

Calcareous nannofossils from the Upper Triassic-Lower Jurassic of Lurestan (Iran): preliminary data

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In the Zagros fold and thrust belt of Iran, Upper Triassic-Lower Jurassic rocks are widely exposed only in north Lurestan, which is close to the Iran-Iraq border. Biostratigraphic data for this interval are very poor, and correlations with other areas of the Arabian Plate are mainly based on lithostratigraphy. Consequently, sequence stratigraphic interpretations that attempt to extend the standard chrono-sequence stratigraphy of the Arabian Plate (Sharland *et al.*, 2004) to this region are highly uncertain and speculative. One of the main uncertainties is the position of the Triassic-Jurassic boundary, which is either placed at the boundary between the Baluti Shale and the Sarki Formation or within the lowermost part of the Sarki Formation (i.e., Aqrabi *et al.*, 2010).

In this work, we present the first data on the calcareous nannoplankton distribution in the Baluti Shale and the Sarki Formation. The studied samples came from a key section exposed northwest of the village of Dudan. According to our data, the upper part of the Baluti Shale is of Late Triassic (Rhaetian) age. Thus, the Triassic-Jurassic

boundary is located within the Sarki Formation at a level bracketed by the last occurrence of Late Triassic nannofossils, including *Prinsiosphaera triassica* Jafar, and the first occurrence of *Schizosphaerella punctulata* Deflandre & Dangeard. This sequence of nannofossil bioevents is consistent with those recently documented in the Southern Alps by Bottini *et al.* (2016).

References

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