Chronologic distribution of the Glyptodontidae (Mammalia, Cingulata) recorded in the Villavil-Quillay Basin, Catamarca, Argentina

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The present work shows the precise age of some of the most complete fossil specimens belonging to Glyptodontidae exhumed in the Villavil-Quillay basin (Department of Belén, Catamarca Province, Argentina). Thisnspecimens were integrated into an ideal stratigraphic profile of the Santa María Group outcrops in this area, adding information of radiometric dating by K^{40}/Ar^{40} and Ar^{40}/Ar^{39} isotopes performed by other authors. Concerning Doedicurinae, the genus ***Eleuthherocercus*** shows a distribution of remains along the sequence, from 7.14±0.05 Ma to levels after 3.66±0.05 Ma; the geological record shows a higher concentration of fossils in the Zanclean, the lowest stage of the Pliocene, being also the taxon with the latest records together with the genera ***Stromaphorus*** and ***Phlyctaenopyga***. Oldest record of the genus ***Eosclerocalyptus*** is close to 7.14±0.05 Ma, but remaining fossils were concentrated in levels ranging from 5.64±0.16 Ma to 5.3±0.2 Ma, corresponding to the limit between the Messinian (the final stage of the Miocene) and the Zanclean (lowest Stage of the Pliocene). In turn, fossils of the genera ***Stromaphorus*** and ***Phlyctaenopyga*** are only recorded between ca. 6Ma. to 3.66±0.05 Ma, so far limited for the late Messinian to all Zanclean stage. Obtaining a precise time frame for these fossils will allow us the possibility of generating a much more reliable information in future in that concerning paleobiological, taxonomic and evolutionary issues still to be resolved for Glyptodontidae diversity of the Argentinian North Western region. Also, will allow a more accurate comparison with fossil remains of glyptodons of other areas of South America of equivalent age.

Xenarthra
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Pliocene
North Western region

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