

### Conference Abstract

# Characterization and perspectives on studies of subterranean invertebrate communities in Latin America

Tamires Zepon<sup>‡</sup>, Maria Elina Bichuette<sup>‡</sup>

‡ Universidade Federal de São Carlos, São Carlos, Brazil

Corresponding author: Maria Elina Bichuette (lina.cave@gmail.com)

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### **Abstract**

Studies about subterranean fauna in Latin America were intensified in the last decades. Many research are species description, but other knowledge areas have been studied, such as subterranean invertebrates communities. This study aims to characterize studies about these communities in Latin America countries. We made a bibliographic survey of published papers in scientific journals and bulletins of speleology groups, and different aspects were verified, like localities (country), publish date, number of sampled caves, use of tests and statistical analyzes and sample effort. Of the 20 Latin America countries, we not found those studies for ten (10) of them (Bolivia, Costa Rica, El Salvador, Haiti, Honduras, Nicaragua, Panama, Paraguay, Dominican Republic, and Uruguay). We accessed a total of 164 published studies, of which the most was conducted in Brazil (69), followed by Mexico (52), Venezuela (17) and Cuba (11). In Brazil, most of studies was published in the last two decades (2000-2017), in Mexico in the 70's, in Venezuela between 80's and 2009 and in Cuba in 70's and 90's. Except for Brazil, where the most of studies explored the influence of biotic and abiotic factors in the communities, all countries published mainly faunistic inventories about only an unique cave or region. Thus, they do not present tests and statistical analysis and, sometimes, neither ecological discussion. Moreover, many publications do not have information about number of sample occasions and most of Brazilian studies did only one sample occasion. That makes it harder both the

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ecological approach that permits the verification of patterns that acts in the communities structuring and the comparison of data from different regions. Therefore, although the knowledge of subterranean invertebrates communities has increased, the Latin American has a huge potential to be explored in relation to areas with few or no studies, and to more consistent ecological studies.

# **Keywords**

Latin America cave biology, Scenario, Invertebrate Communities

# Presenting author

Maria Elina Bichuette

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