

***Comahuesuchus brachybuccalis* (Archosauria, Crocodyliformes) of the Upper Cretaceous of Neuquén Province and its phylogenetic affinities<sup>1</sup>.**

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New cranial remains of *Comahuesuchus brachybuccalis* are described from the lower section of the Río Colorado Formation, Neuquén Group (Upper Cretaceous). This small crocodyliform shows several important changes in the anterior region of the skull, developing a snout that is short, wide, relatively tall, and circular in shape. Likewise, it is differentiated from other Crocodyliformes by: paracanine fossa open in the posterior region of the maxilla; short, wide secondary palate formed principally by the maxilla; anterior process of the ectopterygoids well developed and with a broad jugal contact; triple contact between the ectopterygoids, pterygoids, and palatines in the ventral region of the pterygoid wings; five maxillary teeth, the third caniniform, the others small and cylindrical, similar to the four dentary teeth; the mandibles have eleven teeth, the anterior ones oriented horizontally and becoming vertical posteriorly, the tenth tooth caniniform, the others small and cylindrical; the mandibular symphysis is broad and elongate. This peculiar form displays a novel adaptive type for the Crocodyliformes that played very particular ecological role during the Upper Cretaceous of Argentina. The presence of a short, broad snout, with the dorsal border of the nares formed principally by the nasal and oriented vertically, the skull and mandibles lightly ornamented, and the presence of numerous reduced maxillary teeth are some of the characters that relate *Comahuesuchus* with *Notosuchus*, *Sphagesaurus*, *Chimaerasuchus*, and *Malawisuchus*. Additionally, it shares with *Sphagesaurus* the absence of the preorbital fenestra.

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<sup>1</sup> Original reference: Martinelli, A. G. 2000. *Comahuesuchus brachybuccalis* (Archosauria, Crocodyliform) del Cretácico Superior de la provincia de Neuquén y sus afinidades filogenéticas. *Ameghiniana* 37: 28R-29R.

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