Introduction

Members of the water strider genus *Rhagovelia* are among the most commonly encountered aquatic Heteroptera in tropical regions, forming the dominant guild of surface-dwelling insect predators on rocky upland streams. The common name for members of this genus is "riffle bugs," referring to their habit of schooling in sheltered eddies behind rocks or along stream banks. Riffle bugs are a primarily tropical group, being absent from most of Eurasia and having only a limited representation in Australia and North America. In terms of species this genus is among the largest in the aquatic Heteroptera, containing over 200 described taxa worldwide, many of which are regional endemics with restricted geographical ranges. Despite this diversity, the riffle bug fauna of most tropical areas has remained poorly understood, with many undescribed species and few useful keys.

The current work grew primarily out of studies on the systematics and zoogeography of *Rhagovelia* species inhabiting the Old World tropics. Collections in the Eastern Hemisphere over the last decade have revealed that the number of *Rhagovelia* species in that half of the world, especially on the islands of Madagascar, Borneo, Celebes, New Guinea, and the Moluccas, was vastly underestimated by previous workers. Our improved understanding of the Old World fauna has allowed the delimitation of species groups that are morphologically similar to those seen in the Neotropical region (Polhemus & Polhemus 1988), but the pattern of relationship between the Old World and New World species groups has remained unclear. In the absence of a cladistic