

**INVERTEBRATES AS INTERMEDIATE HOSTS OF
THE FISH HELMINTH PARASITE**

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INVERTEBRATES AS INTERMEDIATE HOSTS OF THE
FISH HELMINTH PARASITE

by

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A project report submitted in partial fulfilment of
the requirement for the degree of Bachelor of
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Dedicated to
* Eric whose love has brought
me this far
* My late parents
* My brothers and sisters, nieces
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CONTENTS

	Page
Acknowledgements	i
Contents	ii
List of tables	iv
List of figures	v
Abstract	vii
Abstrak	viii
1.0 Introduction	1
1.1 Location of project	2
1.2 Literature review	2
2.0 Materials and methods	7
2.1 Methods of collecting samples	7
2.1.1 Chaetognath, Copepod and jellyfish	7
2.1.2 Snails, clams and limpets	7
2.1.3 Crabs	8
2.2 Obtaining parasites from hosts	9
2.3 Preparation, examination and preservation	10
2.4 Methods of measuring	11
2.5 Identification	16
2.6 Photograph taking	16
2.7 Methods of drawing	16
2.8 Scanning Electron Microscope technique	17
3.0 Results	19
4.0 Description	27
4.1 Plerocercoids and procercoids of cestode	27
4.1.1 <u>Polypocephalus</u> sp.	27

4.1.2 <u>Scolex polymorphus</u>	34
4.2 Larval stages of digenae	45
4.2.1 Cercaria and sporocysts	45
4.2.2 <u>Cercaria longicaudata</u>	45
4.2.3 Metacercaria	48
4.3 Nematodes	55
4.3.1 <u>Echinocephalus</u> sp.	55
4.3.2 Rhabditida nematode	58
5.0 Discussion	63
6.0 Conclusion	74
Literature cited	76

LIST OF TABLES

Table		Page
1	Parasite infection	
	Location: Chendering (rocky area)	19
2	Parasite infection	
	Location: Setiu	19
3	Parasite infection	
	Location: Penarek	20
4	Parasite infection	
	Location: Pulau Redang	20
5	Parasite infection	
	Location: Mengabang Telipot	21
6	Parasite infection	
	Location: Pulau Kapas	23
7	Parasite infection	
	Location: Pulau Tenggol	24
8	Prevalence and mean intensity	25
9	<u>Scolex polymorphus</u> from different hosts	34
10	Measurements of <u>Scolex polymorphus</u>	36
11	Metacercaria from various hosts	50

LIST OF FIGURES

Figure		Page
1	<u>Polypocephalus</u> sp. A	30
2	<u>Polypocephalus</u> sp. B	31
3	<u>Polypocephalus</u> sp. A and <u>Polypocephalus</u> sp. B	32
4	<u>Polypocephalus</u> sp. A in strands of muscle fibres of <u>Matuta</u> sp.	33
5	<u>Scolex polymorphus</u>	37
6	<u>Scolex polymorphus</u> A	38
7	<u>Scolex polymorphus</u> C and <u>Scolex polymorphus</u> D	39
8	<u>Scolex polymorphus</u>	40
9	<u>Scolex polymorphus</u> E	41
10	<u>Scolex polymorphus</u> F	42
11	<u>Scolex polymorphus</u> G	43
12	<u>Scolex polymorphus</u> G	44
13	<u>Cercaria longicaudata</u> and sporocyst	46
14	<u>Cercaria longicaudata</u> and sporocysts	47
15	Metacercaria B	51
16	Metacercaria B encysted in the mesoglea of leptomedusae	52
17	Metacercaria A encysted in the body cavity of <u>Sagitta enflata</u>	53
18	Metacercaria A in the head region of <u>Sagitta enflata</u>	54
19	<u>Echinocephalus</u> sp.	56
20	<u>Echinocephalus</u> sp.	57
21	Rhabditoid nematode	60

22	Rhabditoid nematode: Scanning Electron Micrograph	61
23	Rhabditoid nematode	62
24	Food relationship of the invertebrates found and their predators	64
25	Suggested life cycle of the monorchid cercaria	68
26	Suggested life cycle of the hemiuroid metacercaria	69
27	Suggested life cycle of <u>Polypocephalus</u> sp.	70

Phoxocampus was found in most of the invertebrates examined. *Palaemon* sp. was found to be heavily infected by 2 types of monogeneans identified as *Polypocephalus* sp. *Mesoclinus* sp. and *Leucaspis* sp. *Leucaspis* were also found to be heavily infected with monogeneans. *Monoculus* metacercariae was found in the *Crangon* sp., *Crangis* longicarpata in *Merluccius* lateralis, *Argentinasilus* sp. in *Merluccius* lateralis and *Merluccius* productus and a monorchid nematode in *Cyprinodon* sp.

The morphology of the basic parts of *Argentinasilus* sp. in the determination of the protobranch, life cycles of the parasites and the food relationships of *Merluccius* are discussed.

ABSTRACT

This is a study on a few invertebrates as the intermediate hosts of fish helminth parasites. The invertebrates chosen were the clams (Meretrix meretrix, Meretrix lusoria, Donax sp., Donax faba, Mactra liacea and Mactra pusilla), the crabs (Matuta sp. and Ocypode sp.), the jellyfish (Siphonophora and leptomedusae), the gastropods (Polinices didyma, Nerita sp. and Neritina sp.), the limpets, the copepods (Calanoid), the arrow worm (Sagitta enflata) and the cephalopod (Loligo sp.)

Plerocercoids were found in most of the invertebrates examined. Matuta sp. was found to be heavily infested by 2 types of plerocercoids identified as Polypocephalus sp. Mactra liacea and Mactra pusilla were also found to be heavily infested with plerocercoids. Hemiuroid metacercaria was found in the leptomedusae, Cercaria longicaudata in Meretrix lusoria , Echinocephalus sp. in Meretrix lusoria and Meretrix meretrix and a rhabditoid nematode in Ocypode sp.

Food relationship of the hosts plays an important role in the dissemination of the parasites. Life cycles of the parasites based on food relationship of hosts are discussed.

ABSTRAK

Ini merupakan satu kajian mengenai beberapa invertebrat yang menjadi perumah perantaraan endoparasit ikan. Invertebrat yang dipilih dalam kajian ialah pelecypoda (Meretrix meretrix, Meretrix lusoria, Donax sp., Donax faba, Mactra liacea dan Mactra pusilla), ketam (Matuta sp. dan Ocypode sp.), obor-obor (Siphonophora dan leptomedusae), gastropod (Polinices didyma, Nerita sp. dan Neritina sp.), limpet, copepod (Calanoida), chaetognath (Sagitta enflata) dan sotong (Loligo sp.).

Banyak pleroserkoid telah dijumpai dalam kebanyakan invertebrat yang diperiksa. Matuta sp. telah dijangkiti oleh 2 jenis pleroserkoid iaitu Polyocephalus sp. Mactra liacea dan Mactra pusilla juga didapati mendapat serangan pleroserkoid yang teruk. Metaserkaria (Hemimuridae) telah dijumpai dalam leptomedusae, Gercaria longicaudata dalam Meretrix lusoria, Echinocephalus sp. dalam Meretrix lusoria dan Meretrix meretrix dan nematod dari famili Rhabditidae dijumpai dalam Ocypode sp.

Kitaran hidup parasit-parasit ini telah dibincangkan berdasarkan pertalian makanan di antara perumah-perumah.