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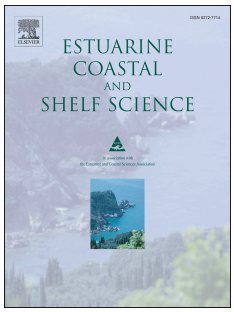

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BIOEROSION STRUCTURES IN HIGH-SALINITY MARINE ENVIRONMENTS: EVIDENCE FROM THE AL–KHAFJI COASTLINE, SAUDI ARABIA

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Abstract

Salinity is one the major stress factors that controls the biotic activities in marine environments. In general, the mixture with fresh-water has been mention as a great stress factor, but the opposite, i.e. high-salinity conditions, is less developed in the ichnological literature. Along the Al-Khafji coastline, Saudi Arabia, hard substrates (constituted by gastropods, bivalves and coral skeletons) contain diverse and abundant bioerosion traces and associated encrusters. Field and laboratory observations allowed the recognition of eight ichnospecies belong to the ichnogenera *Gastrochaenolites*, *Entobia*, *Oichnus*, *Caulostrepsis* and *Trypanites*, which can be attributed to various activities produced by bivalves, sponges, gastropods and annelids. The borings demonstrate two notable ichnological boring assemblages, namely, *Entobia*-dominated and *Gastrochaenolites*-