

Foraminifera biostratigraphy of Albian- Cenomanian deposits in southwest of Qayen, East of Iran

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Cretaceous deposits in the southwestern Qayen, east of Iran (eastern margin of the Lut Block), have been investigated for foraminiferal biostratigraphy. The Albian-Cenomanian succession outcropping in the east of Iran represents a case study for better understanding the eastern part of Tethyan Ocean biostratigraphy. The thickness of the measured section is 260 meters and the main lithologies consist of marl, shale, marly limestone and limestone. The biostratigraphic study led to the identification of 22 genera and 28 species of planktonic and benthic foraminifera recorded for the first time in this stratigraphic section. Based on the foraminiferal assemblage, four biozones are identified as follows:

1- *Muricohedbergella planispira* Interval zone: the lower boundary of this biozone is defined by the first appearance of *Muricohedbergella delrioensis* (PREMOLI SILVA AND VERGA, 2004) and the upper boundary of this biozone is determined using the first appearance of *Ticinella praeticinensis*. The foraminiferal assemblage in this biozone includes: *Valvulineria* cf. *lenticula*, *Lagena* sp., *Berthelina intermedia*, *Pleurostomella reussi*, *Vaginulinopsis excentrica*, *Valvulineria gracillima* and *Hemirobulina inaequalis*. 2- *Ticinella praeticinensis* subzone: this belongs to the *Biticinella breggiensis* Interval zone and is defined by the first appearance of *Ticinella praeticinensis* (PREMOLI SILVA & VERGA, 2004; OGG et al., 2008). The foraminiferal assemblage in this biozone includes *Tritaxia tricarinata*, *Spirillina minima*, *Dentalina cylindroides*, *Dorothia hyperconica* and *Nodosaria paupercula*. 3- *Ticinella raynaudi* Interval zone: the lower boundary of this biozone is defined based on the first appearance of *Ticinella raynaudi* (LONGORIA, & GAMPER, 1977). The foraminiferal assemblage in this biozone includes *Berthelina baltica*, *Spiroplectammia* sp., *Gaudryina jendrekovae* and *Caudammia crassa*. 4- *Lenticulina subangulata* - *Lenticulina macrodisca* assemblage zone: this biozone is defined based on the presence of *Lenticulina subangulata* and *Lenticulina macrodisca*. Other foraminifera occurring in this biozone are: *Gavelinella berthelini*, *Spiroplectammia gandolfi*, *Valvulineria* cf. *lenticula* and *Valvulineria angulate* (WEIDICH, 1990; HOLBOURN AND KAMINSKI, 1997).

The identified foraminiferal assemblages allow to discuss and correlate the inferred biozones with those commonly used in the Tethys Realm. An Early Albian-Early Cenomanian age are assigned for the studied stratigraphic interval. Data based on the ammonite contents in the studied section confirm an Early Albian-Early Cenomanian age (SHARIFI et al., 2016).

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