

## REINTERPRETATION OF PHYLOGENETIC RELATIONSHIPS AMONG ANCHOMOMYINS (PRIMATES) ON THE LIGHT OF NEW FINDINGS FROM THE IBERIAN PENINSULA

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Adapiformes have been hardly known from Spain for many years due to their scarce fossil record. The description of new species and the recovery of new dental elements from several Iberian Eocene sites have opened new perspectives on the debate of phylogenetic relationships among this group. Up until now, only three anchomomyin genera were known: *Anchomomys*, *Periconodon* and *Buxella*. However, the new genus *Mazateronodon* has been recently described from Mazaterón (Spain), bringing up new information on the possible European lineages present during the Eocene. The genera *Buxella* and *Anchomomys* were previously considered to be closely related because of their lower molar morphology. On the contrary, the genus *Periconodon* was thought to be less closely related to them because of the morphology of its upper molars. Our new observations lead us to suggest that *Buxella* and *Periconodon* would be closely related due to the presence of a pericone in their upper molars, even though this cusp is smaller in *Buxella*. On the other hand, considering upper and lower molar morphology, we propose a close relationship of *Mazateronodon* and *Anchomomys*. Moreover, past interpretations considered that all the species of the genus *Anchomomys* could be arranged in a single lineage. However, a recently discovered new species from the Spanish locality of Sant Jaume de Frontanyà suggests the existence of at least two lineages within this genus. Thus, current research on these primates from the Iberian Peninsula is helping understand and decipher the phylogeny of this group.

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