

Character Analysis

Terminology

All species of *Rhagovelia* possess a folding fanlike swimming plume on segment III of the middle tarsus (Fig. 10), which Andersen (1982) considered to be a unique synapomorphy defining the genus as a monophyletic unit. The success of this skating adaptation is testified to by the hundreds of *Rhagovelia* species that now occur in all the tropical areas of the world. One result of this diversification has been the evolution of distinctive, geographically isolated clades within the genus, and for this reason the taxonomy of *Rhagovelia* has tended to focus on “species groups” occurring in particular geographical regions. Some of these species groups have even been given subgeneric rank by certain authors (see Matsuda 1956). Although in my opinion none of the clades within the Neotropical *Rhagovelia* currently warrants subgeneric status, it is still often easier for the sake of utility to deal with subsets of related species when working at the intrageneric level. As a result, the concept of species groups is retained in the present work, based on monophyletic clades identified by phylogenetic analysis, but it should be noted that not all of the species group clades involved are of equivalent size or phylogenetic rank.

Certain of the larger monophyletic clades recognized herein contain several closely related species group clades within them, and are referred to subsequently as “species complexes.” Thus the *obesa* species complex contains the *obesa*, *spinigera*, and *ainsliei* species groups within it. The species