
Tethyan/Indo-Pacific microfloral provincialism during the Late Jurassic/Early Cretaceous period

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South-East Asia is situated in a transition zone when assessed in terms of Palaeozoic and Mesozoic palaeobiotic provincialism, and much work has been accomplished concerning both the palaeofloral and palaeofaunal affinities displayed by the fossil record within the region. Without exception, these studies have concentrated wholly upon the terrestrial affinities of the palaeoflora, or the oceanic affinities of neritic invertebrate faunas. No work to date has been published concerning the palaeo-floristic affinities of the marine benthic calcareous algae, an important group in the formation of Phanerozoic reef complexes.

Progress made to date in determining the palaeo-floristic affinities of the Mesozoic benthic calcareous algae found within various sub-neritic deposits of east and south-eastern Asia is detailed, together with the methods utilised for the recognition of such features within the assemblages examined. Palaeoclimatic and palaeobiogeographic influences most likely to have affected the dispersal and distribution of marine microflora within the region during Jurassic/Cretaceous times are then discussed, and the inferences drawn from this compared and contrasted with the known provincial affinities of the contemporaneous regional terrestrial and marine biotas. Finally, the possibility that the South-East Asian region constitutes a distinct microfloral sub-province within the Late Jurassic/Early Cretaceous Tethyan/Indo-Pacific transition zone is explored, and evidence supporting this concept expounded.