

## A new record of a giant neopiblemid rodent from Peruvian Amazonia and an overview of lower tooth dental homologies among chinchilloids

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We report here a new record of the giant caviomorph *Phoberomys* corresponding to a fragmentary mandible from the Monte Salvado area, Peruvian Amazonia (Madre de Dios Department). We describe this specimen and compare it with the material previously attributed to *Phoberomys*. The mandibular fragment is referred to as *Phoberomys* sp. Found as float on a bank of the Río Las Piedras, it has been hypothetically assigned a late Miocene age, due to the local/regional stratigraphic and lithologic context. This specimen constitutes the second record of *Phoberomys* in Peru. For the first time, the pattern of p4s and lower molars in *Phoberomys* was analyzed and compared to a large taxonomic sample (including Paleogene–Recent chinchilloids and other caviomorphs) in order to progress the understanding of the homology of dental structures in this genus. For p4s and lower molars, the position of the protoconid in *Phoberomys* and other chinchilloids (*Drytomomys* sp., *Potamarchus*, *Eumegamys*, *Gyriabrus*, *Isostylomys*, and *Tetrastylus*) is ambiguous, and as a result we propose two alternative homology hypotheses for these taxa: protoconid within the first and second laminae or within the third lamina on juvenile specimens. The knowledge of a comprehensive ontogenetic sequence in extinct and extant chinchilloids, associated with more complete palaeontological records, would likely allow for a clarification of these homology ambiguities.

**Key words:** Mammalia, Rodentia, *Phoberomys*, mandible, Palaeogene, South America, Peru, Monte Salvado.

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