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The effect of the different prebiotic level added to the feed on the performance of *Lactobacillus* sp bacteria (enzyme α -amilase activity, and digestibility of carbohydrates) in the digestive track of white shrimp (*Litopenaeus vannamei*)

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This study aims to analyze the performance of the *Lactobacillus* sp., in the digestive track of the white shrimp after being given various prebiotic in the feed. Test animals used in this study was white shrimp juvenile *Litopenaeus vannamei*, measured the weight of 1.84 ± 0.23 g/individual with a stocking density of 10 shrimp/container, cultured for 30 days in a tank measuring 50x45x45 cm³ of 12 units, used the recirculation systems and filled 50 L seawater with salinity of 15 ppt. The treatments were four types of feed that is formulated with several of prebiotics i.e. A (without prebiotic), B (lotus seeds), C (sweet potatoes) and D (copra). In These four types of treatments has been added with *Lactobacillus* sp. with a population density of $1.5x10^9$ CFU/ml. The result showed that the effect of feeding with various prebiotic on the performance of *Lactobacillus* bacteria population (1.4x104-1.2x105 CFU/ml) were not significantly different, but it was significantly different to the enzyme α -amylase activity, (0.2558 IU/mL/minute), digestibility of carbohydrates (91.89%). The best resulted is feed added with prebiotic copra, while the fat digestibility (83.93%) that resulted in the feed without prebiotic showed the lowest result.

Biography

Alexander Rantetondok has completed his PhD at the age of 54 years from Hasanuddin University. He is a Professor in Fish Disease and Fish Immunology at Faculty of Marine Science and Fisheries, Hasanuddin University. He is the former Head of Fish Diseases and Parasites of Hasanuddin University and has been serving as an Editorial Board Member of various national and international Journals.

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