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Biofacies studies of the Late Paleocene to Early Eocene rocks of United Arab Emirates and Northwest Turkey

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B iostratigraphic correlation was conducted on Muthaymimah Formation in the western flank of the Northern Oman Mountains of United Arab Emirates and Atbasi Formation, northwest Turkey. Based on abundance and diversity of foraminiferal assemblages (such as *Morozovella* spp.) with the lithological characters, the two formations of the Late Paleocene to Early Eocene were deposited under tectonic movements with rapid sea level rise that caused the deposition of mudstone/ wackstone facies in open marine environment. Both study areas also share a similar shallow-marine packstone/grainstone facies, rich in benthonic foraminifera (such as *Bolivinoides curtus, Neoflabellina jarvisi* and *Somalina sp.*, and *Nummulites spp.*) and skeletal shell remains (molluscs, bryozoa and echinoids), accompanied by thin calcarenite and iron oxides. In both areas, sedimentation occurred during extensive rifting and rapid subsidence, in an environment of seafloor oxidation.

Biography

Mahmoud Abu Saima has completed his PhD from the Geology department, Faculty of Science, Ain Shams University, Cairo, Egypt. He is an Instructor of the Department of Geology at the United Arab Emirates University. He is particularly interested in Micropaleontology. He has published numerous papers on the Triassic and Jurassic palynomorphs and Cretaceous/Tertiary foraminifera in international journals.

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