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Effects of brown algae (*Sargassum fulvellum* (Turner) C. Agardh, 1820) supplementation on growth performance, blood profile and liver histopathology on juvenile Nile tilapia (*Oreochromis niloticus* Linnaeus, 1758)

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Alternative feed ingredients for high value cultured fish are necessary to lessen feed amount and operation costs while meeting the fish's nutritional requirements. *Sargassum fulvellum* (SFM) supplementation in diets of juvenile Nile tilapia (*Oreochromis niloticus*) was employed to determine its effect on growth performance, feed utilization efficiency, HSI/VSI, carcass composition, blood profile, and liver histopathology. O. niloticus were fed five iso-nitrogenous and iso-lipidic test diets: positive control, negative control, 3% SFM meal, 6% SFM, and 9% SFM for 56 days in a recirculation set-up. Highest average weight gain (545.70±5.47%), specific growth rate (18.45±0.28%), highest percentage survival (88±17%), and viscera somatic index (12.44±0.74) were observed in 6% SFM diet. No significant differences (P>0.05) were observed in the serum components. Liver histopathology results seem to be dose dependent making the diet toxic at higher supplementation levels. Nonetheless, supplementation diet of 6% SFM deemed competitive as compared to standard feeds.

Biography

Cyrell N Ate completed her Master of Science in Biology at Ateneo de Manila University. She aspires to be an agent of change and development to help community especially local fish farmers through information dissemination and research. She is also eyeing to gain more knowledge in the field of aquaculture and algal research.

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