

## **PALEOGEOGRAPHICAL SIGNIFICANCE OF PALEOBOTANICAL AND OSTRACOD EVIDENCE FROM THE LATE PERMIAN OF OMAN**

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Discovery of a new ostracod fauna in the late Permian marine Khuff Formation, combined with paleobotanical data from the continental Gharif Formation, supports new discussion of the paleogeographical reconstruction of Late Permian central Paleo-Tethys. The Khuff Formation overlies the continental Gharif Formation which contains the Gharif paleoflora. The Late Permian phytogeographic sequence for Arabian Platform is as follows: Murgabian: Gondwanan assemblages with first intermingling of Cathaysian and Euramerian elements, Latest Murgabian: mixed Cathaysian and Euramerian assemblages with latest northernmost *Glossopteris* 'immigrant' ; Late Djulfian: assemblage dominated by Euramerian elements. So Arabian plate moved during the Late Permian into tropical latitudes low enough to accomodate paleobotanical evidence. The paleobotanical data support a southernly route for Permian floral exchanges between China and Arabian plate via intervenig plates. The Khuff Formation marine ostracod association shows that a mixed fauna existed on Oman platform, with important endemic elements, new species and a close relationship with the Russian Platform, the Far East (South China) and North America. The importance of equatorial surface currents in the interpretation of the Permian neritic ostracod species distribution along the western border of Pangea has been demonstrated. For species movement across the Paleopacific on « biological rafts » the existence of archipelagos as « relay stations » was necessary. These data supports a close relationship between Arabian Platform and South China, implying a limited oceanic space between these areas. The models for reconstruction of Pangea during the Late Permian are discussed in the light of both paleobotanical and ostracod evidence.