High resolution assessment of Santonian (Dicarinella asymetrica zone) foraminifera communities in north western Tunisia

Zaineb El Amri (1) and Dalila Zaghib-Turki (2)
(1) Higher Institute of Arts and Crafts, University of Kairouan, Kasserine, Tunisia (zainenb_amri@yahoo.fr), (2) Department of Geology, Faculty of Sciences, University of Tunis-El Manar, Tunis, Tunisia (dalila.turki@yahoo.fr)

Four sections in north western Tunisia (Ettout, Jbil, Ennahli and Fguira Salah) has been subject of planktonic foraminifera study. In these areas, the Santonian outcrops are well exposed and consist of alternation of marl, indurate marl and limestone. This interval deposits belong to upper part of Kef Formation.

272 samples have been collected and examined. Assemblages of planktonic foraminifera are composed by genus : Marginotruncana, Dicarinella, Contusotruncana, Globigerinelloides, Globotruncanita, Globotruncanana, Heterohelix, Sigalia, Planoglobulina, Ventilabrella.

Quantitative analyses show that the Santonian assemblages are dominated by small Heterohelicidae (Hetrohelix genus) and trochospiral unkeeld forms (Hedbergella genus, Archaeoglobigerina genus). Benthic foraminifera are present but rare (<15%) in all samples of this zone in the studied sections.

Several bioevents are recorded in the Santonian autcrops including the LO and HO of Dicarinella asymetrica, LO of Costellagerina pilula, LO and HO of Sigalia deflaensis, LO and HO of Sigalia carpatica, LO of Ventilabrella eggeri, LO of Planoglobulina manuelensis, LO of Globotruncanita elevata, and LO of Globotruncanana area.

The thickness variation of the Dicarinella asymetrica zone in these studied areas is controlled by the depth of the basins.