

The fossil record of camelids demonstrates a late divergence between Bactrian camel and dromedary

Denis Geraads, Gilles Didier, Andrew Barr, Denne Reed, and Michel Laurin


Acta Palaeontologica Polonica 65 (2), 2020: 251-260 doi:<https://doi.org/10.4202/app.00727.2020>


A new compilation of the Old World fossil record of Camelidae and a recent phylogenetic analysis allow a new assessment of the timing of the clade's diversification. Using a recent implementation of the fossilized birth-death process, we show that the divergence between Bactrian camel and dromedary has a peak probability density around 1 Ma and probably occurred less than 2 million years ago. These dates are much younger than molecular estimates, which place the divergence between the dromedary and the Bactrian camel between 4 and 8 million years ago. Calibration problems in molecular dating seem to explain much of this difference.

Key words: Mammalia, Camelidae, phylogeny, divergence time, fossil record, birth-and-death models, Pleistocene, Africa.

Denis Geraads [denis.geraads@mnhn.fr] and Michel Laurin [michel.laurin@mnhn.fr], ORCID ID 0000-0003-2974-9835] (corresponding author), CR2P-UMR 7207, CNRS, MNHN, UPMC, Sorbonne Université, CP 38, 8 rue Buffon, 75231 Paris Cedex 05, France. Gilles Didier [gilles.didier@umontpellier.fr], IMAG, Univ Montpellier, CNRS, Montpellier, France. W. Andrew Barr [wabarr@gwu.edu], Center for the Advanced Study of Human Paleobiology, Department of Anthropology, The George Washington University, Washington DC 20052, USA. Denne Reed [reedd@austin.utexas.edu], Department of Anthropology, University of Texas at Austin. Austin, TX 78712, USA.

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