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Bartonian Benthic Foraminifera: Examples From The Arabian And North African Carbonate Platforms

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Larger benthic foraminiferal assemblages from the mid-Eocene (Bartonian) sedimentary successions of the Tethyan carbonate platforms have been studied in southeastern Turkey and northeastern Egypt. The larger benthic foraminiferal assemblage from the Hoya Formation (Diyarbakır) shows a significant similarity to those reported from the Observatory Formation (coeval with the Sannor Formation) in the Cairo–Suez district (NE Egypt). Biostratigraphically, three larger benthic foraminiferal total range zones have been described in the Hoya Formation at the Hazro–Diyarbakir section (Northern Arabian platform, SE Turkey). These biozones are, from base to top: a) Somalina stefaninii Total Range Zone, b) Dictyoconus aegyptiensis Total Range Zone, and c) Alveolina fusiformis Total Range Zone. In northeastern Egypt, similar larger benthic foraminiferal assemblages were reported from the mid-Eocene rocks exposed at the Cairo–Suez district and Shabrawet area suggesting similar conditions of deposition and extended sedimentary basin. One larger benthic foraminiferal biozone has been described from the Bartonian succession in northeastern Egypt. This biozone is: Dictyoconus aegyptiensis/Somalina stefaninii biozone (Bartonian). Special attention is paid to the biostratigraphical significance of these microfossils, as well as to their use in reconstructions of depositional environments and palaeobiogeographical affinities.
Keywords: Bartonian; Larger benthic foraminifera; Carbonate platform; SE Turkey; NE Egypt