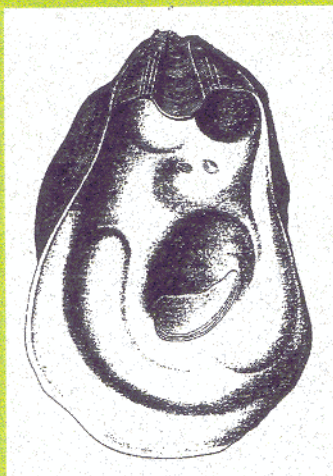


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DEL GOLFO SAN JORGE**

**CORRELACIONES DEL MESOZOICO
EN EL ATLÁNTICO SUR**

Proyecto 381 (SAMC)
Programa de Correlación Geológica Internacional (IGCP)
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RESÚMENES DE LOS TRABAJOS PRESENTADOS EN
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CRETACEOUS CONCHOSTRACANS FROM POTIGUAR BASIN (NORTHEASTERN BRAZIL): RELATIONSHIPS WITH WESTERN AFRICAN CONCHSTRACOFANAS AND PALEOECOLOGICAL DIFFERENCES

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Many fossil groups have been used in the biochronostratigraphic and paleoenvironmental analyses aimed to understand the geological evolution of the Potiguar Basin, Northeastern Brazil. The discovery of conchostracans (Conchostraca, Branchiopoda) in regional Cretaceous rocks increases the diversity of fossil groups known to have lived in the area.

Two distinct conchostracofaunas were recovered from different stratigraphic levels in the basin. These fossils were core-sampled from onshore lacustrine shales of the Pendência Formation (Lower Cretaceous), the basal rock unit of the rift phase sequence of Potiguar Basin. They were also found in outcrops at the gypsite quarry of Dix-Sept Rosado county, within marls of the Jandaíra Formation (Upper Cretaceous) deposited under marine conditions of the drift phase. Both are monospecific faunas belonging to the Cyzicidae (*Cyzicus mawsoni*) and Limnadiidae families (*Estheriina astartoides*), well preserved and normally showing the two articulated valves. Conchostracans of these families are common in Gondwanic basins. The associations observed in Lower Cretaceous strata have great similarity with coeval assemblages of Western African basins, such as Cameroon, Congo and Gabon.

Although conchostracofaunas are common in ephemeral freshwater ponds of hot, alkaline waters, they can occur even in brackish waters of nearshore lagoons and tidally-influenced zone, which is the interpreted life environment of Late Cretaceous conchostracans in the Potiguar Basin. The aim of the present study is to describe the specimens recovered from the Potiguar Basin, compare them with species from Northeastern Brazil and Western Africa, and make a paleoecological assessment of previously unreported Upper Cretaceous Brazilian occurrences.