

ECTOPARASITES IDENTIFICATION ON SINGAPORE  
PARROT FISH (*Sparus prasiognathus*) IN MARINE PARK  
TERENGGANU

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ECTOPARASITES IDENTIFICATION ON SINGAPORE PARROTFISH  
(*Scarus prasiognathos*) IN REDANG MARINE PARK, TERENGGANU.

By

Lo Chun Nghen

Research Report submitted in partial fulfillment of  
the requirements for the degree of  
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Department of Marine Sciences  
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ECTOPARASITES IDENTIFICATION ON SINGAPORE PARROTFISH (*Scarus prasiognathos*) IN REDANG MARINE PARK, TERENGGANU.

oleh Lo Chun Nghen, No. Matrik: UK 5844

telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Samudera sebagai memenuhi sebahagian daripada keperluan memperolehi Ijazah Sarjana Muda Sains – Biologi Marin,  
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## LIST OF ABBREVIATIONS

Fig	= figure
No.	= number
sp.	= species
DO	= dissolved oxygen
Std	= standard
°C	= degree Celsius
ppt	= part per thousand
mg/L	= milligram per liter
%	= percentage
m	= meter
cm	= centimeter
mm	= millimeter
µm	= micron meter
GAA	= glutamic acetic acid
1 <sup>st</sup>	= first
2 <sup>nd</sup>	= second
3 <sup>rd</sup>	= third
4 <sup>th</sup>	= fourth
5 <sup>th</sup>	= fifth

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## ABSTRAK

Kajian ini dijalankan tentang identifikasi ektoparasit pada ikan bayan (*Scarus prasiognathos*). Kajian ini menggunakan 30 ekor sampel ikan yang ditangkap dari kawasan Taman Laut Redang, Terengganu. Dengan menjalankan cara-cara identifikasi di dalam makmal, didapati sebanyak 10 spesis ektoparasit dewasa telah dikenalpasti, tetapi parasit nematod hanya boleh diidentifikasi sehingga order sahaja. Parasit yang dijumpai boleh dikategori kepada 5 kumpulan, iaitu subclass digenea (*Rhipidocotyle sp.*, *Transversotrema sp.*, *Unidentified sp. 1*), order copepoda (*Caligus sp.*, *Holobomolochus sp. 1*, *Holobomolochus sp. 2*), subclass monogenea (*Neobenedenia sp.*, *Ancyrocephalus sp.*), class tubellaria (*Ichthyophaga sp.*) dan class nematode (Oxyuridea nematode). Di samping itu, 3 digenetic metacercaria yang berbeza juga dijumpai. Prevelan ectoparasite terhadap seekor ikan bayan adalah 100 %, dan min keamatan adalah 5.57. Bagi setiap jenis ektoparasit, kejangkitan mereka adalah diikuti oleh digenea (prevelan= 90.00 %, min keamatan= 3.41), copepod (prevelan= 60.00 %, min keamatan= 2.89), monogenea (prevelan= 40.00 %, min keamatan= 1.17), tubellaria (prevelan= 13.33 %, min keamatan= 1.50) and nematode (prevelan= 6.67 %, min keamatan= 1.50).

## ABSTRACT

The study was done on ectoparasite identification on Singapore Parrotfish (*Scarus prasiognathos*). The study was using 30 fishes sample, which were caught at the Redand Marine Park, Terengganu. By undergoing the identification methods in laboratory, 10 species of adult ectoparasite were found, but the nematode parasite could only identified until order. They were consisted of 5 main groups, which were subclass digenea (*Rhipidocotyle sp.*, *Transversotrema sp.*, *Unidentified sp. 1*), order copepoda (*Caligus sp.*, *Holobomolochus sp. 1*, *Holobomolochus sp. 2*), subclass monogenea (*Neobenedenia sp.*, *Ancyrocephalus sp.*), class tuberculata (*Ichthyophaga sp.*) and class nematode (Oxyuridea nematode). On the other hand, 3 different type of digenetic metacercaria were also found. The prevalence of the ectoparasite to an individual parrotfish is 100 %, and the mean intensity is 5.57. For the infection of each ectoparasite, they are followed by digenea (prevalence= 90.00 %, mean intensity= 3.41), copepod (prevalence= 60.00 %, mean intensity= 2.89), monogenea (prevalence= 40.00 %, mean intensity= 1.17), tuberculata (prevalence= 13.33 %, mean intensity= 1.50) and nematode (prevalence= 6.67 %, mean intensity= 1.50).