

Benthic Foraminifera and Calcareous Algae of the Barremian- Lower Aptian Deposits in the West of Kopet Dagh, NE Iran

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The Kopet Dagh Basin is situated in the northeast of Iran and the south of Turkmenistan. In order to micropaleontological investigation of the Tirgan Formation, a stratigraphic section was studied in the west of Kopet Dagh Basin. The Tirgan Formation dominantly consists of limestone and rarely marl. This shallow-marine carbonate platform is overlain by deep-marine facies of the Aptian marls and argillaceous limestone of the Sarcheshmeh Formation. The Tirgan Formation in this Stratigraphic section is about 410 meters. Microfacies studies indicate tidal flat, lagoon, shoal and open marine facies belts. Benthic foraminifera and calcareous algae studies in this section, lead to distinguish of 17 genera and 12 species of benthic foraminifera and 8 genera and 5 species of calcareous algae. The most important identified taxa including *Paleodictyoconus arabicus*, *Praeorbitolina* cf. *cormyi*, *Everticyclammina* cf. *hedbergi*, *Dictyoconus* cf. *pachymarginalis*, *Balkhania balkhanica*, *Charentia cuvillieri*, *Cuneolina* sp., *Nautiloculina* sp., *Haplophragmoides globosus*, *Mayncina* cf. *bulgarica*, *Orbitolinopsis* sp., *Nezzazata isabella*, *Rummanoloculina ponticuli*, *Derventina filipescui*, *Novalesia* cf. *cornucopia*, *Neotrocholina* sp., *Salpingoporella* cf. *muehlbergii*, *Salpingoporella inopinata*, *Terquemella* sp., *Acicularia* sp., *Cylindroporella* sp., *Boueina* sp., *Cayeuxia* sp., *Permocalculus* sp. and *Actinoporella* cf. *podolica*. Based on diversity, appearance and disappearance of identified taxa, the Barremian- Early Aptian age was ascribed to the Tirgan Formation.

Key words: Benthic foraminifera, Calcareous algae, Lower Cretaceous, Barremian, Aptian, Kopet Dagh