

ESTABLISHMENT TISSUE CULTURE OF
Artemisia cina

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FAKULTAS SAINS DAN TEKNOLOGI
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ESTABLISHMENT TISSUE CULTURE OF *Avicennia alba*

By
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LIST OF ABBREVIATIONS

%	percentage
v/v	volume per volume
-OH	hydroxyl group
g	gram
g/L	gram per liter
BAP	Benzylaminopurine
TDZ	Thidiazuron
°C	degree Celcius
ml	milimeter
mg	miligram
mg/L	miligram per liter

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ESTABLISHMENT TISSUE CULTURE OF *Avicennia alba*

ABSTRACT

Mangroves are become extinction due to the development and economic values of the tree. The tissue culture or micropropagation technique can be an alternative method to conserve the mangrove especially *Avicennia alba*. The objectives of this study are to determine the suitable medium and phytohormone for tissue culture of *Avicennia alba* and its growth performance. Shoot tips and axillary bud were used as explants were obtained from mangrove area near at Universiti Malaysia Terengganu. The surface sterilization was done of varies strength of Clorox from 10% until 100% with varies immersion time from 10, 15 and 20 minutes. The best surface sterilization was obtained by using 100% Clorox with 20 minutes of immersion time which is 81% of explants were sterile. The tissue culture technique was not established due to browning of explant.

PENGHASILAN TISU KULTUR *Avicennia alba*

ABSTRAK

Pokok bakau adalah semakin pupus berikutan pembangunan dan nilai ekonomi pokok terbabit. Teknik tisu kultur atau mikropropagasi boleh menjadi langkah alternative bagi memulihara pokok bakau terutamanya *Avicennia alba*. Objektif kajian ini adalah untuk menentukan medium dan phytohormon yang sesuai bagi tisu kultur *Avicennia alba* dan kadar pertumbuhan. Hujung pucuk dan tunas digunakan sebagai eksplan diperolehi dari kawasan bakau Universiti Malaysia Terengganu. Pengsterilan permukaan dilakukan dengan kepekatan Clorox yang pelbagai dari 10% sehingga 100% dengan kepelbagaian waktu rendaman dari 10, 15 dan 20 minit. Pengsterilan permukaan yang terbaik adalah dengan 100% Clorox dan 20 minit waktu rendaman dan sebanyak 81% eksplan steril. Teknik tisu kultur tidak dapat dihasilkan berikutan eksplan yang bertukar menjadi hitam.