RUGOSE CORALS AT THE TOURNAISIAN-VISEAN TRANSITION IN THE CENTRAL TAURIDES (S TURKEY) – PALAEOBIOGEOGRAPHY AND PALAEOCEANOGRAPHY OF THE GONDWANA MARGIN

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The Rugose corals association of the upper Tournaian-lower Visean Yaricak Formation in the Aladag Unit, Central Taurides (South Turkey) is composed of fifteen species belonging to twelve genera. The corals are stratigraphically distributed in four assemblages. The two lower assemblages, typical of the upper Tournaian, are composed of widely distributed taxa (Uravinia, Caninia, Proheterelasma, Zaphrentites). The assemblage crossing the Tournaian-Visean boundary is characterized by Eurasian and cosmopolitan taxa (Calciussiphylum, Siphonophyllum, Bifossularia Amygdalophyllum, Caninophyllum, Keyserlingophyllum) or Asian taxa (Kueichophyllum, Eokonickocarinia). The youngest assemblage is Moliniacian (Lower Visean) in age. These assemblages form a low diversity bottom-level community typical of the South Palaeotethys ‘Kueichophyllum Zone’ extending along the Asian margin of Gondwana (Cimmerian Terrane) during early Carboniferous times. Such an assemblage is interpreted as a temperate-water coral fauna. As in the other Cimmerian blocks (in Caucasus, Iran, Afghanistan, Tibet) all the corals are solitary and colonial taxa are virtually absent. This absence is tentatively explained by the high latitude (c. 50°) position of the Cimmerian Terrane in the southern part of the Palaeotethys Ocean for this time slice. Cold-water palaeocurrents running eastward along the Gondwana margin might also be considered as it possibly could explain the global distribution of the Kueichophyllum fauna, restricted to the east of Africa in the southern coast of the Palaeotethys. A longitudinal physical barrier is considered with a query.