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# Estudio paleolimnológico de laguna de Rocha, sudeste del Uruguay

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## RESUMEN

Se presentan datos de la evolución del estado trófico de la laguna de Rocha y su relación con eventos climáticos y variaciones del nivel del mar. Se realizaron análisis de sílice biogénico (silicofitolitos, diatomeas, espículas de esponjas y crisofitas), nitrógeno y fósforo total, pigmentos fotosintéticos, materia orgánica, dataciones radiocarbónicas y análisis físico textural de los sedimentos. Se identificaron dos grandes eventos limnológicos cuya transición se establece hacia el 2200 a.A.P.. Estos eventos se relacionaron al cambio climático asociado a variaciones en el nivel del mar.

## ABSTRACT

*Paleolimnological study of Rocha Lake, SE Uruguay.*

*A study was undertaken in Rocha Lake (34° 1' S; 54° 17' W) with the aim of reconstructing its paleoenvironmental conditions. A 48 cm core was taken and cut every 1.5 cm. Organic matter, total nitrogen, total phosphorous, photosynthetic pigments, sediment composition and sediment age were estimated. In addition opal phytoliths, diatoms, crysophycean cysts and sponge spicules remains were counted and identified. This integral study allowed us to infer the eutrophication process for the past 3,000 years. Two main limnological processes related to sea level variation were identified: the first, comprised the sediment layer from surface to 25 cm depth with brackish water characteristics; the second, from 25 cm to 48 cm depth with marine characteristics. An increase in trophic state since circa 2,500 years B.P. was observed.*