

IDENTIFICATION OF SPONGES FROM KARAH ISLAND

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**IDENTIFICATION OF SPONGES FROM  
KARAH ISLAND**

By  
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## DECLARATION

I hereby declare that this thesis entitled Identification of Sponges from Karah Island is the result of my own research except as cited in the references.

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## ABSTRACT

Sponges are the oldest and successful living multicellular invertebrates commonly found widely in the world. However, identification of sponges is still ongoing especially in Malaysia scenario. Beside to discover and describe species of sponges in this region, it is also to disseminate and contribute knowledge in the sponge systematic. The aim of this study is to identify and characterize marine sponges' distribution from Karah Island, Terengganu. In addition this project lead the effort to provide more information of these species and encourage sponges' exploration for others significance. Several samples of sponges from Karah Island were collected. Identification and characterization of sponges were based on morphology of sponges like habitat, colour, shape, surface characteristic and consistency and type of spicules or fiber. Skeleton architecture composed of spicules was used widely in this study as main indicator of sponges' identification. Results showed that four obtained specimens were identified up to the species level. Another 20 species were identified up to genus level and six species were identified only up to family level. Results indicated that ten orders from class of Demospongiae were obtained during this study. This finding indicated that population of sponges from Malaysia's island were abundance with 85% of Class Demospongiae.



## ABSTRAK

Span adalah multiselular invertebrata paling tua dan berjaya yang boleh ditemui di seluruh dunia. Walau bagaimanapun, pengenalpastian span masih dijalankan terutamanya dalam senario Malaysia. Selain mencari dan menerangkan spesis yang wujud di kawasan berkenaan, kajian ini juga adalah bertujuan untuk menyebarkan dan menyumbangkan pengetahuan dalam bidang taksonomi span. Tujuan kajian ini adalah untuk mengenalpasti dan menggambarkan taburan span dari Pulau Karah. Tambahan lagi, projek ini adalah salah satu usaha membekalkan maklumat mengenai spesis ini serta menggalakan penerokaan span bagi kepentingan lain. Beberapa sampel span dari Pulau Karah telah diambil. Pengenalpastian dan kriteria span adalah berdasarkan morfologi span seperti habitat warna, bentuk, ciri permukaan dan jasad dan jenis spikul atau fiber. Struktur skeleton span terdiri daripada spikul merupakan kaedah utama pengenalpastian yang telah digunapakai dalam kajian ini. Keputusan menunjukkan empat spesimen telah dikenalpasti hingga ke peringkat spesis. 20 spesis lain telah dikenalpasti sehingga peringkat genus manakala enam spesis hanya dapat dikenalpasti sehingga peringkat family sahaja. Sepuluh order dari kelas Demospongiae telah berjaya dikenalpasti. Penemuan ini menunjukkan populasi span dari pulau di Malaysia adalah banyak dengan 85% daripadanya adalah dari kelas Demospongiae.