A new neolepadid cirripede from a Pleistocene cold seep, Krishna-Godavari Basin, offshore India

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Valves of a thoracican cirripede belonging to a new species of the Neolepadidae, *Ashinkailepas indica* Gale sp. nov. are described from a Late Pleistocene cold seep (52.6 ka), cored in the Krishna-Godavari Basin, offshore from the eastern coast of India. This constitutes the first fossil record of the genus, and its first occurrence in the Indian Ocean. Other fossil records of the Neolepadidae (here elevated to full family status) are discussed, and it is concluded that only *Stipilepas molerensis* from the Eocene of Denmark, is correctly referred to the family. Cladistic analysis of the Neolepadidae supports a basal position for *Ashinkailepas*, as deduced independently from molecular studies, and the Lower Cretaceous brachylepadid genus *Pedupycnolepas* is identified as sister taxon to Neolepadidae. Neolepadids are not Mesozoic relics as claimed, preserved in association with the highly specialised environments of cold seeps and hydrothermal vents, but are rather an early Cenozoic offshoot from the clade which also gave rise to the sessile cirripedes.

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