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Lower Miocene to Holocene *Amphiroa* from Southwest Coast of India: systematics and paleoenvironmental implications

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Southwest coast of Saurashtra, India, in and around Porbandar exposes diverse types of limestones belonging to three formations, viz., Gaj (Lower Miocene), Dwarka (Lower-Middle Miocene), Miliolite (Middle-Late Pleistocene) and Chaya (Middle-Late Pleistocene) (Mathur et al., 1988, Bhatt, 2003). Kundal and Mude (2004) initiated research on coralline algae from Lower Miocene Gaj Formation and they documented 5 nongeniculate and 2 geniculate coralline algal genera. Kundal and Mude, while furthering the research noticed the presence of coralline algae in all four formations. Among the geniculate corallines, *Amphiroa* is highly dominating exhibiting diversity and number. Following Kundal and Dharashivkar (2005), the present authors have discovered and identified 11 species of *Amphiroa* namely, *A. badvei, A. ephedrea*, *A. fortis, A. ishijimai, A. indica, A. krishnai, A. rigida, A. prefragillisima, A. prerigida,, A. tenius* and *A. verrucosa.* In the preset paper these species are systematically described, illustrated and interpreted for paleoenviornments of limestone in which these species abound. The species of *Amphiroa* as well as other coralline algae point shallow water marine tropical environment with moderate to low energy conditions at a depth of 25 to 60 m.

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