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Recent Miliolidae from lagoonal environments of the UAE

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The shoreline of the Arabian/Persian Gulf around Abu Dhabi (UAE) consists of lagoonal environments dominated by carbonate sedimentation.

Sediment samples were collected in the eastern Abu Dhabi lagoon at thirty locations in natural channels and in different inner and outer lagoon subenvironments at water depth shallower than 5m. The water salinity at the studied location ranged between 43 and 50%.

The samples consists prevalently of muddy to silt-size sediments containing skeletal grains including abundant benthic foraminifera. The quantitative study of dead and living (rose Bengal stained) benthic foraminifera in the sediment fraction > 63 μ m shows that at all the sampled location Miliolidae were characterizing more than the 50% of the assemblage, reaching up to the 95% of the total assemblage. The most commonly occurring genera of Miliolidae were Quinqueloculina, Triloculina and Spiroloculina. At several locations, miliolid symbiont-bearing genera (mostly Peneroplis and Spirolina) were also commonly recorded in the benthic foraminifera assemblage. This work will show the distribution in the studied area and the taxonomy of 37 species belonging to the genera Quinqueloculina, Triloculina, Spiroloculina, Sigmoilinita, Miliolinella, Lachlanella, Vertebralina, Cornuspira and Pyrgo.