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The effect of copepod enriched-vegetable based diet on Giant Tiger Prawn (*Penaeus monodon*) post-larvae
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Abstract

Plankton is the primary food sources for many fish larvae as well as other organisms during their early stage of development. Zooplankton such as copepods play a major role in freshwater and marine environment as live food that offer great variety of sizes, species and nutritional value to the larvae. The aim of this study is to increase the nutritional value of copepod and its effect on *Penaeus monodon* post-larvae growth performance. The experiment was carried out 30 days and comprised with four different treatments of diets. The diets fed to copepod consisted of algal diet which is *Tetraselmis* sp. that acted as a control followed by three types of vegetable-based diet which is carrot, water spinach, and lettuce. The efficiency of the copepods enriched was further evaluate on its growth, survival and proximate composition. The outcome of the study showed that highest specific growth rate (SGR) in *P.monodon* post-larvae was obtained when fed with copepods enriched water spinach (11.28±0.38%) and the highest survival rate of *P.monodon* was obtained when being fed with copepods enriched *Tetraselmis* sp. (91.67±0.29%). Proximate analysis composition for enriched copepods and *P.monodon* fed with enriched copepods showed the water spinach produce highest protein and lipid content compared to other enrichment. The current result showed that vegetable based are able to replace the microalgae, hence it also can gave an advantages to the economy in aquaculture and higher yields. © Published under licence by IOP Publishing Ltd.

Author Keywords

Copepods; Enrichment; *P.monodon*; Proximate analysis; Specific growth rate

Index Keywords

Fisheries, Vegetables; Different treatments, Growth performance, Marine environment, Nutritional value, *Penaeus monodon*, Proximate analysis, Proximate compositions, Specific growth rate; Nutrition

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