

Riffles and Mosses: Systematics of New Zealand *Hydora* (Coleoptera: Elmidae)

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Hydora Broun (Larainae) is the sole genus of Elmidae present in New Zealand, containing 7 described spp. Preliminary sorting of specimens indicate that there may be as many as 15 species, but the material has not been critically examined and exact geographic data are lacking to determine if morpho-taxa or valid species are range-restricted or widespread. Based on two-years of field work the species can be classified into three ecological groups: one group with fully aquatic larvae and adults, one with fully aquatic larvae and riparian adults, and a third group that has larvae that are associated with mosses and adults that are riparian. Recent phylogenetic data indicates that the two subfamilies of elmids are not monophyletic, and the presence of riparian and benthic species in the single genus *Hydora* suggests that the behavioural dichotomy between the “riparian” Larainae and “fully aquatic” Elminae may be arbitrary.

