
Relationships and associations of nudibranches with other organisms at Had Khanom – Mu Ko Thale Tai National Park, Thailand

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Nudibranches belong to the mollusk group but have no shell protecting the soft body. Due to the lack of a shell, nudibranches are prone to predators. However, they protect themselves by producing secondary metabolic compounds, which are used as a chemical defense. Some secondary metabolic compounds exhibit potent cytotoxic activities against cancer cells, such as secondary metabolic compounds in *Jorunna funebris* found at Had Khanom. However, little is known about the biology and ecology of these particular nudibranches in Thailand. At present, in Thailand, approximately 110 species of nudibranches have been found including those from a previous study at Had Khanom - Mu Ko Thale Tai National Park. The purpose of this study was to investigate the relationships and associations of nudibranches with other organisms including determining their food and habitats. Surveys were done by scuba diving. During the surveys, size, habitat, food, and behavior of nudibranches in each species were recorded. The results from the field surveys showed that most nudibranches found at Had Khanom - Mu Ko Thale Tai National Park were associated with either hydroids, sponges, sea pens, soft corals, or bryozoans depending on which were their food sources. However some which had conspicuous and contrasting color patterns tended to be found on sand and bare rocks, and were active during the day. These included nudibranches in the Family Phyllidiidae. The results from the surveys also showed that the dominant species was *Flabellina rubrolineata* followed by *Jorunna funebris*. This may be due to the high abundances of their food sources. *F. rubrolineata* fed on hydroids while *J. funebris* fed on blue sponges.