

MANGROVE FISH COMMUNITIES STRUCTURE OF  
KUANTAN RIVER, MIANG RIVER, AND PONTIAN RIVER  
IN PAHANG

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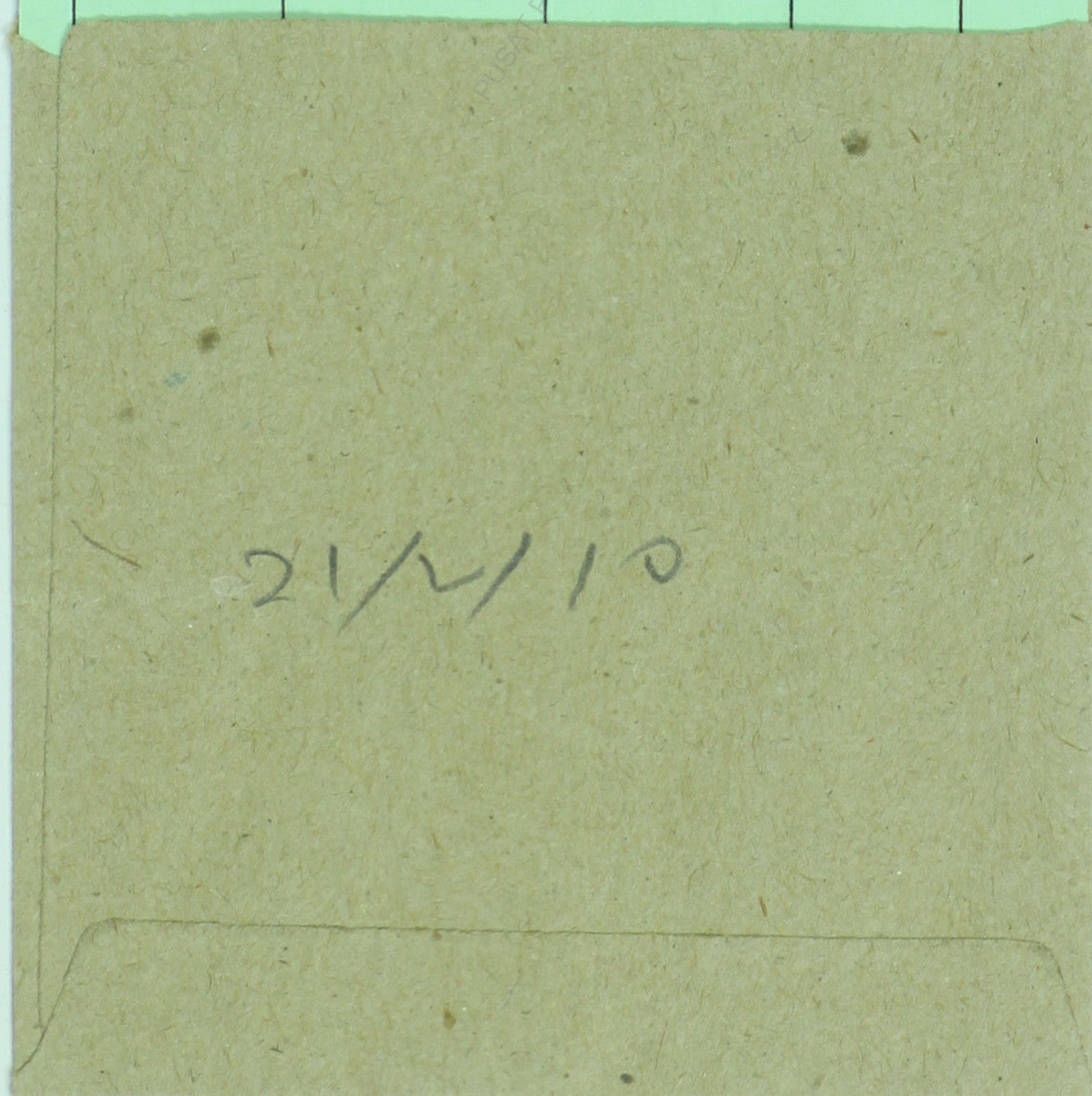


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**MANGROVE FISH COMMUNITIES STRUCTURE  
OF KUANTAN RIVER, MIANG RIVER, AND  
PONTIAN RIVER IN PAHANG.**

By

**TANG WENG LOK**

This project report is submitted in partial  
fulfilment of the requirements for the  
Degree of Bachelor of Science (Hons) Biology

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**APPROVAL AND CERTIFICATION FORM**

I certify that the report of this final year project entitled 'Mangrove Fish Communities Structure of Kuantan River, Miang River, and Pontian River in Pahang' by TANG WENG LOK, metric no. UK3648 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 fulfilment of the requirement for Degree of Bachelor of Science (Hons) Biology in Faculty of Science and Technology, Kolej Universiti Sains Dan Teknologi Malaysia, Universiti Putra Malaysia Terengganu.


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## ABSTRACT

The Kuantan River, Miang River, and Pontian River mangrove estuaries are suitable habitat for the fish communities along the Pahang coastal zone. Trammel nets were used in this study. The fish community structure was worked out, based on the identification through the morphology of fishes, composition, abundance, diversity, and similarity. These mangrove areas were inhabited by 47 species of fish belonging to 23 families. The Kuantan River, Miang River, and Pontian River recorded 21, 15, and 24 species of fishes respectively from the total of 492 specimens. Amongst the fish families; Ariidae, Mugilidae, Engraulidae, Tetraodontidae, and Sciaenidae are the dominant families along side with others such as Batrachoididae, Pristigasteridae, Muraenidae, Haemulidae, Periophthalmidae, Ambassidae, Cyprinidae, Toxotidae, Scatophagidae, Siganidae, Gobidae, Plotosidae, Drepanidae, Megalopidae, Centropomidae, Apogonidae, Bagridae and Lutjanidae. Many of the fish species were also common species found in the mangrove habitats but not all of them are permanent resident. Some are migrant species from the deep sea. Result showed that the *Rhizophora* and *Brugueira* zones are the highest in abundance of fish.

## ABSTRAK

Sungai Kuantan, Sungai Miang, dan Sungai Pontian hutan paya laut merupakan suatu habitat yang sesuai untuk komuniti ikan di sepanjang persisiran pantai Pahang. Pukat tiga lapis digunakan dalam kajian tersebut. Kajian terhadap struktur komuniti ikan ini adalah berdasarkan kepada pengenalpastian melalui morfologi ikan, komposisi, taburan, diversiti, dan kesamaan species ikan. Kawasan paya laut ini didiami oleh 47 spesies ikan daripada 23 famili. Sungai Kuantan, Sungai Miang, dan Sungai Pontian merekodkan sebanyak 21, 15 dan 24 spesies ikan masing-masing daripada jumlah 492 tangkapan. Antara famili ikan; Ariidae, Mugilidae, Engraulididae, Tetraodontidae, dan Sciaenidae merupakan famili yang dominan manakala Batrachoididae, Pristigasteridae, Muraenidae, Haemulidae, Periophthalmidae, Ambassidae, Cyprinidae, Toxotidae, Scatophagidae, Siganidae, Gobidae, Plotosidae, Drepanidae, Megalopidae, Centropomidae, Apogonidae, Bagridae and Lutjanidae juga terdapat di kawasan paya laut dalam kajian ini. Kebanyakan spesies ikan adalah tidak asing di kawasan paya laut tetapi bukan semua species ikan merupakan penghuni tetap. Di samping itu, sesetengah merupakan migrasi daripada tempat lain. Keputusan juga menunjukkan zon *Rhizophora* dan *Brugueira* adalah kawasan paling tinggi merekodkan jumlah tangkapan.