

عنوان مقاله:

Research Article: The effect of biofloc-supplemented diets on the Pacific white shrimp (*Litopenaeus vannamei*):
Analysis of water quality, growth performance, and biochemical composition

محل انتشار:

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خلاصه مقاله:

This study has investigated the impacts of biofloc on water quality, growth parameters, and whole-body composition of the *Litopenaeus vannamei* juveniles (initial average weight 5.23 ± 0.20 g). Five experimental treatments were designed: Shrimp fed basal diet (Control), 5 and 10% wet biofloc-supplemented diets (W5 and W10), 5 and 10% dried biofloc-supplemented diets (D5 and D10) for 32 days. Experimental tanks (50 liters) as triplicate for each treatment, was stocked 12 shrimps. During the experiment, chemical and physical water parameters were examined and were not different statistically among experimental treatments. At the end of the experiment, in W10 treatment, the growth parameters were significantly higher than the control treatment. Also, in W10 and D5 treatments, feed conversion efficiency (FCE) and feed conversion ratio (FCR) were significantly better than the control. Compared to other treatments, significantly better protein efficiency ratio (PER) and lipid efficiency ratio (LER) were observed in W10 treatment. Results indicated that in W10 and D5 treatments, the protein, ash, and dry matter contents of the shrimp were significantly higher compared to the control treatment. Also, in W10, D5, and D10 treatments, carcass lipid and fiber contents were significantly higher compared to the control. Overall, the best performance was observed in shrimp .fed on 10% wet biofloc-supplemented diet

کلمات کلیدی:

White leg shrimp, Microbial flocs, Growth, Body composition, Water treatment

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