



Congreso Latinoamericano
de Paleontología de Vertebrados

Libro de Resúmenes

22 al 25 de Septiembre de 2008 - Neuquén, Patagonia, Argentina



PELVIC GIRDLE AND HINDLIMBS OF *BAURUSUCHUS SALGADOENSIS* (MESOEUCROCODYLIA, BAURUSUCHIDAE) FROM ADAMANTINA FORMATION (UPPER CRETACEOUS), BAURU BASIN, BRAZIL

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Since 2005 many specimens of *Baurusuchus salgadoensis* Carvalho *et al.*, 2005 have been recovered from the reddish sandstones of Adamantina Formation (Turonian-Santonian, Bauru Basin) in the outskirts of General Salgado county. Most of these bear outstanding preservation, completeness and degree of articulation of skull and skeleton remains. Cranial features as lateral orbits, high oreinostral skull and terminal forwardly oriented nares indicate that this species had terrestrial habits (Price 1945). The postcranial skeleton of *B. salgadoensis* shows distinctive characteristics when compared to extant Crocodyliformes, some potentially indicative of cursorial habits of locomotion (Vasconcellos *et al.*, 2005). The sacral vertebrae are in number of three, all robust and each bear lateral processes extensively fused to the ilium. The first vertebra's lateral processes compose the anterior part of the ilium expanded crest; the last firmly extended its lateral processes caudally, to the extension of the postacetabular crest medial surface. The ilium is stout presenting a thick lateral and posteriorly developed postacetabular crest. This postacetabular crest overhangs the acetabulum area, enclosing it anteriorly and dorsally. The isquium is small and thin blade-like bone, with stout two distinct articular facets to the ilium. The pubis is robust and rod-like with thin anterior edge. Its small articular facet to the rest of the pelvic girdle contacts the ischium but not the ilium. The acetabulum is perforated, being mainly composed by the anterior and posterior articular facets of the ischium. The appendicular bones are long and stout. They show a straight aspect of their diaphysis and well-developed epiphysis. The femur is long, showing a straight aspect in lateral view and a slight sigmoid aspect in frontal view. There is a small axial torsion at its proximal end. The fourth trochanter is pronounced and posterior oriented. Astragalus is preserved and shows a well wide reel-shaped trochlea and a well-developed neck presenting a broad articular head, a feature commonly associated to ambulatory/cursorial habits among archosaurs and some synapsida. The metatarsals are long and dorsoventrally flattened, with broad articular heads. The phalanxes are long, specially the ones from the toes two and three. The plantar area is wide and long, similar to many platigrade terrestrial archosaurs. This pattern of pelvic girdle and hindlimbs is observed in the Rausuchia thecodonts and primitive crocodyliformes interpreted as a characteristic trait of those able an erect posture, limb-driven and plantigrade predators of the Triassic (Bonaparte 1984). *Baurusuchus*, here interpreted as cursorial predators morphofunctionally convergent with triassic Rausuchia and Protosuchia, probably competed with medium-sized Theropoda for prey, thus composing a peculiar trophic web in the Cretaceous continental environments of South America. Financial support provided by Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq, grant n° 305780/2006-9) and Instituto Virtual de Paleontologia/ Fundação Carlos Chagas Filho de Amparo à Pesquisa do Estado do Rio de Janeiro (IVP/FAPERJ, grant n° E-26/152.541/2006).

Bonaparte, J.F. 1984. Locomotion in rausuchid thecodonts. *Journal of Vertebrate Paleontology*, 3: 210-218.

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