

UNIVERSITI TEKNOLOGI MARA

**DOMESTICATION OF MARINE
ROTIFER (*Brachionus plicatilis*) IN
EXTENSIVE CULTURE SYSTEM AT
LOW SALINITIES**

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of the requirements for the degree of
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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Under Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

Rotifers are among the smallest metazoa in the world that have their own uniqueness. This research was conducted in order to find out if *Brachionus plicatilis* really can keep the best endurance towards the changes of salinity and does the changes of salinity will give effect towards growth rate of the rotifer species. The main aims for this study was to identify either the changes of the salinity give effects towards the growth rate of the *Brachionus plicatilis*. The second aim was to identify the best salinity for the growth rate of the *Brachionus plicatilis* and last but not least to produce mass production of *Brachionus plicatilis*. Generally, a batch culture method was used for the culturing of the rotifers. There were two batch culture where the first batch rotifer was cultured in 20 ml of sea water while the second batch rotifer was cultured in 10 ml of sea water. A salinities of 12, 9, 5 and 0 ppt were applied to the second batch culture. The result obtained proved that the salinity does give effect towards the growth rate of the rotifer. Based from the result, it also showed that the salinity of 12 ppt was the best and optimum salinity for culture of rotifer for the aquaculture industry. The mass production of the rotifer was also a success. As a conclusion, the changes in salinity does give effect to the rotifer as it affect their growth rate.

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