CORAL MORTALITY FOLLOWING THE 2010 MASS BLEACHING EVENT AT KUT ISLAND, THAILAND

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ABSTRACT: The impact of elevated water temperatures in May-August 2010 on coral assemblages at Kut Island, in the eastern Gulf of Thailand was assessed by quantifying the changes of live coral cover before and after the 2010 bleaching phenomenon at three study sites. The coral mortality as a result of the bleaching varied significantly among the three study sites. Corals at Ao Kralang had the highest percentage mortality (45%) whereas Ao Phrao had the lowest (26%), the latter site being subject to relatively high water-flow. Substantial differences in mortality were found among coral taxa. Fungiids showed the lowest percentage mortality (<5%) while all observed colonies of Montipora spp., Acropora spp. and Pocillopora damicornis completely died. Recovery of these corals will depend on recruitment from neighboring reefs where some surviving colonies were observed.

Key words: coral bleaching, mortality, Kut Island, Gulf of Thailand