

INFLUENCE OF SURFACE COMPLEXITY ON CORAL RECRUITMENT AT MAITON ISLAND, PHUKET, THAILAND

Nalinee Thongtham and Hausa Chansang

Phuket Marine Biological Center, P.O. Box 60, Phuket 83000, Thailand

ABSTRACT

Studies were carried out on recruitment of corals using different complexities of concrete cylinders welded together to form 50x50x50 cm triangular structures. The size and number of cylinders determined the complexity of the structures, which were laid out in a horizontal position in a coral community northeast of Maiton Island, Phuket. After 25 months, the first survey found *Porites* to be the most dominant of the corals that had settled on these structures. The second survey, completed six months later, found that *Porites* was still the most dominant coral, but that the fire coral, *Millepora*, had the highest rate of survival. The number of colonies and the percentage and diversity of surviving corals were significantly higher on high-complexity structures than on the less complex ones. Both studies concluded that at Maiton Island, artificial substrate provided a more suitable area for settlement and growth of coral larvae than natural substrate.