EFFECT OF SALINITY ON GROWTH AND
CHLOROPHYLL CONTENT OF *Kappaphycus* sp.
CULTIVARS

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Lihat sebelah

EFFECT OF SALINITY ON GROWTH AND CHLOROHYLL CONTENT OF *Homalomena* sp. cultures.

By

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Research Report submitted in partial fulfillment of
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RESEARCH REPORT VERIFICATION

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LIST OF ABBREVIATIONS

APX	-	Ascorbate peroxidase
°C	-	Celcius
CAT	-	Catalase
cm	-	Centimeter
CO_2	-	Carbon dioxide
DHAR	-	Dehydroascorbate reductase
Fwt	-	Fresh weight
g	-	Gram
GR	-	Glutathione reductase
GSH	-	Glutathione
H_2O_2	-	Hydrogen peroxide
MDHAR	-	Monodehydroascorbate reductase
mg	-	Miligram
mM	-	Mili Molar
NaCI	-	Sodium chloride
O_3	-	Ozone
$^1O_2$	-	Singlet oxygen
$O_2^{\cdot -}$	-	Superoxide radical
$OH^{\cdot}$	-	Hydroxyl radical
ROS	-	Reactive oxygen species
rpm	-	Revolution per minute

SOD	-	Superoxide dismutase
V	-	Volume

ABSTRACT

Salinity is the major environment factor limiting plant growth and productivity. Effect of high salinity on plants can be observed at the whole plant level as the death of plants and or decrease in productivity. The objectives of the study were to investigate the effect of different concentrations of NaCI on growth and chlorophyll content of *Homalomena* sp. cultures. The species were treated with 0, 25, 50 and 100 mM NaCI for 28 days in Murashige and Skoog (MS) solid medium. Results indicated that NaCI treatments did not significantly ($p > 0.05$) affected the growth parameter and chlorophyll content of *Homalomena* sp. cultures except stem height and chlorophyll content in cultures treated under 100 mM NaCI.

KESAN SALINITI TERHADAP PERTUMBUHAN DAN KANDUNGAN KLOROFIL PADA KULTUR *Homalomena sp.*

ABSTRAK

Saliniti merupakan faktor persekitaran yang utama dalam menghadkan pertumbuhan dan produktiviti tumbuhan. Kesan aras saliniti yang tinggi ke atas tumbuhan dapat diperhatikan melalui keseluruhan keadaan pokok tersebut terutamanya kematian pokok atau penurunan produktiviti. Tujuan kajian ini ialah untuk mengetahui kesan saliniti terhadap pertumbuhan dan kandungan klorofil bagi kultur *Homalomena* sp. Spesis ini dirawat dengan 0, 25, 50 dan 100 mM NaCI selama 28 hari di dalam media pepejal Murashige and Skoog (MS). Keputusan menunjukkan kepekatan NaCI tidak mempengaruhi pertumbuhan dan kandungan klorofil kultur *Homalomena* sp. kecuali bagi tinggi batang dan kandungan klorofil bagi kultur yang dirawat dengan 100 mM NaCl.