

SOME EXPERIMENTS ON THE EFFECT OF  
OIL POLLUTION ON THE MARINE ALGA  
*Enteromorpha flexuosa* (WULF. EX. ROTH.)

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alga *Enteromorpha flexuosa* (wulf.ex.roth) / Mohd.Nasir Saadon.



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SOME EXPERIMENTS ON THE EFFECT OF OIL

POLLUTION ON THE MARINE ALGA

*Enteromorpha flexuosa* (WULF. EX. ROTH).

By

MOHD. NASIR BIN SAADON

A project report submitted in partial  
fulfillment of the requirements for  
the degree of Bachelor of Science (Fishery)

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FAKULTI PERIKANAN DAN SAINS SAMUDRA

BORANG PENGESAHAN

Dengan ini disahkan bahawa kami yang bertandatangan di bawah ini telah membaca dan berpuas hati menerima laporan projek penyelidikan yang bertajuk:

SOME EXPERIMENTS ON THE EFFECT

OF OIL POLLUTION ON THE MARINE

ALGA *Enteromorpha flexuosa* (WULF. EX. ROTH)

yang disediakan oleh:

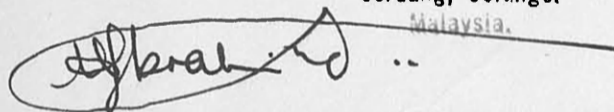
MOHD. NASIR BIN SAADON

sebagai sebahagian daripada keperluan untuk mendapatkan Ijazah Bachelar Sains (Perikanan).



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Pengerusi,  
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#### ABSTRACT

The culturing of *Enteromorpha flexuosa* was carried out under laboratory conditions in Erd-Schreiber culture medium. Two volumes of Tapis A crude oil (0.1 ml/litre and 1.0 ml/litre) were used in the preparation of Erd-Schreiber culture media containing oil to which the *E. flexuosa* germlings were introduced as a temporary treatment.

The present investigation shows that the mean lengths of the germlings of *E. flexuosa* increased significantly when the plants were treated temporarily in "culture media containing oil (0.1 ml/litre and 1.0 ml/litre)". The investigation also shows that the mean lengths of the plants increased significantly faster when the plants were treated temporarily with culture media, containing a higher concentration of oil. The results positively indicate that oil as used in the experiment has a stimulation effect on the growth of *E. flexuosa*.

The present study also shows that the exposure to the atmosphere of the seawater treated with oil progressively decreased the stimulation effects brought about by the oil. The decreased stimulation effect of oil with exposure time to the atmosphere could be due to the fact that natural processes such as evaporation, and biodegradation by bacteria remove some of the components in the soluble fraction of Tapis A crude oil which might have had a hand in stimulating the growth of the germlings of *E. flexuosa*.