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A preliminary study on distribution of riparian vegatations at Merang River, Setiu, Terengganu / Hazwani Noor Mohd Yahya.



#### PERPUSTAKAAN

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# A PRELIMINARY STUDY ON THE DISTRIBUTION OF RIPARIAN VEGETATION AT MERANG RIVER, SETIU, TERENGGANU.

 $\mathbf{B}\mathbf{y}$ 

Hazwani Noor binti Mohd Yahya

Research Report submitted in partial fulfillment of the requirements for the degree of Bachelor of Science (Marine Biology)

Department of Marine Science
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## LIST OF ABBREVIATIONS

S Species richness

E Species evenness

H Species diversity

DBH Diameter at breast height

m Meter

N North

E East

° Degree

Minute

°C Degree Celsius

% Percentage

cm Centimeter

DGPS Digital Global Positioning System

km Kilometer

cm<sup>2</sup> Centimeter square

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#### **ABSTRACT**

Riparian forest has not been studied in Malaysia. This is due to the lack of knowledgment about the ecosystem and the important of riparian areas. The riparian vegetation at Merang River is not much varying. There were 26 of total sampled species belonging to 18 families had collected during the sampling. Inventory technique was used to measure the distribution of riparian vegetation at Merang River. From the inventory method. only 14 plots were established along the river. The database of PC-ORD had used for data analysis such as species richness, species evenness and species diversity. *Melaleuca leucadendron* have the highest species diversity (1.702) with species richness (7). Despites, *Nypa fruticans* had the greatest number of species evenness with 0.9883.

The objectives of the study are to determine the distribution of the riparian vegetation at Merang River. Besides that, this study was used for to know the density and dominance of the riparian vegetation including determining species richness, species evenness and species diversity using PC-ORD analysis.

#### **ABSTRAK**

Hutan riparian masih belum dikaji di Malaysia. Ini kerana kurangnya pengetahuan mengenai ekosistem dan kepentingan kawasan riparian. Tumbuhan riparian di Sungai Merang tidak mempunyai kepelbagaian. Terdapat 26 spesies sampel di bawah 18 famili yang telah dikaji. Teknik inventori digunakan untuk mengira taburan tumbuhan riparian di Sungai Merang. Daripada kaedah inventori ini, hanya 14 plot yang telah dilakukan di sepanjang sungai ini. Pangkalan data PC-ORD digunakan untuk analisis data seperti 'species richness, S', 'species evenness, E' dan spesies diversiti, H. *Melaleuca leucadendron* mempunyai kepelbagaian spesies yang tinggi (1.702) dengan 'species richness' (7). Sementara itu, Nypa frutican menunjukkan species evenness yng tertinggi iaitu 0.9883. Objektif bagi kajian ini adalah mengetahui taburan tumbuhan riparian di Sungai Merang. Selain itu, kajian ini juga adalah mengenai kepadatan dan tumbuhan dominan di kawasan riparian termasuk 'species richness, S', 'species evenness, E' dan spesies diversiti, H dengan menggunakan analisis PC-ORD.