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On Lea's Fijian Deretiosus

(Coleoptera, Curculionidae)

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INTRODUCTION

It has been my good fortune, through the kindness and generosity of the South Australian Museum at Adelaide and its Director, Dr. Herbert M. Hale, to have had the opportunity of studying the types of the Fijian Curculionidae described by the late Arthur M. Lea. I have found, unfortunately, that it is necessary to make a number of changes in the work of this prodigious writer. Some of the changes are given in this paper, and others will appear in subsequent articles. I have included keys to aid in the identification of the members of three genera of Fijian Cryptorhynchinae together with the description of a new species of *Teleodactylus*.

In his paper entitled "Cryptorhynchides (Curculionidae) mostly from Australia" (South Australian Mus., Rec., 4:49-90, 1928), Lea described 12 new species of the genus *Deretiosus* from Fiji. I have found upon examining the types that of these 12 species only six belong to *Deretiosus*. Four belong to *Teleodactylus* and two to *Deretiodes*. In an article entitled "Australasian Coleoptera" in the same publication, part 3, p. 392, 1931, Lea describes *Deretiosus fasciculiceps*. I have not seen a specimen of this species, and the unique type is in the British Museum. For these reasons, therefore, I am uncertain of the generic status of the species and have not included it in the key to the species of *Deretiosus*. Lea said that it is most closely allied to his *D. lectus* and that there are two fascicles on the head.

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Deretiosus and its allies are peculiar in that they have the pectoral canal densely squamose throughout; there is no raised mesosternal receptacle; the rostrum, when in repose, rests against the modified anterior part of the metasternum which forms the posterior boundary of the pectoral canal.

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LIST OF FIJIAN DERETIOSUS AND ALLIES

Genus DERETIOSUS

- 1. Deretiosus v-niger Lea. Viti Levu.
- 2. Deretiosus lectus Lea. Viti Levu.
- 3. Deretiosus variegatus Lea. "Fiji".
- 4. Deretiosus apicalis Lea. Viti Levu.
- 5. Deretiosus exithioides Lea. Taveuni.
- 6. Deretiosus lateroalbus Lea. Viti Levu, Moturiki, Taveuni, and Tuvutha.
- 7. Deretiosus fasciculiceps Lea. "Fiji".

Genus DERETIODES

- 1. Deretiodes scutellaris (Lea), new combination. Viti Levu.
- 2. Deretiodes muticus (Lea), new combination. Viti Levu (Colo-i-Suva).

Genus TELEODACTYLUS

- 1. Teleodactylus invenustus (Lea), new combination. Viti Levu.
- 2. Teleodactylus purpureotinctus (Lea), new combination. Viti Levu.

- 3. Teleodactylus angustus (Lea), new combination. Viti Levu.
- 4. Teleodactylus parallelus, new species. Viti Levu (Colo-i-Suva).
- 5. Teleodactylus minutus (Lea), new combination.

Key to Fijian Genera of the Deretiosus Group

1.	Funicle of the antennae seven-segmented; femora strongly toothed Deretiosus	5
	Funicle of the antennae six-segmented; femora edentate or finely toothed	
2.	Femora not toothed; third tarsal segment bilobedDeretiodes Femora toothed; third tarsal segment truncate distally and not bilobed	

The development of the pronotal fascicles varies with the genus. On *Deretiosus* they are better developed than on the others. There are six strong, compact fascicles, the lateral ones more developed than the others. On *Deretiodes* the four median fascicles are distinct but those at the sides are not larger than the middle ones; the two at the apex are loosely compacted or are not truly fasciculate but consist of isolated, stout, erect setae. *Teleodactylus* has the four median fascicles rather loosely compacted and made up of only a few stout, erect setae; the apex of the pronotum has a scattering of stout, erect setae that do not tend to form fascicles.

Genus DERETIOSUS Pascoe, 1871

Funicle of the antennae seven-segmented; femora strongly dentate, tibiae sinuate and distinctly carinate on the inner edge; mesosternum with one or two tubercles before each mesocoxa, its posterior part continuously inclined with the fore part of the metasternum which does not tend to overhang.

This genus was originally described from New Guinea and occurs in northeastern Australia and as far west as Malaya. Fairmaire's *Microbothrus squamituber* (Soc. Ent. de France, Ann., p. 302, 1881) belongs to this genus, I believe, but I have not seen an authenticated specimen and therefore, have not included it here. It is evidently closely allied to *D. variegatus* Lea and may be that species.

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Key to the Fijian Deretiosus¹

1.	Third elytral interval with only one large callosity and that near the base; elytra with a conspicuous black V at the middleD. v-niger Lea Third elytral interval with two prominent callosities
2.	Anterior callosity of the third elytral interval distinctly larger and more conspicuous than the second; first interval with a number of conspicuous fascicles from a point between the calli on the third interval and the apex; the general ground color fawn or buff
	Anterior callosity of the third interval not much larger and more con- spicuous than the second; the elytra always with angulate mark- ings
3.	Second callosity of the third elytral interval larger than the first; the fifth interval with a rather conspicuous callosity on the de- clivity; elytra with a white V connecting the two posterior calli of the third intervals
	conspicuously larger than the anterior ones
4.	Posterior half of the elytra with a predominance of white scales making that area conspicuously pale as compared to the darker anterior portion; fifth interval with only four fascicles D. apicalis Lea Elytra more concolorous, the apical part not conspicuously paler than the anterior part; fifth interval with more than four fascicles
5.	Elytra with a conspicuous black V between the second calli on the third interval bounded posteriorly by an outstanding V of white scales, without a white patch on the margin of the elytra above the first ventrite
	common M of white scales made up of two A-shaped lines whose apices touch the posterior calli, with a conspicuous, rounded, white spot of scales on the eighth and ninth intervals above the first ven- trite, and with a black patch of scales anterior to this and above the hind coxa D. lateroalbus Lea

Genus DERETIODES Marshall, 1931

Closely allied to *Deretiosus* but with the funicle of the antennae only six-segmented; mesosternum without prominent tubercles before the mesocoxae, metasternum almost vertical between the hind coxae, somewhat hollowed out and slightly overhanging; femora edentate, tibiae not sinuate nor carinate on the inner edge.

This genus was erected by Sir Guy Marshall for the reception of a new species from Samoa. Until now it has remained monotypic. Two of the twelve Fijian species described by Lea in *Deretiosus* belong to this genus. They may be separated as follows:

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¹D. fasciculiceps has been omitted.

- Scutellum conspicuously white, surrounded by dark brown scales; apex of the pronotum with numerous stout, erect, scattered setae on each side of the middle that are not condensed into fascicles; posterior third of the elytra predominantly white with a black patch on the suture; interval two with fascicles......**D. scutellaris** (Lea)
- Scutellum of the same general color as its surroundings, not outstanding; apex of the pronotum with a well developed fascicle on each side of the middle; elytra with a common white V in the middle, the posterior third not much paler than the anterior part; interval two without fascicles**D. muticus** (Lea)

Genus TELEODACTYLUS Marshall, 1931

Closely allied to both *Deretiosus* and *Deretiodes*, but more closely to *Deretiodes*. Funicle of the antennae six-segmented; mesosternum without prominent tubercles before the anterior coxae, metasternum almost vertical between the hind coxae; femora finely toothed, tibiae not sinuate nor carinate internally, tarsi with the third segment not bilobed but truncate distally and with the claw segment articulated in a dorsal fovea (fig. 1,*b*).

This genus was erected by Sir Guy Marshall for a single new species from Samoa, and like *Deretiodes* it has remained monotypic until now. Four of Lea's Fijian *Deretiosus* belong to this genus, and I add another new species.

KEY TO THE FIJIAN TELEODACTYLUS

1.	Third elytral interval with three prominent elongate fasciculate cal- losities; apex of elytra pale
	Third elytral interval with less than three prominent elongate cal- losities
2.	Scaling above predominantly brownish-gray, without any conspicuous black markings
	Much of the background scaling above with a distinct purplish cast, variegated with brown and black scales, with an irregular common V of black scales, the arms beginning mainly on the fourth and fifth intervals and joining at the suture behind the middle; de- clivity with some dark patches above the pale apex T. purpureotinctus (Lea)
3.	Scaling above concolorous, cinnamon-brown, disk of the elytra with- out black or white scales; third interval with a conspicuous elon- gate oval callosity at the base only

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4. Scaling above predominantly brownish-grey variegated with patches of black and white scales, the white patches most numerous, usually with a short inconspicuous white vitta on the third interval behind the basal callosity; pronotum distinctly transverse.....

......**T. angustus** (Lea)

Scaling above predominantly brown or cinnamon variegated with patches of white and black scales, elytra usually with a vague, variable, irregular transverse median fascia of black scales; pronotum conspicuously vittate, almost as long as broad......**T. minutus** (Lea)

Teleodactylus parallelus, new species (fig. 1,b).

Female. Derm concealed by the scaling, reddish-brown; scaling above uniformly concolorous, cinnamon brown, paler below; head with the interocular area and base of the rostrum with pale scales, otherwise as above.



FIGURE 1.—Diagrams of distal segments of the fore tarsi of: a, Deretiosus lateroalbus; b, Teleodactylus parallelus.

Head with the dense scaling spongy, interocular area depressed, with a few stout, erect setae near the eyes. Rostrum rather evenly arcuate, with three faint median carinae behind the antennae, squamose from the base to the antennae, thence shining, densely, evenly and finely punctate to the apex. Antennae with the scape almost as long as the six funicular segments; first funicular segment as long as two plus one-half of three, about twice as broad as two, three-fifths as broad as long, six broader than five and transverse; club longer than the preceding five segments, about three-fourths as broad as long. Prothorax broader than long (2.75:2.50), almost parallel sided in the basal two-fifths, thence slightly, but rather sharply constricted and thence rounded to the apex, base lightly sinuous; punctuation close and dense, the interstices finely asperate; the scales concave; with four loose fascicles across the middle and two stout setae on the sides in the basal half, with numerous stout setae on each side of the middle of the apex. Scutellum clothed with dark brown scales. Elytra subparallel sided from the base to the declivity and thence rounded to the apex, almost three fourths as broad as long and not quite three times as long as the prothorax; striae with rather small separated punctures entirely concealed by the scaling; the alternate intervals only with pustules, the third with a conspicuous elongate-oval callosity near the base, interval five with a vague, feebly developed callosity, the

humeral calli not very strongly developed. Legs with the femora bearing a small sharp tooth, the tibiae feebly arched at the base. Sternum with the metasternum almost vertical between the middle coxae, not tending to overhand, very minutely reticulate and hardly punctate. Venter with the intercoxal piece broadly angulate, the first ventrite rather deeply emarginate behind, with a deeply impressed row of large punctures near the basal margin, the ventrites elsewhere minutely reticulate and evidently impunctate. Length, 3.2 mm. breadth, 1.6 mm.

Viti Levu, Fiji. Holotype female collected by Mr. E. H. Bryan, Jr., at Colo-i-Suva, June 29, 1924, stored in Bernice P. Bishop Museum.

This species may be distinguished from all the other known species of the genus by its plain coloring without spots or variegation. It is allied to T. *minutus* and T. *angustus* but is proportionately longer and more parallel sided than those species.

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