

**SPECIES COMPOSITION AND FOOD HABITS OF FISHES
FOUND IN THE MANGROVE SWAMP AT PAKA,
TERENGGANU**

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KUSTEM**

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Paka, Terengganu / Liew Chih Nie.

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**SPECIES COMPOSITION AND FOOD HABITS OF FISHES FOUND IN
MANGROVE PAKA, TERENGGANU**

BY:

LIEW CHIH NIE

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PUSAT PEMBELAJARAN DAN PENYELIAAN NUR ZAHIRAH

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APPROVAL AND CERTIFICATION FORM

I certify that the report of this final year project entitled by 'LIEW CHIH NIE', metric no. UK 4128 have been read and all the alteration and correction recommended by examiners have been done. This thesis submitted to Department of Biological Science, have been accepted as fulfillment of the requirement for degree of Bachelor Applied Science (Conservation and Management of Biodiversity) in Faculty of Science and Technology, University College of Science and Technology Malaysia, KUSTEM.



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ABSTRAK

Paya bakau di Sungai Paka, Terengganu merupakan satu kawasan yang kaya dengan populasi ikan. Sebanyak 192 ikan telah ditangkap semasa penyamplian. 24 spesis yang terdiri daripada 18 famili, 2 subfamili, 8 order dan 5 suborder. Kebanyakan ikan yang diperoleh ialah ikan air masin dan sebahagian daripadanya merupakan penghuni sementara di paya bakau. *Arius caelatus* didapati ialah spesis ikan yang terbanyak sekali. Spesis diversiti ditentukan dalam kajian dengan menggunakan indeks Simpson (D) iaitu 0.38 dan indeks Shannon-Wiener (H) iaitu 1.78. Nilai kesamarataan (E) yang ditentukan daripada kekayaan bilangan spesis ikan telah mencatatkan nilai sebanyak 0.56. Tabiat pemakanan ikan ditentukan dengan mengenalpasti isi kandungan perut ikan. Di antara 192 perut ikan, 30 daripadanya adalah kosong. *A. caelatus* mencatatkan bilangan perut yang penuh sekali dibanding dengan spesis ikan yang lain. Daripada komposisi makanan, item makanan seperti krustacea, molluska, ikan, insecta, bahagian tumbuhan dan pseudoselom telah diperoleh. Invertebrata menjadi makanan utama bagi pemangsa ikan misalnya krustacea yang terdiri daripada peratusan yang tertinggi di kalangan jenis makanan.

ABSTRACT

The mangrove swamp at Paka, Terengganu provides an abundance of fish population. A total of 192 specimens were caught during the samplings, 24 species belong to 18 families, 2 subfamilies, 8 orders and 5 suborders. Most of these fishes were considered marine fish, and some of were transients in the mangrove. *Arius caelatus* is the most abundance species that was found. The species diversity was estimated in this study by using the Simpson's index (D) which is 0.38, and Shannon-Wiener index (H) which is 1.78. The evenness value (E) of the abundance of fish species calculated is 0.56. The feeding habits of the fishes in the mangrove were determined from stomach content. Out of 192 stomachs dissected, 30 were empty. *A. caelatus* had the most number of full stomachs among the species studied. From the diet composition of the fishes, prey groups like crustacean, mollusca, fish, insecta, plants part, and pseudoselom were found. Most of the fish species in this mangrove are considered as carnivores and omnivores. The predators feed mainly on invertebrates such as crustaceans which contribute the highest percentage of food items.