**Palynology and palaeogeography of the middle Přídolí from Saudi Arabia**

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**Abstract**

A distinctive, rich and diverse marginal marine palynological assemblage from the Tawil Formation occurs in several wells from northwestern and eastern Saudi Arabia. The composition of this assemblage strongly indicates a middle Přídolí age. The assemblage encountered contains abundant, miospores, chitinozoans, acritarchs, tasmanites, freshwater algae, scolecodonts, eurypterid cuticle and other organic remains. Many taxa from this assemblage are of taxonomic interest and useful for regional and intercontinental correlation. The palaeogeographic distribution of this assemblage is also discussed as acritarchs, chitinozoans and miospores encountered in the studied samples correlate well with similar assemblages from various Algerian, Libyan, and Ibero-armorican localities (i.e. Ibarmaghian regions). This corresponds to what is considered a transgressive mid-Přídolí event in the Algerian Sahara, with non-marine intervals bracketing this brief marine sea level rise. This event is likely to have extended into all of north Gondwana including Arabia and relates to S50 Maximum Flooding Surface from the sequence stratigraphic framework defined in the Neftex Geodynamic Earth Model.

Keywords: Pridoli, Saudi Arabia, Miospores, chitinozoans, acritarchs.