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The distribution of modern Smaller Benthic Foraminifera offshore Brunei Darussalam

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Brunei Darussalam is located at the edge of the so-called "Coral Triangle" within the Indo-Pacific Realm and should yield an impressive biodiversity. The aim of this work is to check whether foraminiferal biodiversity equals or not those of the surrounding countries where a biodiversity hotspot has been already proven. In this direction, a previous study was made focusing on the depth distribution of larger benthic foraminifera from sandy patches from six sites offshore Brunei Darussalam and the results obtained pointed toward a possible inclusion of Brunei into the biodiversity hotspot, so a more complete study of the entire fauna seems mandatory at this stage. This study focuses therefore on the diversity and distribution of recent smaller benthic foraminifera from six sandy patch sites and an addition of one muddy substrate site offshore Brunei Muara together with two transects offshore the villages of Muara and Tutong from depths of 20 to 60 m. The purposes of this study are to quantify the diversity of smaller benthic foraminifera and to check whether their depth distribution correlates with different substrate or nutrients requirements. A comparison with other areas within the Indo-Pacific region is mandatory to understand the peculiarities among the living habitats of the smaller benthic foraminifera. Preliminary results show that among the foraminifera observed from the different offshore samples, the suborder Rotaliina dominates followed by Miliolina, Textulariina and Lagenina. Few planktonics are also present. It seems that their depth distribution is affected by the different environmental conditions such as light intensity, water energy and trophism, which all correlate the substrate type of the area studied.