

TAXONOMY AND ULTRASTRUCTURE OF HARPACTIGOIDA
(FAMILY PORCELLIDIIDAE) FROM SEAWEED
(*ULVA RETICULATA*) IN SUNGAI PULAI, JOHOR

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**TAXONOMY AND ULTRASTRUCTURE OF HARPACTICOIDA (FAMILY
PORCELLIDIIDAE) FROM SEAWEED (*Ulva Reticulata*) IN SUNGAI PULAI,
JOHOR.**

By

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Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk:

Taxonomy and Ultrastructure of Harpacticoida (Family Porcellidiidae) from Seaweed (*Ulva reticulata*) in Sungai Pulai, Johor oleh **Hasimah Binti Mohamad Said**

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LIST OF ABBREVIATIONS

Mm	-	Milimeter
%	-	Percent
CMCP-9	-	Mounting media low viscosity, colourless mountain
P1-P4	-	Thoracic locomotor appendages (non-locomotory), pereipod
P5	-	The fifth appendages (non-locomotory), pereipod
SEM	-	Scanning Electron Microscope
α	-	Alpha
β	-	Beta
γ	-	Gamma
sp	-	Species

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ABSTRACT

Order Harpacticoida is the most conspicuous free living copepods in the marine benthic habitats. They showed an amazing diversity of forms and adapted to widely differing types of environment. A taxonomic study on the harpacticoida from family Porcellidiidae was carried out at Sungai Pulai, Johore. The samples were collected from the seaweed, *Ulva reticulata*. Taxonomic characters were observed under a compound microscope attached with lucida tube. There were three species from family Porcellidiidae were found in this study which were *Porcellidium ofunatense*, *Porcellidium yoroium* and *Porcellidium brevicaudatum*. All the species showed the similarity in body shape which was dorso-ventrally flattened. The identification for these species was done by comparing their morphological structure with the established keys. Scanning Electron Microscope (SEM) was used to examine the fine structure such as pits, collared sensillae and network of ridges on the body surface of these harpacticoid. This study was considered as a new founding for this family of harpacticoid in Malaysian waters.

TAKSONOMI DAN UTRASTRUKTUR HARPAKTIKOID (FAMILI PORCELLIDIIDAE) DARIPADA RUMPAI LAUT (*Ulva reticulata*) DI SUNGAI PULAI, JOHOR.

ABSTRAK

Order Harpacticoida adalah haiwan kopepod yang hidup bebas dalam habitat marin benthik. Ia menunjukkan kepelbagaian bentuk yang menakjubkan dan boleh beradaptasi dengan pelbagai jenis persekitaran yang berbeza. Satu kajian taksonomi harpacticoid dari famili Porcellidiidae telah dijalankan di Sungai Pulai, Johor. Sampel telah diambil daripada rumpai laut, *Ulva reticulata*. Ciri taksonomi telah diperhatikan dibawah mikroskop kompaun yang dilengkapi kamera lucida. Sebanyak tiga spesies daripada famili Porcellidiidae telah dijumpai dalam kajian ini iaitu *Porcellidium ofunatense*, *Porcellidium yoroium* dan *Porcellidium brevicaudatum*. Kesemua spesies ini menunjukkan persamaan pada bentuk badan iaitu leper dari bahagian atas hingga ke bawah. Identifikasi untuk spesies ini dilakukan dengan membandingkan bahagian anatomi spesies yang dijumpai dengan kajian yang terdahulu. Mikroskop Elektron Pengimbas juga digunakan untuk melihat struktur yang halus seperti lubang-lubang, kolar sensillae dan jaringan ridges pada permukaan badan harpacticoid ini. Kajian ini merupakan penemuan baru bagi famili harpacticoid ini di Malaysia.