

Abstract Book



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Editors:

Attila Ciner, Haroun Chenchouni, Jesús Rodrigo-Comino, Deepak Singh Bisht, Jasper Knight, Maurizio Barbieri, Mourad Bezzeghoud, Ahmed Radwan, Zhihua Zhang, Zeynal Abiddin Ergüler, Mahesh Kumar Jat, Veysel Turan, Helder Chaminé, Matteo Gentilucci, Md Firoz Khan, Dionysia Panagoulia, Ilker Ugulu, Amjad Kallel, Roohollah Kalatehjari, Stefano Naitza, Zakaria Hamimi, Mingjie Chen, Arkoprovo Biswas, Federico Lucci, Ciro Cucciniello, Santanu Banerjee, Afroz Ahmad Shah, Carla Candeias, Vinciane Debaille, Hasnaa Chennaoui, Domenico M. Doronzo, El Hassane Chellai, Mehdi Eshagh, Imran Ali

Abstract **B**ook

2nd Mediterranean Geosciences Union Annual Meeting (MedGu 2022)

Editors

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The composition of acervulinid–red algal macroids from the Paleogene of Croatia and their distribution in the wider Mediterranean region

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Abstract. This research is a continuation of the previous biometrical study of the Eocene macroids in Dalmatia (southern Croatia), with the aim to determine the principal bioconstructors and reveal the composition and distribution patterns of macroids during the Paleogene Epoch.

We randomly collected 322 samples of extracted macroids and 12 samples of source rocks, from the beaches between Omiš and Mimice in Dalmatia. Thin sections were prepared at the University of Zagreb/Faculty of Science, studied and photographed using a light microscope with camera.

Macroids occur within the Eocene "Nummulitic" packstones, floatstones to rudstones, dominated by the large benthic foraminifera, a common facies of ramp crests, deposited along the coasts of the Tethys Ocean. Algal dominant genera are *Sporolithon* and *Lithoporella*. Among the encrusting foraminifera, *Acervulina* and *Solenomeris* prevail. Serpulids, corals, bryozoans, echinoids, crinoids and other biota also occur as bioclasts, but they are less abundant.

Regularly shaped macroids can be classified as rhodoliths, as they are dominated by the genus *Sporolithon*. Irregularly shaped macroids were formed by the intercalation of red algal and encrusting foraminiferal layers, pointing to the slightly deeper depositional environment. The subsequent demise of green and then red algae, and their replacement with encrusting foraminifera during the Paleogene can be correlated with the basin subsidence and/or increased turbidity, a scenario related with the Alpine tectonics in this area.

Keywords: Acervulinidae, Florideophyceae, Macroids, Paleogene, Croatia.



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