

ON THE PAPUAN *ELOCOBDELLA NOVABRITANNIAE*, THE OCEANIAN *ABESSEBDELLA PALMYRAE* (HAEMADIPSOIDEA: DOMANIBDELLIDAE), AND AN OCEANIAN BARBRONID (HIRUDINEA).¹

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SUMMARY

Generic definitions and detailed descriptions are given for the two domanibdelline land-leeches. An analysis of the nature of the barbronids indicates: separation of these from the Erpobdellidae s.l.; division into Australian and oriental groups; and association of the oceanian barbronid with the group of the Australian Region. It is noted that the characteristic strepsilaematous pharynx is formed by transposition of the ridges, not by torsion.

INTRODUCTION

This paper gives definitive descriptions of two land-leeches which were briefly characterized and named in the demonstration (Richardson, 1975) of a systematization for land-leeches within a Superfamily Haemadipsoidea, also such detail as can be taken from specimens of the first barbronid leech known in Polynesia.

Coming from islands with a wide oceanic separation, the two land-leeches differ in the level of annulation on the somites of the middle series: *Elocobdella novabritanniae* of New Britain, a high island between the Solomon Group and New Guinea, incomplete 7-annulate; *Abessebdella palmyrae* of Palmyra Island, a coral atoll at the northern end of the Line (Outlying) Group in Polynesia, 5-annulate. Both possess a high level of annulation on the anterior and posterior series of somites which is a characteristic feature of many in the Domanibdellinae, others having a high level of annulation only on the anterior or the posterior series (Richardson, 1975).

The subfamily is centred on the New Guinea Archipelago and has partial extensions into Borneo, Celebes, the Philippines, Malay Peninsula, the Australian Northern Territory, and previously was known in Oceania only in the 5-annulate *Fijibdella bilobata* (Moore, 1946) of Fiji, based on a single specimen 10.0 mm long. The only other land-leech known in Oceania is the 4-annulate *Samoabdella minuta* (Blanchard, 1917), Leiobdellinae, based on three specimens from Samoa, the largest 6.0 mm long.

Moore described the annuli of the posterior series in *bilobata* as "very irregular and much jumbled" on the dorsum, an erratic areolation as shown here on the dorsal aspect of xxvi and xxvii in the holotype of *A. palmyrae* (Fig. 1,B), which is somewhat similar to the areolation shown on the ventral aspect of v, vi, and vii, in the holotype of *E. novabritanniae* (Fig. 2,I). There was no erratic areolation in the paratype or smaller specimens of *palmyrae*.

A revised key to the Families and Subfamilies in the Haemadipsoidea is given (Richardson, 1978), and a key to the known 5-annulate domanibdellines (1977b). Incomplete 7-annulate domanibdellines are known to me also in specimens from Rabaul,

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