The Genus Apion in Fiji (Coleoptera, Curculionidae)

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The genus Apion is probably the largest and most widely distributed genus of the Rhyncophora. It contains about 1500 species found in both hemispheres of the old and new worlds from arctic regions to tropical jungles. Few species have been described from Oceania. Heretofore, the eastern limit of the genus in the Pacific has been New Caledonia, whence one species has been described, and none have been recorded from Fiji. A few species have been described from scattered localities between New Caledonia and the Malay Peninsula, and these show that the distribution of the genus is continuous from the Oriental region eastward into Oceania. There are undoubtedly large numbers of species to be found in the Indo-Australian regions when more thorough collecting is done. It is probable that Fiji marks the eastern limit of the genus in Oceania and that few species will be found there.

The holotype of the following new species was sent to me for study from Lea's collection in the South Australian Museum through cooperation of its Director, Dr. Herbert M. Hale. After this paper was written, I had the good fortune to do some research in Fiji, and while there I found a series of the species and a revision of the manuscript to include a description of the female, and notes on the host and distribution of species are now included.

Apion vitiensis, new species (fig. 1).

Male.—Derm slightly glistening, reddish brown above; rostrum yellowish near the apex; antennae brownish yellow; legs yellow, with the trochanters darker and the coxae reddish brown; sternum and venter reddish brown, somewhat darker than the elytra; pubescence coarse, white or yellow, prostrate; elytra with a variable, semi-denuded, more or less W-shaped mark at about the middle, extending laterally over the first four intervals and thence extended irregularly and less definitely toward the humeri.

Head reticulate, not very obviously punctate; pubescence anteriorly inclined, condensed around the margins of the eyes, that on the under side consisting of larger, broader, flattened, more or less medianly inclined setae; the dorsal outline strongly interrupted just behind the eyes by a distinct constriction, the space behind the constriction not pubescent, the interocular area very slightly longitudinally convex; eyes large, about one third broader than the interocular area, almost circular, but one tenth longer than broad, twice as long as the distance between the eye and the prothorax or as long as the first two antennal segments. Rostrum two and one half times as long as the eye in the male, slightly swollen over the antennae then straightly and slightly narrowing to the apex; sculpture similar to that on the head; the median line and apical third not pubescent. Antennae slightly longer than the rostrum, the scape almost capable of reaching the eye and as long as funicular segments one plus two, one as broad as the scape and about as long as two plus half of three, two somewhat longer than three, three to five subequal, six and seven slightly longer; club elongate-oval, somewhat more than one third as broad as long, sharply pointed, somewhat

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longer than the preceding four segments, the first segment making up one third of its mass. Prothorax as high and as broad as long, base sinuous, slightly arcuate on the sides to beyond the middle and there shallowly constricted, apex slightly convex, almost truncate, the longitudinal dorsal outline almost evenly convex; derm reticulate; the setae arising from closely placed punctures, directed anteriorly, rather evenly distributed, not concealing the derm. Scutellum bare. Elytra two thirds as broad as long, two thirds longer than the prothorax; base hardly sinuous, the sides almost evenly arcuate from the base to near the apex, each elytron separately rounded at the apex; sculpture similar to that on the pronotum; striae narrow and well impressed, without distinct punctures; intervals slightly convex; pubescence similar to that on the pronotum or slightly denser, directed posteriorly, somewhat condensed on the base of interval two. Legs with hairlike pubescence, that on the lower surface of the fore femora longer and erect; femora moderately strongly clavate, edentate; tibiae slender, the fore pair simple, the mid and hind pair armed at the inner apical angle with a strongly developed uncus; first tarsal segment somewhat longer than the second, second as long or but slightly longer than the third

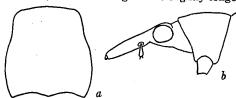


Fig. 1. Apion vitiensis, new species: a, outline of the pronotum; b, outline of prothorax, head, and rostrum.

which is deeply bilobed, the lobes narrow; each claw armed with a prominent basal tooth. Sternum with the fore coxae contiguous, two tenths higher than long, more prominent than the mexocoxae which are separated by a distance about equal to the breadth of a tibia; metasternum rather shallowly punctate, the pubescence denser toward the sides, condensed on the metepisternum and the mesopleural sclerites. Venter rather densely pubescent, finely and shallowly punctate.

The female differs from the male as follows: rostrum five times as long as an eye, twice as long as the prothorax, with a few setae at the base only; antennae with the scape reaching to slightly more than two thirds the distance to the eye, inserted at slightly less than one and one half times the length of an eye from the eyes, as long as funicular segments one to three inclusive, one as long as two plus three; fore femora without longer hair below, none of the tibiae uncinate; Length (male and female, head and rostrum excluded): 2.0-2.5 mm.; breadth: 0.9-1.2 mm.

Fiji: Viti Levu. Holotype male, collected by A. M. Lea (1924?), in the South Australian Museum at Adelaide, allotype female and 25 paratypes, in Bishop Museum, beaten by me from dead fern fronds on the belt road, 16 miles west of Suva, July 22, 1938, elevation 250 feet. The specimens collected by me were taken from at least two large species of ferns.

The reddish derm with the conspicuous yellow or whitish pubescence makes this an easily recognized species. It is not possible for me to place this species as a definite ally of a known species, because of our poor knowledge of the Oceanic Apion, but it is rather closely allied to some undetermined eastern Australian species in the collection before me.