
Species diversity and distribution of gorgonians at Had Khanom – Mu Ko Thale Tai National Park, Thailand

Voranop Viyakarn*, Thepsuda Loyjiw, Chalothon Raksasab
and Suchana Chavanich

Chulalongkorn University, Bangkok, Thailand, *e-mail: vvoranop@chula.ac.th

The purpose of this study was to investigate the diversity and distribution of gorgonians at Had Khanom-Mu Ko Thale Tai National Park using the SCUBA diving technique. Samples were photographed and some were collected and preserved in 70% alcohol for further identification and for being reference specimens. Shapes and characteristics of colonies and sclerites of gorgonians were used to identify to genus level. Fifteen genera from 7 families of gorgonians were found. These included: Family Anthothelidae, *Solenocaulon*; Family Subergorgiidae, *Subergorgia*; Family Melithaeidae, *Melithaea*; Family Acanthogorgiidae, *Anthogorgia*; Family Plexauridae, *Euplexaura*, *Echinomuricea*, *Echinogorgia*, *Menella*, *Astrogorgia*; Family Gorgoniidae, *Rumphella*, *Pseudopterogorgia*; and Family Ellisellidae, *Ctenocella*, *Junceella*, *Dichotella* and *Verrucella*. The highest number of gorgonians, 15 genera, was found at Ko Rab, followed by 12 genera at Ko Tan and Ko Mut Sum. The genus *Subergorgia* showed the highest density (0.05 colony/m²), followed by *Ctenocella* and *Menella*. All gorgonians were usually found in 5 m depth of water or deeper, and were normally attached to rocks, dead corals, or rubble that lay beneath sand or silt substrates. Their distribution was clumped. Moreover, in this study, 3 genera, *Anthogorgia*, *Pseudopterogorgia*, and *Verrucella*, were found to be first records for Thai waters, and another 3 genera, *Solenocaulon*, *Astrogorgia*, and *Euplexaura*, were also first records for the Gulf of Thailand.