

Occurrence of Holocene Benthic Foraminifers in the Bay off Bengal, Rakhine Coast, Myanmar

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Abstract

The occurrence of Holocene foraminifera species in the Bay off Bengal, Rakhine Coast is one of the oceanographic projects undertaken for the first time in Myanmar contributing mainly to the marine Geology of Myanmar. The purposes of this study are to record and describe the Holocene Foraminifera as found in the Myanmar seas especially in the Rakhine shelf. A total of (76) foraminifera species and varieties belonging to (41) genera have been found and recorded from the beach sands collected mainly at six localities (1) Sabagyi village (2) Goff village and (3) Mazin village. Three samples were collected from beach sand and another three samples were collected at low tide at the depth of 3 m below the sea level. Their distributions are shown in the form of graphic patterns. Some Holocene foraminiferal groups are distinct in composition from those of near shore shallow marine and beach deposits. The benthic foraminifera fauna in this shallow marine area is quite distinct by having a pure shallow marine benthic assemblage consisting of *Calcarina calca* and its variants, *Streblus beccarii* and its variants, *Quinqueloculina lamarckia*, *Triloculina tricarinata*, *Asterorotalia trispinosa*, *Asterorotalia multispinosa*, *Elphidium crispum*, *Elphidium advenum* with some shallow marine larger foraminifera such as *Amphistegina radiata*, *Peneroplis planatus*, *Operculina ammonoides*, *Operculina complanata* and some arenaceous forms, *Ammobaculites exigus*, *Textularia fuliacea* and *Bigenerina irregularis*. The foraminiferal assemblages in the Bay off Bengal, Rakhine Coastal area were grouped into the two populations (1) *Asterorotalia trispinosa*, *Elphidium advenum*, *Operculina complanata*, *Poropoeponides cribrorepandus*, *Streblus beccarii* var.2, *Streblus beccarii* var.3 and *Triloculina tricarinata*. Areas near the straits influenced by strong tidal and bottom currents. (2) *Amphistegina radiata*, *Nonion stelligerum*, *Streblus beccarii* var.1 and *Textularia fuliacea*. All of beach fauna are dated as Holocene fossils even though some range from Cretaceous to Tertiary. Recent beach sand from the Rakhine Coast do not contain any deep marine foraminiferal members. An attempt has been made to correlate the Bengal Basin fauna with the known Holocene fauna from the Atlantic and Pacific regions.