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3D DIGITAL ENDOCAST OF THE EARLY MIOCENE (COLHUEHUAPIAN) *SIPALOCYON EXTERNA* (METATHERIA, SPARASSODONTA)

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The skull of *Sipalocyon externus* Ameghino, 1902 (Hathliacynidae) from Sacanana, Chubut, Sarmiento Formation, Colhuehuapian age, is studied (MACN-CH1911). We first record the taxon for this locality, which includes the sparassodonts *Acrocyon riggsi* Simpson, 1930 and a large Borhyaenoidae. The skull is almost complete and was studied through µCT-scanning, representing the first digital encephalic cavity cast$_{(C)}$ for Sparassodonta and one of the few known for stem marsupials. Body mass of the specimen was estimated based on teeth measurements, following Gordon´s equations (1.7 kg), and skull centroid-size, inspired by Zelditch (2.8 kg). Considering the mean body mass, its encephalization quotient with and without olfactory bulbs$_C$ is respectively: 0.32 and 0.30 (Jerison equations) or 0.41 and 0.38 (Eisenberg equations). The estimates for *S. externus* stand between that recorded by Macrini for the marsupials *Didelphis virginiana* (Kerr, 1792) and *Dasyurus hallucatus* Gould, 1842 but are larger than those for the stem marsupial *Pucadelphys andinus* Marshall and De Muizon, 1988. The olfactory bulb$_C$ represents 5.88% of the total endocranial volume, which is smaller than the values for *P. andinus* (11.7%) and other marsupials (8%–11%).The paraflocculus$_C$ corresponds to 2.65%, representing a large proportion of the endocast. This agrees with a deep subarquate fossa (a primitive condition for Metatheria). Vascular organization is largely conservative in this species. Similar to other sparassodonts, the major venous drainage from the endocranium was through the cerebrospinal system instead of jugular vein. In addition, we detected for the first time in this group an accessory transverse sinus enclosed by cranial bone.

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COMPARISONS OF TWO TRIASSIC "CONCHOSTRACAN" ASSOCIATIONS FROM MOROCCO AND COLOMBIA

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We present a preliminar revision of two "conchostracan" assemblages from the Late? Triassic of Gondwana (Colombia and Morocco). The material came from the Timezgadiwine Formation in Irohalene locality at the Argana Valley of Morocco (Africa) and the Bocas Formation at the locality north from Bucaramanga municipality, Santander department, Colombia (South America). This preliminary study is based on the revision of the stereomicroscopic photographs and SEM images from specimens that bring enough diagnostic characters to identify some Triassic species previously reported for other Triassic sequences from the northern hemisphere (North America and Europe). In the fossiliferous levels from Morocco, we identified the presence of the following species: *Laxitextella laxitexta* Sandberger, 1871 (early to middle Carnian), *Laxitextella multireticulata* Reible, 1962 (late Ladinian–early Carnian), ?*Laxitextella* sp., ?*Howellisaura princetonensis* Bock, 1953 (early to middle Carnian), ?*Euestheria minuta* von Zieten, 1833 (early Carnian), *Euestheria* spp. and ?*Gregorisuella* sp. In the "conchostracan" levels from Colombia we identified the presence of ?*Laxitextella multireticulata* Reible, 1962 (late Ladinian–early Carnian), *Shipingia hebaozhaiensis* Shen, 1976 (mid Norian), *Euestheria* ?*buravasi* Kobayashi, 1975 (early Norian) and *Wannerestheria*