# A giant bamboo rat from the latest Miocene of Yunnan (Postprint)

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## Abstract

The Shuitangba subbasin lignite deposits of the Zhaotong Basin in northern Yunnan Province have produced vertebrate fossils of terminal Miocene age. We conducted test wet screening of fossiliferous sediment in 2014 to increase representation of small mammals. This effort produced four teeth of a very large bamboo rat, much larger than the previously known bamboo rat present at Shuitangba, and representing a new species. This new species is characterized by its molars being remarkably larger than those of other known species of Miorhizomys, and being hypsodont with cementum, and less anterorposteriorly compressed. The age of this new species from Shuitangba is in the range of 6.2 to 6.7 Ma. It appears that diverse bamboo rats of the extinct genus Miorhizomys were present in the Late Miocene of Yunnan, somewhat before the 6 Ma appearance of extant Rhizomys to the north in the vicinity of Shanxi Province.

## Full Text

### A Giant Bamboo Rat from the Late Miocene of Yunnan

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**Abstract**

The lignite deposits at the Shuitangba locality in the Zhaotong Basin of Yunnan Province have yielded vertebrate fossils from the terminal Miocene. To increase the sample of small mammals, we conducted test wet screening of fossiliferous sediment in 2014. This effort produced four teeth of a very large bamboo rat, much larger than the previously known bamboo rat from Shuitangba, representing a new species. The new species is characterized by molars that are remarkably larger than those of all other known Miorhizomys species, hypsodont with cementum filling the reentrants, and less anteroposteriorly compressed. The age of this new species from Shuitangba ranges from 6.2 to 6.7 Ma. This discovery reveals that the extinct genus Miorhizomys exhibited high diversity in the Late Miocene of Yunnan, somewhat before the appearance of the extant genus Rhizomys around 6 Ma in the vicinity of Shanxi Province to the north.

**Key words:** Shuitangba, Yunnan, Late Miocene, small mammals, bamboo rat

*Note: Figure translations are in progress. See original paper for figures.*