



ABSTRACT BOOK



19th

EAVP

CONFERENCE 2022

Benevento / Pietraroja Italy

27.06 – 02.07.2022

A NEW GNATHOSAURINE (ARCHAEOPTERODACTYLOIDEA, PTEROSAURIA) FROM THE LATE JURASSIC OF PORTUGAL

A.E. Fernandes^{1,2*}, V. Beccari^{1,2}, A.W.A. Kellner³, O. Mateus^{1,4}

¹ Museu da Lourinhã, Rua João Luís de Moura 95, 2530-158 Lourinhã, Portugal.

² SNSB, Bayerische Staatssammlung für Paläontologie und Geologie, Richard-Wagner-Straße 10, 80333 München, Germany.

³ Laboratório de Sistemática e Tafonomia de Vertebrados Fósseis, Departamento de Geologia e Paleontologia, Museu Nacional, Universidade Federal do Rio de Janeiro, Quinta da Boa Vista s/n, São Cristóvão, 20940-040 Rio de Janeiro, Brazil.

⁴ GEOBIOTEC, Department of Earth Sciences, NOVA School of Science and Technology, Universidade NOVA de Lisboa, Campus de Caparica, Largo da Torre, 2825-149 Caparica, Portugal.

*presenting author, fernandes@snsb.de

Keywords: *Pterodactyloidea, Lourinhã Formation*

The known global distribution and diversity of pterosaurs demonstrates their success as a group, and yet their relatively sparse fossil record and often incomplete preservation (outside of Lagerstätten environments) pose a challenge for further understanding their palaeobiology, when compared with other vertebrates. Such is the case for the Lourinhã Formation of Portugal, which is largely recognized for its rich and taxonomically diverse fossil representation of dinosaurs, fishes, amphibians, marine reptiles, crocodylians, and eggs. Despite this abundance, up to now, pterosaur material recovered from this deposit has been restricted to scant and often fragmentary isolated bones and teeth, hindering any confident taxonomic assignments. Recently, a remarkably-sized dentated rostrum fragment and associated partial cervical vertebrae (ML2554) of a pterosaur were discovered from the Late Jurassic (Kimmeridgian-Tithonian) of Praia do Caniçal, Lourinhã. The specimen exhibits features such as a spatulated anterior expansion of the rostrum, a robust comb-like dentition, and pronounced rims of the tooth alveoli, indicating gnathosaurine affinities. The presence of this taxon adds yet another ecological niche element to the fluvio-deltaic lagoonal environment that has been suggested to be representative of Lourinhã Formation in the Late Jurassic, and contributes to the diversity and distribution of gnathosaurines worldwide.

Furthermore, based on its unique tooth and dentary morphology, ML2554 clearly represents a new taxon, the first named pterosaur species from Portugal.