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The milliped family Platyrhacidae (Polydesmida: Leptodesmidea) in the West Indies: Proposal of *Hoffmanorhacus* n. gen.; description and illustrations of males of *Proaspis aitia* Loomis, 1941; redescription of *Nannorrhacus luciae* (Pocock, 1894); hypotheses on origins and affinities; and an updated New World familial distribution

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Abstract

In the New World, the milliped family Platyrhacidae (Polydesmida) is known or projected for Central America south of southeastern Nicaragua and the northern ¼ of South America, with disjunct, insular populations on Hispaniola (Haiti), Guadeloupe (Basse-Terre), and St. Lucia. Male near-topotypes enable redescription of *Proaspis aitia* Loomis, 1941, possibly endemic to the western end of the southern Haitian peninsula. The tibiotarsus of its biramous gonopodal telopodite bends strongly laterad, and the medially directed solenomere arises at midlength proximal to the bend. With a uniramous telopodite, *P. sahlii* Jeekel, 1980, on Guadeloupe, is not congeneric, and ***Hoffmanorhacus***, **n. gen.**, is erected to accommodate it. *Nannorrhacus luciae* (Pocock, 1894), on St. Lucia, is redescribed; also with a biramous telopodite, its tibiotarsus arises distad and diverges from the coaxial solenomere. The Antillean species do not comprise a clade and are only distantly related; rather than introductions, they plausibly reflect ancestral occurrences on the "proto-Antillean" terrain before it rifted from "proto-South America" in the Cretaceous/Paleocene, with fragmentation isolating modern forms on their present islands. Existing platyrhacid tribes are formally elevated to subfamilies as this category was omitted from recent taxonomies. Without unequivocal evidence to the contrary, geographically anomalous species should initially be regarded as indigenous rather than anthropochoric.

Key words: anthropochore, Antilles, Central America, Guadeloupe, Haiti, Hispaniola, *Hoffmanorhacus*, *Nannorrhacus*, New World, Platyrhacidae, *Proaspis*, St. Lucia, South America, West Indies

Introduction

The sudden passing of R. L. Hoffman in June 2012 deprived mankind of its most knowledgeable diplopodologist. He was the **only** person who could take virtually any eugnathan milliped from any continent and put a tribal or lower name on it. While he worked with nearly every eugnathan order, he focused on the polydesmidan suborder Leptodesmidea (taxonomy according to Shelley [2003a] and Shear [2011]) with the largest-bodied ordinal representatives, where he addressed five families comprehensively: Chelodesmidae, Gomphodesmidae, Oxydesmidae, Platyrhacidae, and Xystodesmidae. The base-level knowledge he established on the primarily Nearctic Xystodesmidae has been extensively enhanced and supplemented in the past 40 years, and his voluminous treatises on the Afrotropical Gomphodesmidae and Oxydesmidae (Hoffman 1990, 2005) are all-inclusive compendia. He left the remaining families—the Neo- and Afrotropical Chelodesmidae and the Neotropical/Australasian/Oceanian Platyrhacidae—with scores of tribal and generic treatments, not having time to fulfill his desire to monograph both. Perhaps over 95% of man's knowledge of the last two assemblages died with him, so diplopodologists must learn them anew, and we offer this treatment of Antillean forms as a first step in advancing knowledge of Platyrhacidae without Dr. Hoffman's encyclopedic insight. He (Hoffman 1998) revised his previous

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