

NEW DICRAEOSAURID (SAUROPODA) REMAINS FROM THE MULICHINCO FORMATION (VALANGINIAN, LOWER CRETACEOUS), NEUQUÉN BASIN, ARGENTINA

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New dicraeosaurid remains collected at the Pilmatué locality (Mulichinco Formation) comprise three articulated mid- to mid-posterior dorsal centra, and a complete right scapulo-coracoid. The centra are heavily eroded and transversely crushed. No pleurocoels are present, whereas in the most distal centrum a shallow lateral depression is present. The natural fractures show that the centra are massive internally, like the dorsal vertebrae of *Pilmatueia faundezi* Coria, Windholz, Ortega, Currie, 2019, and other dicraeosaurids. In contrast, the dorsal centra of non-dicraeosaurid diplodocoids and basal macronarians are pierced by foraminae, which communicate with the inside of the centra. In the scapula, the dorsal part of the posterior margin of the acromion process is slightly convex, and the distal end of the scapular blade is somewhat expanded, like other flagellicaudatans. The acromial process is placed proximally, above the glenoid position, like in *Dicraeosaurus hansemanni* Janensch, 1929; *Amargasaurus cazaui* Salgado and Bonaparte, 1991 and *Suuwassea emilieae* Harris and Dodson, 2004; and unlike non-dicraeosaurid diplodocoids where the acromial process is located nearly at the midpoint of scapular body. In the element described here, the angle between the acromion process and the coracoid is less than 90°, like in *Amargasaurus cazaui*. Preliminarily, these new materials are referred to *Pilmatueia faundezi* (come from the same site and geological formation) expanding the anatomical knowledge of this species.

NEW FINDINGS OF NEOGENE XENARTHRA (MAMMALIA) FROM ECUADOR: DIVERSITY AND PERSPECTIVE*

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The knowledge of Neogene xenarthrans in Ecuador is still poor compared to other regions of South America. Until now, the only recognized species is the Cingulata Dasypodini *Anadasypus aequatorianus* Carlini, Castro, Madden, and Scillato-Yané, 2013 coming from the Letrero Formation (Upper Miocene, Nabon Basin, southern Ecuador). However, some recent findings allow us to improve our knowledge about the Xenarthra diversity in the current territory of this country. The new remains are also coming from southern Ecuador, and they were exhumed from the Letrero Formation (upper Miocene) and Gonzanamá Formation (Catamayo basin, middle–upper Miocene). The recognized taxa include the Tardigrada Mylodontidae Mylodontinae, cf. *Simomyodon* sp., and the Cingulata Glyptodontidae indet. and Pampatheriidae. The morphology of the osteoderms and molariforms of the glyptodonts suggests that it could belong to new taxa, but further studies are necessary to confirm this taxonomic hypothesis. In turn, if confirmed, this represents the first report of the genus *Simomyodon* in Ecuador. A preliminary comparison with the Laventan fauna of Colombia reveals taxonomic differences. To summarize, this new findings shed light to our knowledge of the Neogene diversity of Xenarthra at low latitudes and underline the relevance of the Mio–Pliocene units. Certainly, new field works will produce more findings that help us to interpret more properly the diversity achieved by this clade, and its phylogenetic and paleobiogeographic relationship with faunas from coetaneous deposits of southern South America.

*Financial support: PICT 2017-0765, PI 0002.