The increasing demand for food fish and decline in capture fisheries production has resulted towards intensification of aquaculture practices. The shift from low density to high density culture i.e. traditional to semi-intensive or intensive culture is consequently leading to an unprecedented rise in the demand for fish feeds. Farmers are shifting gradually from no feed, through the use of farm-made feeds, to factory made feeds. West Bengal is an impressive contributor in the global and cultured prawn industry and it has favorable environment for prawn culture. Freshwater prawn, *Macrobrachium rosenbergii* locally known as 'golda' has become one of the preferred and perishable food item for both domestic and international consumers. Presently, the species is commercially cultured in various districts of West Bengal, India. This particular species has been recognized with high potential in aquaculture because it grows faster in suitable environmental conditions and attain marketable size within six months. From economic point of view, feed cost appears to be one of the major constraints against the greater expansion of aquaculture. Traditionally fishmeal has been the major source of protein in commercial fish feeds elsewhere in the world. However, use of fishmeal as the only protein source for fish feed makes the feed expensive. One way of reducing feed cost is to partially reduce the fishmeal with cheaper plant or animal protein sources of indigenous origin. Therefore investigation into the formulation of suitable feeds by using locally available plant resources for *M. rosenbergii* farming is necessary. Hence, this study was undertaken to formulate feeds through incorporation of mangrove based floral ingredients and consequently to evaluate their efficacy on the culture species.