microcryptorhynchus* now known to inhabit New Caledonia are as follows:

Microcryptorhynchus globus, new species (fig. 1, *a*, *b*).

Male. Derm piceous, the appendages reddish brown, elytral derm shiny when exposed, the mud-colored incrustation thin or comparatively thin over all; dorsum distinctly squamose, squamae dense, minute, round, appressed, mud colored, with a slight iridescent cast.

Head concealed from above by pronotum; punctures small, concealed by scales; with a row of long, slender, sharp, spike-like, erect setae along inner margin of each eye. *Rostrum* in male squamose and incrustated to the antennae and with four rows of long, erect, spike-like setae similar to those on head but becoming shorter toward antennae and outer rows most distinct toward base, areas between rows of setae forming vague carinae, area beyond antennae shiny, finely reticulate, with small punctures bearing curved hairlike setae. *Prothorax* transverse (3.5:3.0), broadest at about middle, arcuate on sides from base to subapical constriction which is broadly and shallowly impressed across dorsum; densely punctate, punctures medium sized but coarse, their interstices narrower than their diameters; with numerous, scattered, long, slender, sharp, erect, spike-like setae similar to those on elytra; basal squamose area not conspicuous. *Elytra* globose, subspherical, only slightly longer than broad (3.2:2.8), slightly more than twice as long as prothorax (3.2:1.5),

broadest at about middle, without a distinct subapical constriction; striae narrower than intervals, their punctures rather large; intervals broadly convex, each bearing a row of long, slender, mostly straight, sharp, erect, spike-like setae. *Legs* squamose and bristling with long, slender, erect, spike-like setae similar to those on elytra; tibial unci all well developed, arising distinctly from the outer edge, inner corner of apex of each tibia with a minute denticle. *Sternum* with mesosternal receptacle deep and cavernous, with complete, high side walls, aperture C-shaped, and terminating before middle of mesocoxae in male, hind wall protuberant, thick, slanting forward and downward to a level slightly below that of mesocoxae, median length as great as distance between mid and hind coxae in male; metasternum as long as ventrites 3 plus 4 along medium line, less than one half as long at its narrowest point between mid and hind coxae as longitudinal chord of a metacoxa at trochanter, coarsely reticulate, with a row of punctures around all margins, punctures normally bearing squamiform or spatulate setae; with dense white squamae next to elytra, but these scales usually concealed by incrustation. *Venter* with first two ventrites bare, alutaceous, tumid, the first flattened at base in male and with a row of mostly shallow punctures along base, and a few across middle and near apex, the second ventrite with two vague transverse rows, these punctures bearing fine, curved setae, suture between the first two ventrites almost or entirely obsolete in middle, but deeply and conspicuously impressed at sides; ventrites three and four each with a single row of small setae and with a few squamae at sides, punctures inconspicuous; ventrite five inconspicuously punctate, with numerous fine, slanting setae and scattered squamae. Length: 2.3 mm.; breadth: 1.4 mm.

New Caledonia. Holotype male and one male paratype collected by F. X. Williams at the summit of Mount Mou, August 21, 1940.

This species is distinct from either of the other two species of *Microcryptorhynchus* known to inhabit New Caledonia. Its ball-like elytra are given a spiny appearance because of the numerous, erect, conspicuous setae. It resembles some of the more globose species from southeastern Polynesia, but it can be recognized easily.

***Microcryptorhynchus williamsi*, new species (fig. 1, *c, d*).**

Female. Derm piceous to black, shiny when exposed on dorsum and venter, tarsi reddish brown, antennae yellowish brown; scaling mud colored; incrustation mud colored, thin to comparatively thick.

Head, in repose, concealed from above by pronotum; sculpture concealed by scaling, closely set with rather coarse punctures; with a row of stout, heavy, erect, spatulate, conspicuous setae along inner margin of each eye. *Rostrum* squamose from base to antennae, the squamae rather large, with four rows of erect, spatulate or squamiform setae, outer rows most distinct and regular and are continuations of ocular rows of the head, setae becoming progressively smaller distad; with small, longitudinal, subconfluent and confluent punctures beyond antennae, those on sides larger; bare distal part extending upward to about half way from antennae to base as a carina that resembles a greatly attenuated V, the carina becoming very narrow and disappearing in squamae and incrustation at about half way from antennae to base. *Prothorax* approxi-

mately as long as broad, rounded on sides from base to subapical constriction which is distinctly impressed across dorsum; densely, deeply, coarsely punctate, punctures reticulately placed and distinctly more narrowly separated than diameters of punctures; the conspicuous, stout, erect, clavate or elongate-spatulate setae most numerous in a band around anterior margin and a band at about middle which is broken up into four rather poorly defined clusters. *Elytra* ovoid, about four fifths as broad as long, twice as long as prothorax as measured from side, broadest just before middle, without a conspicuous subapical constriction; striae broader than intervals, with large, close, deep, coarse punctures, when viewed with a strong light coming from the side the punctures appear to have glowing rubies at their bases; intervals convex, the alternate ones each bearing a row of long, erect, spike-like, spindle-shaped, or narrowly spatulate

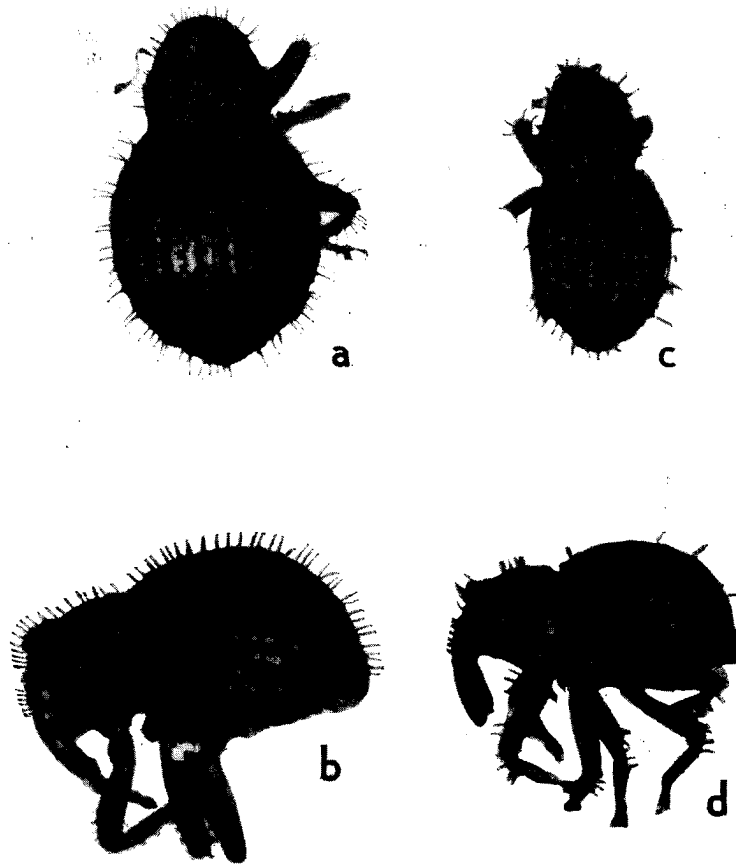


FIGURE 1.—New species of *Microcryptorhynchus*: a, dorsal, b, lateral views of *M. globus* Zimmerman, holotype; c, dorsal, d, lateral views of *M. williamsi* Zimmerman, holotype. (Photographs by W. Twigg-Smith.)

setae. *Legs* densely squamose and with numerous erect setae similar to those on the elytra on the femora and tibiae; unci distinct on all tibiae, appearing to arise more toward middle of apex than from outer sides, inner corner of tibia rounded off and not acute nor denticulate. *Sternum* with mesosternal receptacle deep and cavernous, with complete, high side walls, the aperture broadly U-shaped and terminating before middle of mesocoxae in female, the hind wall protuberant, extending to a level slightly below that of mesocoxae, median length of hind wall shorter than median length of metasternum in female; metasternum at its narrowest point between mid and hind coxae about one half or slightly less than one half as long as longitudinal chord of a metacoxa across trochanter, with large, conspicuous, deep, coarse punctures on lower surface. *Venter* with first two ventrites jointly tumid and convex, the suture separating them impressed only at sides, densely, deeply, coarsely punctured throughout, punctures large and round, with squamiform setae borne from anterior edges of punctures; ventrites three and four narrow, appearing impunctate, with a few small squamae; ventrite five inconspicuously punctate and with numerous squamae or squamiform setae. Length: 1.8 mm.; breadth: 0.95 mm.

New Caledonia. Holotype female collected by F. X. Williams from the hills behind Noumea, October 16, 1940.

This species may most easily be separated from *M. globus* because of its smaller size, different shape and because it has the setae on the elytra on the alternate intervals only.

I take pleasure in dedicating this species to its collector Dr. F. X. Williams in recognition of his research in New Caledonia.

The only other species of *Microcryptorhynchus* described from New Caledonia is so inadequately characterized in the original description, that, in this genus of more than one hundred species, it is impossible to tell much about it. However, it is possible to glean enough from the description to readily separate it from *M. globus*, but the distinction between it and *M. williamsi* is not so apparent from the description alone. The previously described species, with its original description quoted is:

***Microcryptorhynchus caledonicus* Lea, Records South Australian Museum 4: 89, 1928.**

Dark brown, parts of under-surface almost black, antennae almost flavous. Densely clothed with greyish-brown scales, interspersed with stout, erect setae.

Rostrum rather wide, apical half glabrous and with sharply defined punctures, basal half squamose and setose. Antennae inserted almost in exact middle of sides of rostrum. Prothorax almost as long as wide, sides moderately rounded; with crowded, normally concealed punctures. Elytra subcordate, base truncate, sides widest at about basal third; with regular rows of large punctures, appearing much smaller through clothing. Metasternum and two basal segments of abdomen with crowded punctures. Length, 1.2 mm.

New Caledonia: Noumea (A. M. Lea); unique.

A minute species, fairly close to the preceding one (*M. vitiensis*), from Fiji, but prothorax shorter and clothing not quite the same. The type is probably a female, although the rostrum appears rather wide for a member of that sex.

I have specimens of *M. vitiensis*, including one of Lea's paratypes, before me; it is quite distinct from *M. williamsi*. Because of its larger size and certain other structural differences, I feel that *M. williamsi* is distinct from *M. calidonicus* Lea. The holotype of *M. caledonicus* should be redescribed in detail, for as its description now stands, it could be applied to any one of a number of distinct species of *Microcryptorhynchus*.