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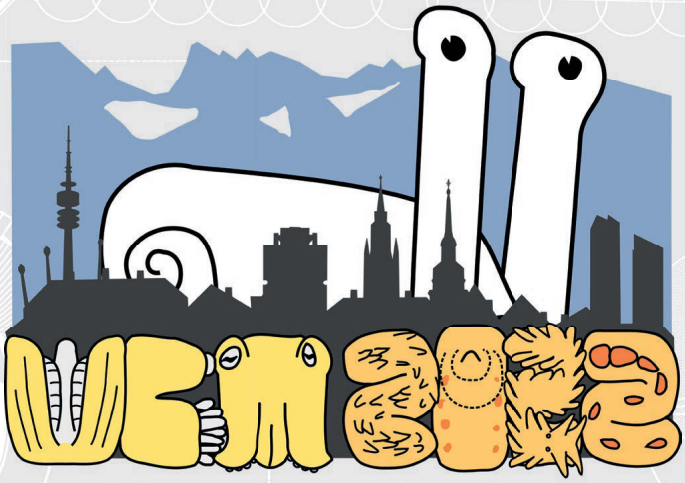

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Palaeoecological analysis of two Late Pleistocene continental mollusc assemblages from Uruguay

F. Cabrera[1], **F. Montenegro**[1,2], **M. Ubilla**[1] **& S. Martínez**[1]

Email: fcabrera@fcien.edu.uy

Extant continental (freshwater and terrestrial) molluscs are very informative from an environmental point of view. The specific environmental requirements of different taxa can be extrapolated to the fossil assemblages in order to reconstruct past environments. This is especially true for the Quaternary, when fossil assemblages are mostly composed by extant species. We analysed two associations of continental molluscs from the Late Pleistocene of Uruguay, with the goal of reconstruct the depositional environments for each assemblage. For this analysis, 11 localities from the Sopas Formation and 10 from the Dolores Formation were selected. The statistical analyses aimed to understand the diversity of each locality and to make comparisons among them, using traditional diversity indices (Shannon, Simpson, Equitability). To estimate the diversity Rarefaction and Chao1 were applied. Lastly, the species occurrence in all localities were compared, using several multivariate analyses: NMDS with axes rotation by Principal Components Analysis, Correspondence Analysis, and Cluster Analysis. The multivariate analyses show that all local assemblages are distributed in two main associations: one composed mostly by Sopas Formation localities (Sopas Association) and the other composed mostly by Dolores Formation localities (Dolores Association). Only one locality from each Formation was interchanged. The Sopas Association records mostly the families Cyrenidae (36.1 %), Tateidae (32 %), Cochliopidae (26.1 %), and the only record of the family Chilinidae. Also, the large, massive species *Diplodon charruanus*, *D. wymanii* and *D. peraeformis* are present. Meanwhile, the Dolores Association records mostly representatives of Cochliopidae (54.4 %), Planorbinae (20.2 %), Sphaeridae (16 %), and has the only records of Physidae and Succineidae. Cochliopidae (*Heleobia*) are present in both associations, which is logical since currently they are quite ubiquitous in most lotic and lentic environments. Ampullariidae and the subfamily Ancylinae are also present in both associations, along with the delicate species *Diplodon rhuacoicus*, which is the only *Diplodon* from the Dolores Association. Presently, the communities that include Sopas-like assemblages are mostly found in high to moderate current lotic environments, with rocky to coarse bottoms. Meanwhile, the communities that include the taxa typical of the Dolores Association are common in lentic or very calm lotic environments, with fine sediments and abundant aquatic vegetation.

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[1] Paleontology Department, Facultad de Ciencias (UdelaR), Montevideo, Uruguay
[2] Museo de Historia Natural, Ministerio de Educación y Cultura, Montevideo, Uruguay