



MIOCENE SHARK TEETH ASSEMBLAGES AND ANCILLARY FISH TAXA FROM BARIPADA, ORISSA: TAXONOMIC REVISION AND A GLOBAL PALAEOBIOGEOGRAPHIC OVERVIEW

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ABSTRACT

New assemblages of fossil fish remains have been collected from the Miocene marine beds of Baripada, Orissa, along the river Burhabalang. Although several authors previously described various taxa from the same locality, little was known about their stratigraphic distribution. Present work includes a detailed systematic study, based on numerous specimens along with the establishment of regional stratigraphy and depositional environment. Five new species of sharks are reported here. Among them *Isurus desori*, *Carcharhinus* aff. *balochensis* and *Carcharhinus* aff. *perseus* are described for the first time from the Indian subcontinent; whereas *Isurus oxyrinchus* and *Galeocerdo cuvieri* were not previously reported from Baripada.

The state-of-the-art of the Miocene shark assemblages of the world has been reevaluated in the light of new data. The most diverse shark teeth assemblage has been found to be in Baripada. Diversity patterns have been studied. The species-level faunal correlation using Jaccard similarity coefficient method suggests the persistence of endemism among the major bio-provinces during the early Miocene and reasons for this have been explored.

Keywords: Shark teeth, Miocene, India, Palaeobiogeography, Transgression