

The Triassic eucynodont *Candelariodon barberenai* revisited and the early diversity of stem prozostrodonians

Agustín G. Martinelli, Marina Bento Soares, Téo Veiga De Oliveira, Pablo G. Rodrigues, and Cesar L. Schultz

Acta Palaeontologica Polonica 62 (3), 2017: 527-542 doi:<https://doi.org/10.4202/app.00344.2017>

The dental anatomy of *Candelariodon barberenai* from the *Dinodontosaurus* Assemblage Zone (Pinheiros-Chiniquá Sequence, Santa Maria Supersequence, late Ladinian–early Carnian) of south Brazil, is redescribed. *Candelariodon* was originally classified as *Eucynodontia* incertae sedis and our analysis recovered this taxon deeply nested within Probainognathia, as the sister taxon of *Potheriodon* plus Prozostrodonia. The lower postcanine dentition of *Candelariodon* has several apomorphies shared with *Prozostrodon*, *Santacruzgnathus*, *Brasilodon*/*Brasilitherium*, and some basal mammaliaforms (*Morganucodon*, *Megazostrodon*), such as a lingual cingulum with discrete cusps e and g and two distinct morphologies in the tooth row. The reinterpretation of *Candelariodon* as a probainognathian cynodont more derived than *Probainognathus* and the rich Brazilian fossil record document an important adaptive radiation of non-mammaliaform prozostrodonians and closely related forms prior to the origin of the mammaliaform clade.

Key words: Cynodontia, Probainognathia, Prozostrodonia, *Dinodontosaurus* Assemblage Zone, South America, Brazil.

Agustín G. Martinelli [agustin_martinelli@yahoo.com.ar], Marina Bento Soares [marina.soares@ufrgs.br], Pablo G. Rodrigues [pablogr@bol.com.br], and Cesar L. Schultz [cesar.schultz@ufrgs.br], Laboratório de Paleontologia de Vertebrados, Departamento de Paleontologia e Estratigrafia, Instituto de Geociências, Universidade Federal do Rio Grande do Sul (UFRGS), Av. Bento Gonçalves 9500, Agronomia, 91540-000, Porto Alegre, RS, Brazil. Téo Veiga de Oliveira [teovoli@yahoo.com.br], Divisão de Mamíferos do Museu de Zoologia da UEFS, Departamento de Ciências Biológicas, Universidade Estadual de Feira de Santana (UEFS), Av. Transnordestina s/n, Bairro Novo Horizonte, 44036-900, Feira de Santana, BA, Brazil.

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