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Sardine oil as a source of lipid in the diet of giant freshwater prawn, Macrobrachium rosenbergii

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The freshwater prawn, *Macrobrachium rosenbergii* is a more popular crustacean cultured widely in monoculture system in India. It has got high nutritional value in the human diet. Hence, understanding its enzymatic and body composition is important in order to judge its flesh quality. Fish oil specially derived from Indian oil sardine is a good source of highly unsaturated fatty acid and lipid source in fish/prawn diet. A 35% crude protein diet with graded levels of Sardine oil as a source of fat was incorporated at four levels viz, 2.07, 4.07, 6.07 and 8.07% maintaining a total lipid level of feed at 8.11, 10.24, 12.28 and 14.33% respectively. Diet without sardine oil (6.05% total lipid) was served as basal treatment. The giant freshwater prawn, *Macrobrachium rosenbergii* was used as test animal and the experiment was lost for 112 days. Significantly higher gain in weight of prawn was recorded in the treatment with 6.07% sardine oil incorporation followed by higher specific growth rate, food conversion rate and protein efficiency ratio. The 8.07% sardine oil diet produced the highest RNA: DNA ratio in the prawn muscle. Digestive enzyme analyses in the digestive tract and midgut gland showed the greatest activity in prawns fed the 8.07% diet.

Biography

A T Ramachandra Naik is currently working as Associate Professor at College of Fisheries, Mangalore, and Karnataka Veterinary, Animal and Fisheries Sciences University, Karnataka, India. He has over 10 years of teaching, research and extension experience in the area of Aquaculture, Fish Nutrition, Marine Biology, Fish Diversity and Aquatic Environment Management. He has visited Michigan State University, East Lansing, USA in connection with 'e-Content Development in Fisheries' and involved in e-Content Development for BFSc degree program in India. He has served as Assistant Director of Students' Welfare and currently holding the charge of NSS Programme Officer of the college. During the tenure of 10 years, he has undergone several trainings viz, Recent advances in freshwater aquaculture nutrition, Aquaculture for livelihood and solar drying, Wildlife conservation and management, Entrepreneurship development, Write-shop for success stories, Scientific report writing and presentation, Multimedia content development, e-content management, Life skills development, etc. He has conducted 10 village stays and NSS annual special camps during the period of his tenure as faculty of fisheries. Besides, he has guided 5 MFSc and 1 PhD Student and was an Advisory Committee Members for several Master's and Doctoral students. He has published 40 scientific research papers in national and international journals, 35 popular articles, 40 articles in vernacular related to fisheries.

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