

Morphology and identification of a previously undescribed fossil catarrhine tooth from the middle Miocene of Romania. K. P. MCNULTY^{1,2}, C. RADULESCO¹, P. SAMSON², M. FERU³, and E. DELSON^{1,2,3,5}. ¹Dept. Anthropology, Lehman College; ²City University of New York Graduate School; ³New York Consortium in Evolutionary Primatology (NYCEP); ⁴Institutul de Speologie "Emil Racovitza", Bucharest, Romania; ⁵American Museum of Natural History.

Fieldwork in 1978 at the late middle Miocene (13-11 Ma) site of Taut, Romania recovered a number of mammalian fossils, including an isolated, non-cercopithecoid catarrhine tooth. The specimen is a moderately worn and slightly eroded left lower molariform tooth without roots. Some features of its morphology suggest that this tooth may be a deciduous premolar: long, narrow trigonid; relatively high buccal flare; low breadth-length index; accessory cresting in the mesial fovea; broad talonid relative to the trigonid; and buccal cusps placed anterior to lingual cusps. Comparisons with the molars and deciduous premolars of extant and fossil hominoids as well as pliopithecids (and other archaic catarrhines such as *Dendropithecus*) suggest that this specimen may be a hominoid dP₄, due to its: broad talonid; elongate mesial fovea; long, gradual, lingually oblique postmetacristid; lingually projecting entoconid; deep lingual notch; and anteriorly placed buccal cusps.

On the other hand, the Taut specimen bears a general phenetic resemblance to lower molars of crouzeillean pliopithecids. Similarities include a low breadth-length index, elongate mesial fovea, narrow mesial breadth relative to distal breadth, buccolingual waisting, reduced hypoconulid, and a restricted distal fovea. There is no indication of a pliopithecine triangle. This tooth cannot be readily placed within any known pliopithecoid taxon.

Overall, morphological evidence best supports the hypothesis that this is a hominoid deciduous premolar. A linear regression of M₁ to dP₄ size in hominoids suggests that this specimen is smaller than one would expect for synchronic European *Dryopithecus*. Due to its isolated biogeographic position and its distinctive morphology, this tooth broadens our current understanding of the variation and distribution of Miocene catarrhines.

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