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A morphology-based phylogeny of the *Liolaemus alticolor*–*bibronii* group (Iguania: Liolaemidae)

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Abstract

The genus *Liolaemus* was split in two subgenera, *Liolaemus* sensu stricto and *Eulaemus*. Inside the *Liolaemus* sensu stricto subgenus, many groups have been proposed. One of them is the *L. alticolor-bibronii* group. Here, I studied 184 morphological characters of more than one thousand specimens that of the *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 *L. alticolor-bibronii* group is monophyletic, and that it is sister to the *L. gravenhorsti* group. This finding is congruent with previous morphological and molecular phylogenies. Also, nested within the *L. alticolor-bibronii* group the *L. lemniscatus* and the *L. robertmentensi* groups are found. In contrast to previous hypotheses, *Liolaemus tacnae* is never recovered as a member of the *L. alticolor-bibronii* group.

Key words: *Liolaemus*, *chiliensis* group, *L. alticolor-bibronii* group, morphology, phylogeny

Resumen

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