

Spatio-temporal variation in scleractinian coral recruitment along the Andaman Coast of Thailand

Kacharat Phormkhunathon¹, Thamasak Yeemin¹

¹*Marine biodiversity research group, Department of Biology, Faculty of Science, Ramkhamhaeng University, Thailand*

Correspondence: kacharat_007@yahoo.co.th

The spatial and temporal variation of scleractinian coral recruitment was examined in 2004-2006 in three provinces of southern Thailand, in the Andaman sea. Ten study sites, each with 36 settlement plates, were placed on the reefs. The dominant groups of recruits were *Pocillopora* spp., *Fungia* spp., *Porites* spp., and *Platygyra* spp.. The highest density of coral recruits was *Pocillopora* spp. (322 recruits/m²). There were much temporal variation in scleractinian coral recruitment. The peaks of coral recruitment for several genera recorded were in the periods of March-May. In certain tsunami affected areas, densities of coral recruit in 2006 were much higher than those in 2005. Lower density of coral recruits were found on the lower surface of the settlement plates. Most coral recruits were settled on horizontal and oblique positions of the settlement plates. Significant spatial variation in coral recruitment patterns were detected. High diversity of coral recruits were found on certain islands near the coastline. Different recruitment patterns of the dominant groups of recruits underline the importance of life history strategies for maintenance mechanisms and processes of scleractinian coral populations. The present study provides important basic data for coral reef restoration planning.

Keywords: Coral, Recruitment, Andaman