

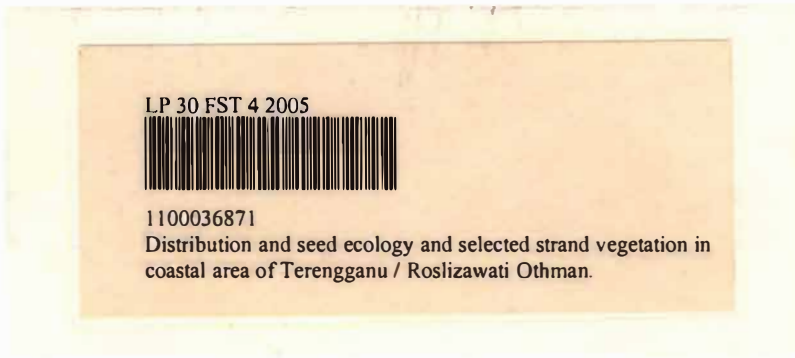
DISTRIBUTION AND SEED ECOLOGY OF SELECTED STRAND  
VEGETATION IN COASTAL AREA OF TERENGGANU

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DISTRIBUTION AND SEED ECOLOGY OF SELECTED STRAND  
VEGETATION IN COASTAL AREA OF TERENGGANU

By

Roslizawati binti Othman

Research Report submitted in partial fulfillment of  
the requirements for the degree of  
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**JABATAN SAINS BIOLOGI  
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**PENGAKUAN DAN PENGESAHAN LAPORAN  
PROJEK PENYELIDIKAN I DAN II**

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk:

**Distribution and Seed Ecology of Selected Strand Vegetation In Coastal Area of Terengganu**, oleh **Roslizawati bt Othman**, No. Matrik: **UK 7072** telah diperiksa dan semua pembedaan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Biologi sebagai memenuhi sebahagian daripada keperluan memperoleh ijazah **Sarjana Muda Sains Gunaan (Pemuliharaan dan Pengurusan Biodiversiti)**, Fakulti Sains dan Teknologi, Kolej Universiti Sains dan Teknologi Malaysia.

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## ABSTRACT

Study was carried out on the distribution and seeds of the three species of strand vegetations, consist of *Calotropis gigantea*, *Vitex trifolia* and *Fagraea fragrans*. The distribution of *Calotropis gigantea* and *Fagraea fragrans* were similar among three study sites, but significantly different for *Vitex trifolia* (Kuala Terengganu > Besut = Marang). Germination was examined with collected seeds (control) and dessication up to three weeks (dessication treatment), using filter paper and sand as a germination medium. The results of the study showed no germination for *V.trifolia* seeds compared to *C.gigantea* and *F.fragrans* seeds at lower seed moisture content. *C.gigantea* seeds survived at 5% moisture content (100% germination on filter paper and 85% germination in sand) and *F.fragrans* at 11% moisture content (89% germination on filter paper and 45% germination in sand). Filter paper was a better germination test medium compared to sand for *C.gigantea* and *F.fragrans*.

## EKOLOGI BIJI BENIH DAN TABURAN TUMBUHAN PINGGIRAN PANTAI YANG TERPILIH DI KAWASAN PANTAI TERENGGANU

### ABSTRAK

Kajian ke atas biji benih dan taburan populasi tiga spesies pinggiran pantai iaitu *Calotropis gigantea*, *Vitex trifolia* dan *Fagraea fragrans* telah dijalankan. Taburan *C.gigantea* dan *F.fragrans* adalah sama di antara ketiga - tiga kawasan kajian, tetapi terdapat perbezaan yang signifikan bagi taburan *V.trifolia* (Kuala Terengganu > Marang = Besut). Biji benih dicambahkan secara terus (kawalan) dan dikering selama tiga minggu pada suhu bilik  $27\pm 2^{\circ}\text{C}$  (rawatan pengeringan) sebelum dicambahkan dengan menggunakan medium kertas turas dan pasir. Biji benih *V.trifolia* tidak menunjukkan sebarang percambahan, berbanding dengan biji benih *C.gigantea* dan *F.fragrans* yang mampu bermandiri di bawah kandungan lembapan biji benih yang rendah. Biji benih *C. gigantea* dapat bermandiri sehingga 5% kandungan lembapan (100% percambahan dengan kertas turas dan 85% percambahan di dalam pasir). Biji benih *F.fragrans* pula bermandiri sehingga 11% kandungan kelembapan (89% percambahan dengan kertas turas dan 45% percambahan di dalam pasir). Medium kertas turas merupakan medium yang lebih baik untuk ujian percambahan biji benih bagi spesies *C.gigantea* dan *Fragraea fragrans*.