XXXVII Jornadas de Paleontología V Congreso Ibérico de Paleontología

XXXVII Jornadas SEP V Congreso Ibérico CUENCA 2022

Libro de Resúmenes

Cuenca Octubre 2022



Blanco, F., Blanco-Moreno, C., Buscalioni, A. D., de la Cita, L., Llandres, M., Martín-Abad, H., Marugán-Lobón, J., Monleón, M. A., Navalón, G., Nebreda, S. M., Prieto, I., San Román, C. (Eds.)





NEW SPECIES OF ALBANERPETONTIDAE (LISSAMPHIBIA) FROM THE LOURINHÃ FORMATION

Alexandre R. D. Guillaume^{1,2*}, Miguel Moreno-Azanza^{1,2,3}, Octávio Mateus^{1,2}

¹GEOBIOTEC, Department of Earth Sciences, NOVA School of Science and Technology, Universidade Nova de LisboaCampus de Caparica, P-2829 516 Caparica, Portugal.

²Museu da Lourinhã, 2530-158 Lourinhã, Portugal.

³Aragosaurus: Recursos Geológicos y Paleoambientes–IUCA, Departamento de Ciencias de la Tierra, Universidad de Zaragoza, 50009 Zaragoza, Spain.

E-mail: alexandre.guillaume.763@gmail.com

Albanerpetontidae are an extinct group of derived small ballistic-tongue-feeding amphibians of uncertain affinities. They ranged from the early Bathonian to the early Pleistocene, and have been recovered from Europe, North America, Asia and North Africa. Due to their small size, their fossil record is scarce and usually fragmentary, most generally recovered as isolated bones from vertebrate microfossil assemblages. In this work we describe historic and new material from the Late Jurassic Lusitanian Basin of Portugal, including specimens previously informally described from the Guimarota microfossil assemblage -Kimmeridgian- and new material from three localities in the Lourinhã Formation (Kimmeridgian-Titonian). Specimens here described include cranial and post-cranial elements, such as (but not limited) premaxillae, maxillae, dentaries, fused frontals, parietals, articular, atlases, axes, humeri, femora, and ilia. The specimens here presented exhibit intraspecific variation but support the presence of a new species in the Upper Jurassic of Portugal. Frontals show affinities with the genus Celtedens -hourglass outline frontal bone, with a curved orbital margin and a broad; blunt internasal process. The paired maxillae differ from those in Celtedens ibericus by having a small, undivided suprapalatal pit facing laterolingually, instead of having it more medial and facing lingually; but share affinities with Anouaelerpeton and Lower Cretaceous specimens of the Isle of Wight, United Kingdom. The triangular nasal process of the maxillae is round and slightly anteriorly projected, a condition shared with more basal albanerpetontids, as the lack of dorsal process in the dentaries and the ornamented postorbital wing of the parietal. Our material confirms the presence of a new species of Albanerpetontidae during the Late Jurassic of Portugal, as previously informally proposed. However, it may represent a new form, different from Celtedens.

Keywords: Amphibia, Celtedens, Late Jurassic, Portugal, Systematics.

Acknowledgments: We thank the municipality of Lourinhã for providing the "Espaço NovaPaleo" to work. We are grateful for the Master students from FCT-UNL and all volunteers who participated to the MicroSaurus Citizen Science Project hosted by the DinoPark of Lourinhã and to Museu Geológico in Lisbon for providing the access to Guimarota collection. This work was supported by the Fundação para a Ciência e Tecnologia (FCT-MCTES) of Portugal under Grants PTDC/CTA-PAL/31656/2017, PTDC/CTA-PAL/2217/2021, and UIDB/04035/2020; and by PDL under research Grant Microsaurus-superanimais 3. ARDG is supported by FCT-MCTES, grant number SFRH/BD/144665/2019.