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With the advent of the Green Revolution and the Blue Revolution, the average individual has become aware of the need to add quality protein to his normal food intake. In meeting the nutritional requirements of the growing population, the production of high quality fish protein has a vital role and aquaculture has emerged as a major frontier of fish production in the developing countries. Aquaculture refers to the production of aquatic animals and plants such as fishes, shrimps, molluscs and seaweeds in water. Aquaculture can provide the social and economic support to societal needs only if sufficient attention is given with a multi-disciplinary systems oriented approach involving engineers, geneticists, nutritionists, chemists, botanists and microbiologists, along with fishery biologists.

India possess a vast resource with favorable climate and environmental conditions for raising fish production through aquaculture. The potential areas which are suitable water bodies (brackish water) for aquaculture in India estimates to 1.456 million ha of which an area of only about 50,000 ha is presently used for culture, mostly by traditional methods. For an optimum economic production, a concerted effect with the application of modern technologies in the seed, feed and water quality are essential. In fact, systematic feeding fish has been a recent practice in many countries. The problem of feed continues to haunt the prawn culture industry in India. The feed
conversion ratio varies according to the nutritional value of the feed to the species. The most efficient FCR, close to 1:1, can be achieved only with quality raw materials, scientific formulations with a balance of nutrients, fortification with vitamins and minerals and proper processing for form, quality and water stability of pellets.

The present work represents an earnest effort in the formulation of cost effective prawn feeds from naturally occurring and easily available raw materials of animal and plant origin. The testing and evaluation of the nutritional quality of the developed feeds with three of the most common species of prawns in this area were also carried out.

The work embodied in the thesis is under publication/under preparation as indicated below.


