Abstract

Variation in body characteristics related to lizard locomotion has been poorly studied at the intraspecific level in Anolis species. Local adaptation due to habitat heterogeneity has been reported in some island species. However, studies of mainland species are particularly scarce and suggest different patterns: high variability among highland lizards and poorly differentiated populations in one Amazonian species. We characterized inter population variation of body size and shape in the highland Andean Anolis ventrimaculatus, an endemic species from Western Colombia. A total of 15 morphometric variables were measured in specimens from the reptile collection of the Instituto de Ciencias Naturales, Universidad Nacional, Colombia. The study included individuals from seven different highland localities. We found size and shape sexual dimorphism, both of which varied among localities. Patterns of variation in body proportions among populations were different in both males and females, suggesting that either sexual or natural selective factors are different in each locality and between sexes. Since this species exhibits a fragmented distribution in highlands, genetic divergence may also be a causal factor of the observed variation. Ecological, behavioral, additional morphological as well as phylogenetic data, may help to understand the evolutionary processes behind the geographic patterns found in this species. Rev. Biol. Trop. 61 (1): 255-262. Epub 2013 March 01.

Keywords

Anolis ventrimaculatus, intraspecific variation, Mainland, South America.