

MAPPING OF MANGROVE FOREST IN PEKAN,
TAMBUK USING REMOTE SENSING

DIKEMUKAKAN OLEH
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MAPPING OF MANGROVE FOREST IN PEKAN, PAHANG USING REMOTE SENSING

PROJECT AND SEMINAR

(SSA 3199)

BY:

**KHAIRI SHAH BIN KADERAN
UK 3217**

PUSAT PEMBELAJARAN DIGITAL SULTANAH NU'UZZAHIRAH

**Faculty Science and Technology
KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA
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ABSTRACT

Mapping and classifications of mangrove forest in Pekan District was done by using satellite image of Landsat-7. Landsat-7 image was processed by using PCI 7.0 Programme and Supervised Classification method. Ground truth had been done based on dominant species. Accuracy assessment which determined how accurate was the classification when it is compared with ground truth data. Only classification of mangrove that has overall accuracy higher than 80% will be accepted as a map. Mangrove forest in District of Pekan had been classified into 6 classes. They are *Mix Rhizophora-Bruguiera* Forest, *Mix mangrove*, *Bruguiera* Forest, *Avecennia* Forest, *Mix Avencinnia-Sonneratcea* Forest and *Rhizophora* Forest. Landsat-7 images will provide an alternative for mangrove mapping and classification instead of using aerial photographs.

ABSTRAK

Kajian pemetaan dan penfklasifikasian hutan paya laut di Daerah Pekan dilakukan dengan menggunakan kaedah penderiaan jauh iaitu penggunaan imej Landsat-7. Imej Landsat-7 telah diproses di makmal dengan menggunakan program PCI 7.0 dan menggunakan Pengelasan Berselia. 'Ground Truth' dilakukan untuk melihat keadaan sebenar di lokasi dan pengklasifikasian hutan dibuat berdasarkan sepsis yang dominant. 'Accuracy assessment' iaitu perbandingan di antara pengklasifikasian imej dengan 'ground truth data' telah dilakukan. Pengklasifikasian yang mempunyai peratus ketepatan melebihi 80% sahaja boleh diterima sebagai peta. Hutan paya laut di daerah Pekan telah dikalsifikasikan kepada 6 jenis iaitu Mix *Rhizophora-Bruguiera* Forest, Mix mangrove, *Bruguiera* Forest, *Avecennia* Forest, Mix *Avencinnia-Sonneratcea* Forest dan *Rhizophora* Forest. Penggunaan imej Landsat-7 akan dapat memberi satu alternative lain kepada pemetaan dan pengklasifikasian hutan paya laut yang selama ini banyak bergantung kepda kaedah foto udara.