

Unusual Formations in the B. R. Chinchorro Bank: Microatolls

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Abstract

There are unique reef patches in the Biosphere Reserve Banco Chinchorro reef lagoon that have an unusual formation. They appear to be miniature atolls. These formations are at a depth of 2-6 m; however, a few meters away, presenting flowering microatolls occur while others are strongly impacted. In this context, to define the causality of this phenomenon, an analysis of three of these formations was carried out; to try to relate the structure of the corals that make up these formations to the factors of the environment. Records in nictemeral cycles, twelve environmental parameters, and micronutrients. Despite their closeness, the diversity of these patches is high in two of them and very low in the third. These results show notable differences that typify each of them, according to their position on the reef (leeward and windward), in addition, these patterns relate to the underwater scurry of possible relict water that drains from the lagoon microsystem of the main island of the reef, Cayo Centro, towards the microatolls.

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