

Dental and tarsal morphology of the European Paleocene/Eocene 'condylarth' mammal *Microhyus*

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New dental and postcranial remains of the alleged louisinine hyopsodontid 'condylarth' *Microhyus* from the European Paleocene/Eocene transition are described, and prompt a reevaluation of the genus. New specimens belonging to *Microhyus musculus* from Dormaal (MP7, Belgium) provide the first evidence of the lower dentition of the type species. We describe *M. musculus?* from Pourcy (MP7, France) and cf. *Microhyus* sp. from Berru (MP6a, France). A rich original assemblage of *M. reisi* from Silveirinha (MP7, Portugal) allows a detailed description of the morphological dental variation within that species. Well-preserved astragali and calcanei from Silveirinha can be confidently attributed to *Microhyus reisi*. Functional analysis of these elements suggests that *Microhyus* was a terrestrial mammal capable of rapid running or jumping. The pedal morphology of *Microhyus* is very similar to that of *Paschatherium*. These louisinines share some derived characters with the hyopsodontids *Apheliscus* and *Haplomylus* (e.g., the occurrence of a cotylar fossa on the astragalus) but they differ from *Hyopsodus*. Therefore, in view of the pedal morphology alone, the hyopsodontids may be polyphyletic. Given the dental similarities between *Microhyus* and the early representatives of the order Macroscelidea, we compared the tarsal morphology of louisinines with that of modern macroscelidids (Paleogene tarsal remains are currently unknown for this group). Macroscelidids and louisinines present some similarities in their astragalar morphology; however, the macroscelidid astragalus appears to be too specialized to be compared with that of *Microhyus* and *Paschatherium*.

Key words: Eutheria, 'Condylarthra', Louisininae, *Microhyus*, Paleocene, Eocene.

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