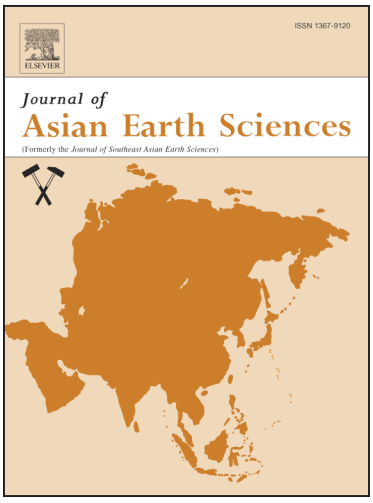

A new murid rodent assemblage from the Upper Siwaliks, Himachal Pradesh, India: Biostratigraphic, Phylogenetic and Palaeobiogeographic implications

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Abstract

In case of freshwater deposits that cannot be isotopically dated or that lack a continuous sequence for magnetostratigraphic study, rodent biochronology is an useful tool in making intra-regional biostratigraphic correlations and dating isolated Siwalik fossil localities within the Himalayan Foreland Basin. We here, report a new fossil locality exposed near the Village Devni Khadri situated close to the Markanda River Valley (District Sirmaur, Himachal Pradesh, India). This Upper Siwalik locality belonging to the Tatrot Formation contains a diverse fauna and flora including large mammals, birds, crocodiles, fishes, gastropods, bivalves, ostracods and charophytes beside dental remains of murid rodents *Golunda kelleri, Mus flynni, Mus jacobsi* and *Abudhabia* cf. *A. kabulense*. Based on the biostratigraphic ranges of these murid rodents from well dated Siwalik and Karewa localities, this richly fossiliferous locality has been placed here at ~3 Ma. The new age facilitates regional correlation and a revision of stratigraphic placement of rodent bearing Plio-Pleistocene Indian sites. A PAUP based cladistic analysis of fossil and extant *Golunda* and its relatives suggest the monophyly of the *Golunda* group, and a close relationship between African and Asian forms. Presence of common rodent elements in the fossil record of Africa and Asia points towards possible inter-continental dispersal in Pliocene time.