

Early Eocene frogs from Vastan Lignite Mine, Gujarat, India

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The Ypresian Cambay Shale Formation of Vastan Lignite Mine in Gujarat, western India, has yielded a rich vertebrate fauna, including the earliest modern mammals of the Indian subcontinent. Here we describe its assemblage of four frogs, including two new genera and species, based on numerous, diverse and well-preserved ilia and vertebrae. An abundant frog, *Eobarbourula delfinoi* gen. and sp. nov., with a particular vertebral articulation similar to a zygosphen–zygantrum complex, represents the oldest record of the Bombinatoridae and might have been capable of displaying the Unken reflex. The large non-fossorial pelobatid *Eopelobates*, known from complete skeletons from the Eocene and Oligocene of Europe, is also identified at Vastan based on a single nearly complete ilium. An abundant “ranid” and a possible rhacophorid *Indorana prasadi* gen. and sp. nov. represent the earliest records of both families. The Vastan pelobatids and ranids confirm an early worldwide distribution of these families, and the bombinatorids and rhacophorids show possible origins of those clades on the Indian subcontinent.

Key words: Amphibia, Bombinatoridae, Ranidae, Pelobatidae, Rhacophoridae, Eocene, Vastan, India.

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