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capable of tolerating at least brackish water conditions. Corroborative evidence for the *Estheriina astartoides* being of an halotolerant species come from the analysis of the associated palynofacies, strongly dominated by amorphous organic matter and palynoforaminifera. — (December 15, 1998).

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CRETACEOUS CONCHOSTRACANS FROM POTIGUAR BASIN, NORTHEAST BRAZIL*

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Many fossil groups have been used in biostratigraphic and paleoenvironmental analyses in order to understand the geological evolution of the Potiguar Basin, Northeast Brazil. The present finding 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), and also found in outcrops at the gypsite quarry of Dix-Sept Rosado county, within marls of the Jandaíra Formation (Upper Cretaceous). Both are monospecific faunas belonging to the Cyzicidae (*Cyzicus mawsoni*) and Limnadiidae families (*Estheriina astartoides*), with well preserved specimens that normally show the two articulated valves. Conchostracans belonging to these families are common in Gondwanan basins. The association observed in the Lower Cretaceous strata (*Cyzicus mawsoni* fauna) has great similarity with coeval assemblages of Western African basins, such as those of Cameroon, Congo and Gabon. Otherwise, there are almost no reports of the Upper Cretaceous conchostracan occurrences, either in Brazilian or African basins. 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 zones. The paleoenvironmental context of the gypsite quarry of Dix-Sept Rosado points out to the interpretation of some Late Cretaceous conchostracans taxa as being eurhaline forms, certainly