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Some New Species of Araucaricola Lea from the South Pacific¹

(Coleoptera, Tenebrionidae)

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The genus Araucaricola was founded by Lea (Roy. Soc. S. Australia, Trans., 53:218, 1929) for a single species, A. ebenina, found on Norfolk Island beneath the bark of Araucaria, the Norfolk Island pine. The genus has hitherto remained monotypic. In a collection of Coleoptera made by E. C. Zimmerman from different islands of the South Pacific, and recently sent by Bernice P. Bishop Museum to the British Museum for determination, are a number of small Tenebrionidae that must be assigned to the same genus. These, however, were found in the dead fronds and stems of Cyathea, Piper, and so forth, so that the generic name originally bestowed upon them is rather unfortunate. As far as present evidence goes each species appears to be associated with a particular kind of wood, but as some of the records are indefinite (for example, 'from rotten stump') this association may with further collecting prove to be not constant.

The genus was placed by Lea near the Australian genus Mesotretis Bates. This is probably correct, but the latter is out of place in Gebien's Catalogue in the Ulominae. It should be associated—together with Lorelus Sharp, from New Zealand, and Micropedinus Lewis, from Japan—with the Heterotarsinae, near the American genus Prateus LeConte. Of these it most resembles Micropedinus in its short broad form. It differs from all the others in the massive head, with long 2d joint of the antennae (nearly as long as the 3d) and in

¹ Mangarevan Expedition publication 32.

the sexual characters, though these are not so well developed in the new species as in A. ebeninus Lea.

In size, shape and color, as well as in the rather massive head with small eyes, and in the close fit of the thorax and the elytra, the species bear a strong superficial resemblance to those of *Menimus* Sharp, another genus of marked insular habit; but the latter has only 10-jointed antennae, the mesosternum very short and sharply depressed in front, the elytral epipleura incomplete, and more slender tarsi.

It is quite possible that at least one of the species, most probably that from Tahiti, has been described but assigned to some other family so that the description has escaped my notice.

The types of these new species are all in Bishop Museum, with paratypes in the British Museum.

Araucaricola rapaensis, new species (fig. 1, a).

Elongate ovate, greatest width just behind middle (i.e., at first ¼ of elytra), depressed, nitid, blackish piccous (castaneous when immature), underside paler, antennae, mouthparts and legs reddish.

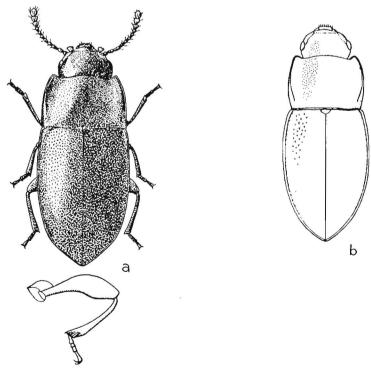


Figure 1.—a, Araucaricola rapaensis; b, A. zimmermani.

Head and thorax moderately finely and sparsely punctured, with traces of alutaceous ground sculpture, elytral puncturation strongly and rather more widely spaced. Head massive, with eyes small, lateral and entire, scarcely as long as the 3d joint of the antennae; clypeus slightly produced, truncate, genae slightly elevated over antennal bases, the elevation continued back as a low ridge above the eye. Antennae 11-jointed, reaching nearly to base of thorax, the 2d joint nearly as long as the 3d, 3d to 8th gradually shorter, 9th to 11th forming a loose club. Thorax feebly trapeziform, transverse, the sides nearly straight in basal 2/3, converging slightly from base forwards; anterior angles slightly prominent, the anterior margin sinuate, bordered only at the angles, the sides strongly bordered, the border becoming wider towards the base, angles rectangular; base feebly bisinuate, sharply bordered throughout. Scutellum transverse, rounded. Elytra fitting closely to base of thorax, forming a continuous line with side of thorax, margins somewhat explanate and broadly exposed from above, apex obtusely angulate; epipleura very broad, gradually narrowing to apex. Wings wanting. Prosternal process depressed behind the coxae; mesosternum horizontal in front, metasternum about as long between coxae as diameter of intermediate coxal cavities. Intercoxal process of abdomen about as wide as that of metasternum, and like it sharply bordered. Femora stout, claviform, scarcely projecting beyond edge of elytra; tibiae slightly thickened towards apex; tarsi very short, the last joint as long as the rest together, the penultimate oblique, but not lobate nor produced beneath.

Male. Posterior femora slightly bent about middle, the tibiae feebly arcuate; anterior tibiae not emarginate at base. Size $2\frac{1}{2} \times 1$ to $4 \times 1\frac{3}{4}$ mm. (usual length about $3\frac{1}{4}$ mm.).

Rapa: Maitua, 600-700 feet, July 10, 1934, 66 specimens in rotten stump; Mount Perahu, 1,300-1,700 feet, July 15-28, 1934, 8 specimens in dead *Cyathea* fronds; Mount Tautautu, 700-800 feet, 2 specimens under dead bark.

Araucaricola zimmermani, new species (fig. 1, b).

Very similar to A, rapaensis, but a little smaller and more parallel-sided, the thorax widest at about anterior $\frac{1}{2}$, the sides feebly converging basally, so that the base is scarcely wider than the apex, the sides therefore not in line with the sides of elytra. Puncturation much as in the preceding. Size $2\frac{1}{4} \times \frac{7}{8}$ to $3\frac{1}{3} \times 1\frac{1}{3}$ mm.

Rapa: Mangaoa Peak, 1,000-1,200 feet, July 25, 1934, 3 specimens; Mount Perahu, 1,300-1,700 feet, July 28, 1934, 6 specimens in dead *Cyathea* fronds and trunk; Morongota, 700-800 feet, July 11, 1934, 1 specimen.

Araucaricola australensis, new species (fig. 2, a).

In size and shape very similar to A. zimmermani but more convex, margins of thorax and elytra narrow, not broadly exposed from above; the antennae also shorter, reaching but little beyond middle of thorax.

Austral Islands: Raivavae, Mount Arua, in dead branches of *Piper*, 81 specimens.

Araucaricola tahitiensis, new species (fig. 2, b).

Narrower and more convex than any of the above species, the lateral margins not explanate, those of elytra in part concealed from above by the convexity of the sides of the disk. Puncturation very variable, that of head and thorax always much finer than that of elytra, sometimes scarcely evident, but occasionally quite strong. The greatest width of elytra is farther back, at about 2/3 of their length.

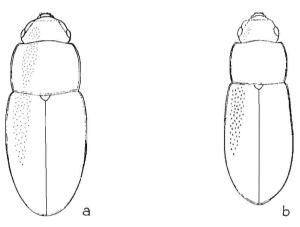


FIGURE 2.—a, Araucaricola australensis; b, A. tahitiensis.

Society Islands: Tahiti, Papenoo Valley, base of Mount Orofena, 3,000 feet, Sept. 16, 1934, 6 specimens in dead *Cyathea* fronds; Mount Aorai Trail, Sept. 13-16, 1934, 12 specimens in dead *Cyathea* fronds.

The new species differ from the genotype in being apterous, less convex, in the more feeble development of the sexual modifications of the posterior legs, and in their host plants. They may be separated from one another by the following key:

| 1. | Form broad, depressed: elytral margins broadly exposed from above. Austral Islands, Rapa |
|----|---|
| | Form narrower, parallel; elytral margins not explanate, scarcely exposed |
| | from above3 |
| 2. | Thorax widest at base, sides in line with those of elytra |
| | Thorax widest before middle, base scarcely wider than apex |
| | A. zimmermani |
| 3. | Punctures of elytra not much stronger than those of thorax. |
| | Austral Islands, Raivavae |
| | Punctures of elytra very strong, much stronger than those of thorax. |
| | Society Islands, Tahiti |