

## A new large mammal from the Ypresian of Morocco: Evidence of surprising diversity of early proboscideans

Emmanuel Gheerbrant, Jean Sudre, Henri Cappetta, Mohamed Iarochène, Mbarek Amaghazaz, and Baâdi Bouya

*Acta Palaeontologica Polonica* 47 (3), 2002: 493-506

We describe a new primitive proboscidean, *Daouitherium rebouli* gen. et sp. nov., from the early Ypresian of the Ouled Abdoun Basin, Morocco, which also yielded *Phosphatherium*. It is the earliest known large mammal from Africa and one of the oldest known proboscideans. It has true lophodont molars similar to those of *Barytherium* and *Numidotherium*. It is closer to these genera and more advanced than *Phosphatherium* (e.g., morphology of the mandible), but it is also primitive in striking features known also in *Phosphatherium* (absence of diastema, retention of two additional teeth in front of p2). A parsimony analysis of *Daouitherium* suggests its intermediate phylogenetic position between the basal, small *Phosphatherium* and the large, more derived *Numidotherium* and *Barytherium*. *Daouitherium* is a better candidate for the ancestry of *N. koholense* than *Phosphatherium*, but it is also specialized. *Daouitherium* and *Numidotherium* may belong to the same basal radiation of "Barytherioidea". However, the family referral of *Daouitherium* is uncertain (Numidotheriidae?). The discovery of such a large and derived proboscidean with respect to *Phosphatherium* in the same African beds of such antiquity is evidence of an unexpected early diversity of proboscideans and of the old origin of the order. It also supports the African origin of Proboscidea s.s.

**Key words:** Mammalia, Proboscidea, early Eocene, Africa, Ouled Abdoun Basin, new taxa.

Emmanuel Gheerbrant [[gheerbra@mnhn.fr](mailto:gheerbra@mnhn.fr)], Laboratoire de Paléontologie (UMR 8569 du CNRS), Muséum National d'Histoire Naturelle, 8 rue Buffon, F-75005 Paris, France (corresponding author); Jean Sudre and Henri Cappetta, Laboratoire de Paléontologie (UMR 5554 du CNRS), Université Montpellier II, case courrier 064, Place Eugène Bataillon, F-34095 Montpellier Cedex 05, France; Mohamed Iarochène, Direction de la Géologie, Ministère de l'Énergie et des Mines, BP6208 Rabat-Instituts, Morocco; Mbarek Amaghazaz and Baâdi Bouya, Groupe Office Chérifien des Phosphates, Centre Minier de Khouribga, Service Géologique et Direction du Développement, Khouribga, Morocco.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see [creativecommons.org](https://creativecommons.org)), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

 [Full text \(325.9 kB\)](#)