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Classification and distribution of mangrove forest in the north of Setiu, Terengganu using aerial photo interpretation technique / Lim Chia Kia.



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Pengarang <b>LIM CHIA KIA</b>		No. Panggilan	
Judul <b>Classification and distribution of mangrove</b>		LP 26 FST	
Tarikh	Waktu Pemulangan	Nombor Ahli	Tanda Tangan
15/02/05	100 pm	UK 7736	✓
21/3/05	3.45 pm	UK 7739	✓
21/7/05	12/00 pm	840312-08 5982	✓
21/8/05	2/00 pm	UK 7720	✓
17	4-30 pm	UK 7745	✓
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18/2/10

**CLASSIFICATION AND DISTRIBUTION OF MANGROVE FOREST  
IN THE NORTH OF SETIU, TERENGGANU  
USING AERIAL PHOTO INTERPRETATION TECHNIQUE**

**By**

**LIM CHIA KIA**

**This project report is submitted in partial fulfillment of the  
requirements for the degree of Bachelor of Science (Marine Science)**

**Faculty of Science and Technology**

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## Abstract

Mangrove forest in East Coast of Peninsular Malaysia has not been completely studied compared to the West Coast of Peninsular Malaysia. This is due to the distribution of mangrove in the East Coast is lesser than in the West Coast. This study is to collect baseline data about the classification and distribution of mangrove forest in the North of Setiu, Terengganu. The study area consists of 11 villages, 12 islands and 1 swamp place. Construction of map of the study area was based on the interpretation of aerial photos of scale 1: 5 000. Topography map with scale 1: 50 000 was used as secondary source. The final map shows the distribution of mangrove forest in study area. There are eight class of mangrove forest found in study area which are Nypa, Bruguiera, mixed-mangrove, Bruguiera-Lumnitzera, Melaleuca, Rhizophora, Avicennia-Ceriops and Nypa-*E. grandis* . The total area coverage is 1087.4481ha and the total distribution of mangrove forest is 418.3471 ha. Percentage of each classes are 26.72% of Nypa forest, 17.21% of Bruguiera forest, 36.87% of Mixed-Mangrove forest, 3.54% of Bruguiera-Lumnitzera forest, 6.53% of Melaleuca forest, 2.72% of Rhizophora, 3.01% of Avicennia-Ceriops forest and 3.41 of Nypa-*E. grandis* forest. The accuracy of interpretation is 85%. Although the scale is suitable to classify the forest type, only those who are experienced and skilled in photo interpretation and familiar with the area will get the better and high accuracy. It is still a good exercise for a beginner to learn about this field.

## Abstrak

Kajian terhadap hutan paya bakau di pantai timur Semenanjung Malaysia tidaklah begitu lengkap berbanding dengan di pantai barat Semenanjung Malaysia. Ini berikutan taburannya yang lebih banyak tertumpu di pantai barat berbanding dengan pantai timur. Kajian ini adalah untuk mengumpul maklumat asas atau panduan (baseline) tentang klasifikasi dan taburan hutan paya bakau di utara Setiu, Terengganu. Kawasan kajian meliputi 11 kampung, 12 pulau dan 1 kawasan paya. Pembuatan peta kawasan kajian adalah berdasarkan penaksiran foto udara dengan skala 1: 5 000. Peta topografi dengan skala 1: 50 000 digunakan sebagai sumber rujukan yang kedua. Pemetaan kawasan kajian menunjukkan taburan kelas hutan paya bakau yang ada di kawasan kajian. Terdapat lapan kelas hutan paya bakau di kawasan kajian iaitu Nipah, Bruguiera, mixed-mangrove, Bruguiera-Lumnitzera, Melaleuca, Rhizophora, Avicennia-Ceriops dan Nypa-*E. grandis*. Jumlah keluasan kawasan kajian ialah 108.7448 ha dan jumlah taburan hutan paya bakau ialah 418.3471 ha. Peratusan untuk setiap kelas adalah 26.72% untuk hutan Nypa, 17.21% untuk hutan Bruguiera, 36.87% untuk hutan campuran (Mixed-Mangrove) forest, 3.54% untuk hutan Bruguiera-Lumnitzera, 6.53% untuk hutan Melaleuca, 2.72% untuk hutan Rhizophora, 3.01% untuk hutan Avicennia-Ceriops dan 3.41% untuk hutan Nypa-*E. grandis*. Ketepatan dalam penaksiran ialah 85%. Walaupun skalanya memang sesuai untuk mengelaskan jenis hutan, hanya mereka yang berpengalaman dan mahir dalam bidang penaksiran serta sudah biasa dengan kawasan tersebut akan mendapat ketepatan yang lebih baik dan tinggi. Ia merupakan satu latihan yang baik untuk mereka yang baru menceburi bidang ini.