

Calcareous nannofossils at the Aptian–Albian boundary in the Zagros Basin (SW Iran)

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The Kazhdumi Formation in the Zagros Basin (SW Iran) primarily consists of alternations of marls, silty marls and thinly-bedded limestones. This formation was deposited under pelagic conditions in the southeastern parts of the Tethyan realm. Calcareous nannofossil biostratigraphy and palaeoecology were investigated across the Aptian–Albian interval. The studied interval spans calcareous nannofossil Zones NC7 to NC10B (Roth, 1978). The most important bioevents are the bases of *Eprolithus floralis*, *Prediscosphaera columnata*, *Axopodorhabdus albianus* and *Eiffellithus turriseiffelii*. *Eprolithus floralis* was recorded from the oldest sample in the studied interval. The youngest bioevent was the base of *Corollithion kennedyi*. Based on calcareous nannofossil taxa, the base of *P. columnata* was the most reliable bioevent for identifying the Aptian–Albian boundary. An increase in the relative abundance of *Lithraphidites carniolensis*, *Discorhabdus ignotus* and small *Zeugrhabdotus* spp. was recorded at the Aptian–Albian boundary. Simultaneously, a decrease in the relative abundance of *Nannoconus* spp. and *Watznaueria barnesiae* – markers of an oligotrophic environment – was also recorded. *Lithraphidites carniolensis*, *D. ignotus* and small *Zeugrhabdotus* spp. are considered to be eutrophic taxa, so a high relative abundance of these taxa indicates eutrophic environmental conditions at the Aptian–Albian boundary, which agrees with findings from other parts of the world.