



## **Palynomorph - based palaeoenvironmental inferences of the Shemshak Formation, at the Khoshyeilagh section, northeastern Shahrud**

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The palaeoenvironment of the Shemshak Formation at the Khoshyeilagh section north of Ghosnavi Village was studied by using palynomorphs and organic matter contents. A total of 67 samples were collected and prepared palynologically from the formation. Diverse and reasonably well preserved palynomorphs are recorded. This section with 1280 m thickness is consists of shale, sandatone and coal layer. The palynologically productive samples contain spores, pollen grains, dark and transparent AOM, opaque phytoclasts, phytoplankton (dinoflagellate cysts), woody debris (plant tissue) which were studied statistically. The high abundance of terrestrial palynomorphs dominating phytoclasts indicates accumulation in a deltaic environment. However, occurrence of marine palynomorphs testifies intermittent marine incursions.

Keywords: Shemshak Formation, Palynomorphs, Khoshyeilagh, Palaeoenvironment, Shahrud.