A morphology-based phylogeny of the \textit{Liolaemus alticolor–bibronii} group
(Iguania: Liolaemidae)

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Abstract

The genus \textit{Liolaemus} was split in two subgenera, \textit{Liolaemus} sensu stricto and \textit{Eulaemus}. Inside the \textit{Liolaemus} sensu stricto subgenus, many groups have been proposed. One of them is the \textit{L. alticolor–bibronii} group. Here, I studied 184 morphological characters of more than one thousand specimens that of the \textit{L. alticolor–bibronii} group. Many of these characters are original from this study, especially the characters related to color pattern. Also, I include eight population without taxonomic status. Using those characters and terminal taxa, I performed phylogenetic analyses using parsimony as optimality criterion, under implied weight. Two different topologies were found. The results show that the \textit{L. alticolor–bibronii} group is monophyletic, and that it is sister to the \textit{L. gravenhorsti} group. This finding is congruent with previous morphological and molecular phylogenies. Also, nested within the \textit{L. alticolor–bibronii} group the \textit{L. lemniscatus} and the \textit{L. robertmentensi} groups are found. In contrast to previous hypotheses, \textit{Liolaemus tacnae} is never recovered as a member of the \textit{L. alticolor–bibronii} group.

Key words: \textit{Liolaemus}, \textit{chiliensis} group, \textit{L. alticolor–bibronii} group, morphology, phylogeny

Resumen

El género \textit{Liolaemus} fue dividido en dos subgéneros, \textit{Liolaemus} sensu stricto y \textit{Eulaemus}. Dentro de \textit{Liolaemus} sensu stricto se han propuesto diversos grupos. Uno de ellos es el grupo \textit{L. alticolor–bibronii}. Se estudiaron 184 caracteres morfológicos de más de mil ejemplares pertenecientes a las especies del grupo \textit{L. alticolor–bibronii}. Muchos de esos caracteres