

A New Standard Facies Belt and Biofacies Approach Based on Acropora Coral in Ujunggenteng Area, West Java Province, Indonesia

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Abstract

Acropora coral is one of coral, which found as a builder of reefal limestone. So far, the study about Acropora coral just stop for the study about coral shape, we call it with branching corals, and known as bafflestone facies in limestones. Studies about taphonomy and the presence of coral as a divider in the limestone facies and limestone biofacies still rarely performed. One location that shows the distribution of coral Acropora with good exposed along the Ujunggenteng Beach, Sukabumi, West Java, Indonesia, at coordinates 70 21 '31.2 " - 70 22' 30" latitude and 1060 24 '12.2 " - 1060 25' 30" longitude, To understand the aspects of paleontology with well, detailed mapping and supported by laboratory analysis were done. Results of morphological observation showed that the coral Acropora Ujunggenteng area consists of five species, namely Acropora cervicornis, Acropora palifera, Acropora gemmifera, Acropora humilis, and Acropora palmata. Five coral can be divided into three biofacies associations and each of that has a specific characteristics. Its namely with association Acropora cervicornis - Acropora palmata (thanatocoenose), Acropora gemmifera - Acropora humilis, and Acropora cervicornis - Acropora palifera. After analyzing biofacies, limestone standard facies belt analysis was performed. The new approach is made limestone standard facies classification in the Ujunggenteng area, which is based on depositional environment and coral taphonomy. Based on these parameters, limestone standard facies in Ujunggenteng area can be divided into three groups limestone facies, which is proposed as Shoreface - thanatocoenose coral, Open shelf - thanatocoenose coral, and Shelf margin - biocoenose coral.