P56. MONITORING CORAL RECOVERY AT NEARSHORE CORAL REEFS IN PHANGNGA PROVINCE, THE ANDAMAN SEA FOLLOWING THE 2010 CORAL BLEACHING EVENT

Makamas Sutthacheep¹, Thamasak Yeemin¹, Sittiporn Pongsakun¹, Kanwara Sangmanee¹, Juthamart Putthayakool¹

¹Marine Biodiversity Research Group, Department of Biology, Faculty of Science Ramkhamhaeng University, Bangkok 10240, THAILAND
smakamas@hotmail.com

Mass bleaching and subsequent mortality of scleractinian corals in response to elevated seawater temperatures has been considered as one of the most impacts of global climate change. Three extensive coral bleaching events in the Andaman Sea were reported, in the years 1991, 1995 and 2010. Studies on survival of coral colonies, coral recruitment and community structure of coral reef associated macrofauna would predict the trends for coral recovery from the impacts of coral bleaching events. The present study aimed to examine the status of coral communities, density of coral recruits and coral reef associated macrofauna at nearshore coral reefs in Phangnga Province, the Andaman Sea following the 2010 coral bleaching event. The dead coral cover was high (>50%) while the live coral cover was in the range of 13-21%. There was high diversity of coral recruits on natural substrates. The average densities of macrobenthic fauna varied from 1.9 to 2.6 individuals.m⁻², with significant differences among study sites. The dominant macrobenthic species were a soft coral (Lobophytum sp.), a sea star (Linckia laevigata) and a sea urchin (Echinostrephus molaris). Coral recovery at these coral reefs would be possible but local anthropogenic stressors must be overwhelmingly reduced in order to enhance coral reef resilience. The long-term monitoring programs in the Andaman Sea are required for decision makers to support their adaptive management approaches.