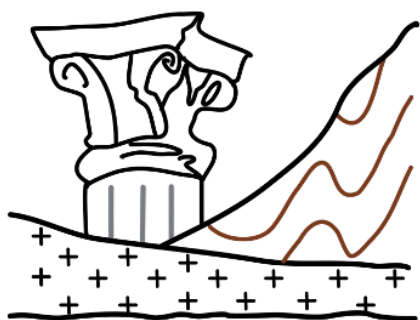




XII Congresso Nacional de Geologia

Évora, 21 a 26 de Junho

Alentejo, onde a Geologia tem Espaço e Tempo



Livro de Resumos

Coordenado por:

Pedro Nogueira, José Roseiro e Noel Moreira

Uma Organização de:

Sociedade Geológica de Portugal



Departamento de Geociências da Escola de Ciências e Tecnologia da Universidade de Évora



Instituto de Ciências da Terra



Laboratório HERCULES



Comissão Organizadora:

Pedro Nogueira; Alexandre Araújo; Pedro Dinis; José Carlos Kullberg; Ruben Martins; João X. Matos; Patrícia Moita; Noel Moreira; José Roseiro.

Ficha Técnica:

Editor: Universidade de Évora

Suporte: Eletrónico

Título: XII Congresso Nacional de Geologia – Livro de resumos

ISBN: 978-972-778-551-3

Nota Editorial: As figuras, tabelas, fotografias e quaisquer outros elementos gráficos incluídos nos resumos são da exclusiva responsabilidade dos respetivos autores. Os autores assumem igualmente a responsabilidade pela obtenção das necessárias autorizações de reprodução e pelo cumprimento da legislação aplicável em matéria de direitos de autor e propriedade intelectual.

Preliminary analysis of the paleofloral assemblages (charophytes and palynomorphs) from the Uppermost Jurassic of Valmitão (Lusitanian basin, Portugal)

Yurttaş, Metehan Doğukan ¹; Pereira, Ricardo ^{1,2}; Castro, Lígia Sousa ^{1,2}; Moreira, Noel ³

¹ Earth Sciences Department, NOVA School of Science and Technology, Campus of Caparica, 2829-516 Caparica, Portugal;

² GeoBioTec Research Center – Polo FCT, NOVA School of Science and Technology, Campus of Caparica, 2829-516 Caparica, Portugal;

³ Departamento de Geociências e IIFA – Universidade de Évora, Instituto de Ciências da Terra – Polo de Évora.

Resumo

The Upper Jurassic biostratigraphy of the Lusitanian Basin is well defined in charophyte assemblages from the Oxfordian (Pereira et al., 2003) and Late Tithonian (Pereira et al., 2010) stages. The limited charophyte records in the Early-Middle Tithonian interval between these two reference levels create a biostratigraphic resolution gap at the basin scale. This study examines whether the Early-Middle Tithonian charophyte gap in the Lusitanian Basin, reflects paleoenvironmental dynamics, rather than a depositional hiatus, based on preliminary data from the Valmitão coastal section near Ribamar, Lourinhã (western Portugal). Within the scope of the study, charophyte and palynological analyses were performed on 10 samples systematically collected along the Valmitão section. The investigations revealed that gyrogonites were restricted to the lowermost productive levels, VLM1 and VLM2, among the 10 sampled intervals. High-resolution sampling within the VLM2 interval revealed a systematic upward decrease in gyrogonite abundance, accompanied by increasing pyritization and the eventual disappearance of charophyte remains. Palynofacies analyses showed that the levels studied clustered in the “Field 1” (high phytoclast, low AOM, and palynomorph) on the Tyson Diagram. These data indicate a phytoclast-dominated proximal depositional setting with high terrestrial organic matter input. These findings suggest that local paleoenvironmental and taphonomic conditions, particularly facies variability and redox fluctuations, may have influenced charophyte occurrence and preservation. In conclusion, these preliminary results from the Valmitão section suggest that local paleoenvironmental and taphonomic factors may have contributed to the apparent scarcity of Early-Middle Tithonian charophyte records in the Lusitanian Basin, rather than solely reflecting a true stratigraphic hiatus.

References

- Pereira, R., Azerêdo, A. C., & Feist, M. (2010). Revision of Late Tithonian charophytes from Lisbon and Sintra-Cascais (Portugal): Taxonomy, biostratigraphy and palaeobiogeographical significance. *Journal of Micropalaeontology*, 29(1), 37–49.
- Pereira, R., Feist, M., & Azerêdo, A. C. (2003). New charophytes from the Upper Jurassic of the Lusitanian Basin (Portugal). *Journal of Micropalaeontology*, 22(2), 113–126.

Agradecimentos

Noel Moreira acknowledges the financial support provided to the Institute of Earth Sciences (ICT) through the multi-annual funding contract with the Foundation for Science and Technology (FCT), under project UID/04683/2025 with the DOI <https://doi.org/10.54499/UID/04683/2025>.