OPEN ACCESS Journal of Fisheries and Aquatic Science

ISSN 1816-4927
DOI: 10.3923/jfas.2016.

Research Article
Optimum Diet for Survival and Development Growth of Laboratory-scale Culturing Harpacticoid Species, *Stenhelia stephensoni* (Greenwood and Tucker 1984)

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Abstract

Objective: This study aims to introduce diets that are more affordable and applicable, compared to algal diet, which is time consuming and costly in maintenance. **Methodology:** The present study was designed for 15 days to observe the effects of different diets on population growth of marine tropical harpacticoid copepod, *Stenhelia stephensoni* under laboratory condition. The constant value of salinity was at 28 PSU and temperature at 27°C. **Results:** The diets tested were processed into juice form and are composed of single type diets and combination diets. Single type diets were made of carrot, banana, sago, *catappa* leaf, goat dung and seaweed, while combination diets were made with the mixture of goat dung and seaweed and goat dung with *catappa* leaf. Harpacticoid copepod which were fed with combination diet of goat dung and *catappa* leaf recorded significantly ($p<0.05$) higher population growth and survival (90%) compared to the rest of the treatments tested. **Conclusion:** The present study suggested that *Stenhelia stephensoni* could be a potential copepod for being commercially cultivated by as it is highly demand as food item for marine fish larvae in aquaculture industry.

Key words: Goat dung, *catappa* leaf, single diets, combination diets, *Stenhelia stephensonii*

Received: Accepted: Published:

Citation: M. Fatimah A'tirah, M.L. Shabdin, A.R. Khairul Adha, M.T. Zakirah and N. Awangku Shahrir, 2016. Optimum diet for survival and development growth of laboratory-scale culturing harpacticoid species, *Stenhelia stephensoni* (Greenwood and Tucker 1984). J. Fish. Aquat. Sci., CC: CC-CC.

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Competing Interest: The authors have declared that no competing interest exists.

Data Availability: All relevant data are within the paper and its supporting information files.