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Taxonomic identification of harpacticoida from Setiu Lagoon (family ectinosomatidae) / Shirley a/k Nathanael Naning.



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**TAXONOMIC IDENTIFICATION OF HARPACTICOIDA FROM SETIU LAGOON
(FAMILY ECTINOSOMATIDAE)**

By

Shirley ak Nathanael Naning

**Research Report submitted in partial fulfillment of the requirements for the degree of
Bachelor of Science (Marine Biology)**

Department of Marine Science
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**PENGAKUAN DAN PENGESAHAN LAPORAN
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Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk 'TAXONOMIC IDENTIFICATION OF HARPACTICOIDA FROM SETIU LAGOON (FAMILY ECTINOSOMATIDAE)' oleh SHIRLEY AK NATHANAEL NANING, No. Matrik UK8483. 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, Fakulti Sains dan Teknologi, Kolej Universiti Sains dan Teknologi Malaysia.

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LIST OF ABBREVIATIONS

- A.1 -Antennule (1st Antenna).
- A.2 -Antenna (2nd Antenna)
- Md -Mandible
- Mx1 -Maxillule (1st Maxilla)
- Mx2 -Maxilla (2nd Maxilla)
- Mxp -Maxilliped
- P.1-P.4 -Thoracic locomotor appendages(legs) ,pereipod
- P.5 -the fifth appendages(non-locomotory), pereipod
- Cu.r -Caudal rami
- R -Rostrum
- Cph -Cephalothorax
- Th.1- Th.4 -free thoracic segments, which consists the P.2-P.5.
- Abd -Abdomen
- An.op. -Anal Operculum
- Cmcp-9 -Mounting media low viscosity, colourless mountant
- ♀ -Female
- ° -Degree
- ' -Minute
- " -Second
- N -North
- E -East
- cm -Centimeter

μm -Micrometer

ml -Millimeter

% -Percent

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ABSTRACT

A taxonomic study on harpacticoid copepod was carried out using the samples from sediments of Setiu Lagoon, Terengganu. A total of three Harpacticoids species from Family Ectinosomatidae were found from the samples namely *Ectinosoma californicum*, *Ectinosoma* sp. and *Halectinosoma* sp.. The two species which were unidentified had some similarities to species that had been recognized by copepod taxonomists. *Ectinosoma* sp. much similar to *Ectinosoma californicum* but differences was found on the setal formula, ornamentation of thoracic somites, caudal rami and antennule. The third species, *Halectinosoma* sp. had setal formula which does not match any setal formula of genus *Halectinosoma* in any study before. Both species maybe a new harpacticoid species as the taxonomy study of harpacticoids have been poorly studied in Malaysia.

ABSTRAK

Kajian taksonomi ini dilakukan dengan menggunakan sampel sedimen dari Lagun Setiu. Tiga spesis harpaktikoid dari famili Ectinosomatidae telah dijumpai dari sampel sedimen iaitu *Ectinosoma californicum*, *Ectinosoma* sp. dan *Halectinosoma* sp.. Dua spesis lagi tidak dapat dikenalpasti melalui sumber rujukan yang ada namun ciri-ciri spesis ini mempunyai persamaan dengan spesis lain pada famili Ectinosomatidae yang telah dikenalpasti oleh ahli pengkaji taksonomi kopepoda. *Ectinosoma* sp. mempunyai banyak kesamaan pada formula setae, susunan pada bahagian toraks, kaudal rami dan antennule. Spesis yang ketiga *Halectinosoma* sp. mempunyai formula setae yang tidak menyamai mana-mana formula setae di dalam genus *Halectinosoma* dalam kajian sebelum ini. Kedua-dua spesis ini kemungkinan spesis Harpaktikoida yang baru, disebabkan kajian mengenai taksonomi harpaktikoida adalah sangat jarang dilakukan di Malaysia.