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Screening of antimicrobial properties from local edible and
flowering plants at Mengabang Telipot, Terengganu, Malaysia /
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PERPUSTAKAAN SULTANAH NUR ZAHIRAH
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HAK MILIK
PERPUSTAKAAN SULTANAH NUR ZAHIRAH UMT

SCREENING OF ANTIMICROBIAL PROPERTIES FROM LOCAL EDIBLE
AND FLOWERING PLANTS AT MENGABANG TELIPOT, TERENGGANU,
MALAYSIA

By
Azlina Binti Ismail

Research Report submitted in partial fulfillment of the requirements for the
degree of Bachelor of Agrotechnology Science (Aquaculture)

Department of Fisheries Science and Aquaculture
FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE
UNIVERSITI MALAYSIA TERENGGANU
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**FAKULTI AGROTEKNOLOGI DAN SAINS MAKANAN
UNIVERSITI MALAYSIA TERENGGANU**

**PENGAKUAN DAN PENGESAHAN LAPORAN
PROJEK ILMIAH I DAN II**

Adalah ini diakui dan disahkan bahawa laporan ilmiah bertajuk:

.....Screening of antimicrobial properties from local edible and flowering plants at
Mengabang Telipot, Terengganu, Malaysia......

.....
oleh.....Azlina Binti Ismail....., No.Matrik ..UK.16364..... telah
diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan
kepada JabatanSains Perikanan dan Akuakultur..... sebagai memenuhi
sebahagian daripada keperluan memperoleh Ijazah Sarjana Muda
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DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged.

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Date :17 MARCH 2009.....

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ABSTRACT

Antimicrobial activity of methanol crude extract of edible and flowering plants were investigated to determine the antimicrobial activity. The objective of these studies to find new sources of antimicrobial. Antimicrobial activity of methanol plant extracts were evaluated against gram negative bacteria (*Vibrio* spp, *Flavobacterium* spp, *Aeromonas* spp, *Aeromonas hydrophilla*, *Vibrio fluvalis*, *Escherichia coli*) and gram positive bacteria.(*Streptococcus agalactica*). The MIC value of plant extracts were determined by two –fold serial dilution . Nine plants extracts exhibited antimicrobial activity against one or more of tested bacteria at different concentrations. Among the tested plants, the highest antimicrobial activity was exhibited by methanol extract of *Stanolobium stans* L. But most of plants were consider having weak antimicrobial activity. This study showed the these plants have the potential as an alternative to antibiotic.

ABSTRAK

Aktiviti antimikrobial bagi ekstrak mentah methanol untuk tumbuhan yang boleh dimakan dan berbunga telah diselidik untuk menentukan aktiviti antimikrobial. Matlamat kajian ini mencari sumber antimikrobial yang baru. Aktiviti antimikrobial bagi ekstrak metanol tumbuhan telah dinilai berdasarkan penentangan ke atas bakteria gram negetif (*Vibrio* spp, *Flavobacterium* spp, *Aeromonas* spp, *Aeromonas hydrophilla*, *Vibrio fluvialis*, *Escherichia coli*) dan bakteria gram positif (*Streptococcus agalactica*). Nilai MIC ditentukan oleh siri pencairan dua kali ganda. Sembilan ekstrak tumbuhan telah mempamerkan aktiviti antimikrobial dengan melawan satu atau lebih bakteria yang telah diuji pada kepekatan yang berbeza. Diantara tumbuhan yang diuji, aktiviti antimikrobial yang paling tinggi telah ditunjukkan oleh ekstrak *Stanolobium stans* L. Kebanyakan ekstrak menunjukkan aktiviti antimikrobial yang lemah. Dalam kajian ini menunjukkan tumbuhan tersebut mempunyai potensi sebagai antibiotik alternatif.