iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 10 **Issue:** VII **Month of publication:** July 2022

DOI: https://doi.org/10.22214/ijraset.2022.45345

www.ijraset.com

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International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 10 Issue VII July 2022- Available at www.ijraset.com

Shrimp Farming or Prawn Culturing

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I. INTRODUCTION

A freshwater prawn farm is an aquaculture business designed to raise and produce freshwater prawns or shrimp. Indian aquaculture has been evolving from the level of subsistence activity to that of an industry. This transformation has been made possible with the development and standardization of many new productions and associated techniques of input and output subsystems. In recent years aquaculture has created great enthusiasm and interest among entrepreneurs especially for shrimp farming in coastal areas. Shrimp farming is capital intensive activity and uncontrolled mushrooming growth of it has led to outbreak of diseases and attributed environmental issues calling for closure of shrimp farms. Although India has vast freshwater resources they are not fully exploited except for carp culture in limited scale. Fresh water fish culture employing composite fish culture technology has become popular for use in large number of tanks and ponds in the country. To meet the raw material required by the processing units for export demand there is urgent need to expand our production base. In addition it is always stressed that there is a need to utilise our natural resources productively to ensure the much needed food security.

II. MACROBRACHIUM ROSENBERGII

The giant freshwater prawn is suitable for cultivation in tropical and subtropical climates. It is a hardy species by virtue of its ability to adapt to various types of fresh and brackish-water conditions. It accepts pelleted feed and has omnivorous feeding habit. In the natural environment, lower reaches of rivers, tidal inlets, where water is directly or indirectly connected with sea are their preferred habitat specially during spawning. The breeding takes place in low saline waters which is also needed for larval and post larval development after incubation. Breeding of *Macrobrachium rosenbergii* takes place in estuaries. There is different canals which opens into a sea or a river.

Macrobrachium malcolmsonii	
Kingdom:	Animalia
Phylum:	Arthropoda
Subphylum:	Crustacea
Class:	Malacostraca
Order:	Decapoda
Family:	Palaemonidea
Genus:	*Macrobrachium*
Species:	***Macrobrachium malcolmsonii***

(Milne-Edwards, 1844) is an omnivorous bottom dwelling fresh water prawn. It feeds on decomposing plants and animals, small worms, insects and their larvae.



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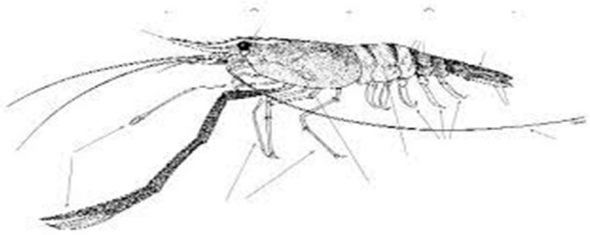
III. THE SOIL TYPE

For Macrobrachium, culture should be clay silt mixture or sandy loam comprising of 60% sand and 40% silt with good water retention capacity.
The pH of soil should be on the range:5 to 7

IV. MANAGEMENT

The duration of culture varies from 6 to 12 months depending on the type of culture practice. Generally in monoculture the culture period may be 6-8 months and 8-12 months under polyculture. The average growth of prawn may range from 50 gms to 200 gms depending on the duration, density, water quality, feeding etc. The survival rate may range from 50% to 70% depending on the type of management practices.

The harvest time varies in each 5-6 months in a year. In order to get desired production, feeding, aeration, water exchange, periodic monitoring should be continued. All around the farm there are ropes tied from one end to another as the protection for the prawns from the birds and other organisms.



AERATOR is used to regulate the amount of oxygen content dissolved in the water. The aerators are run on each day in between 6pm-7pm. aerators to regulate oxygen in water



water inlet system



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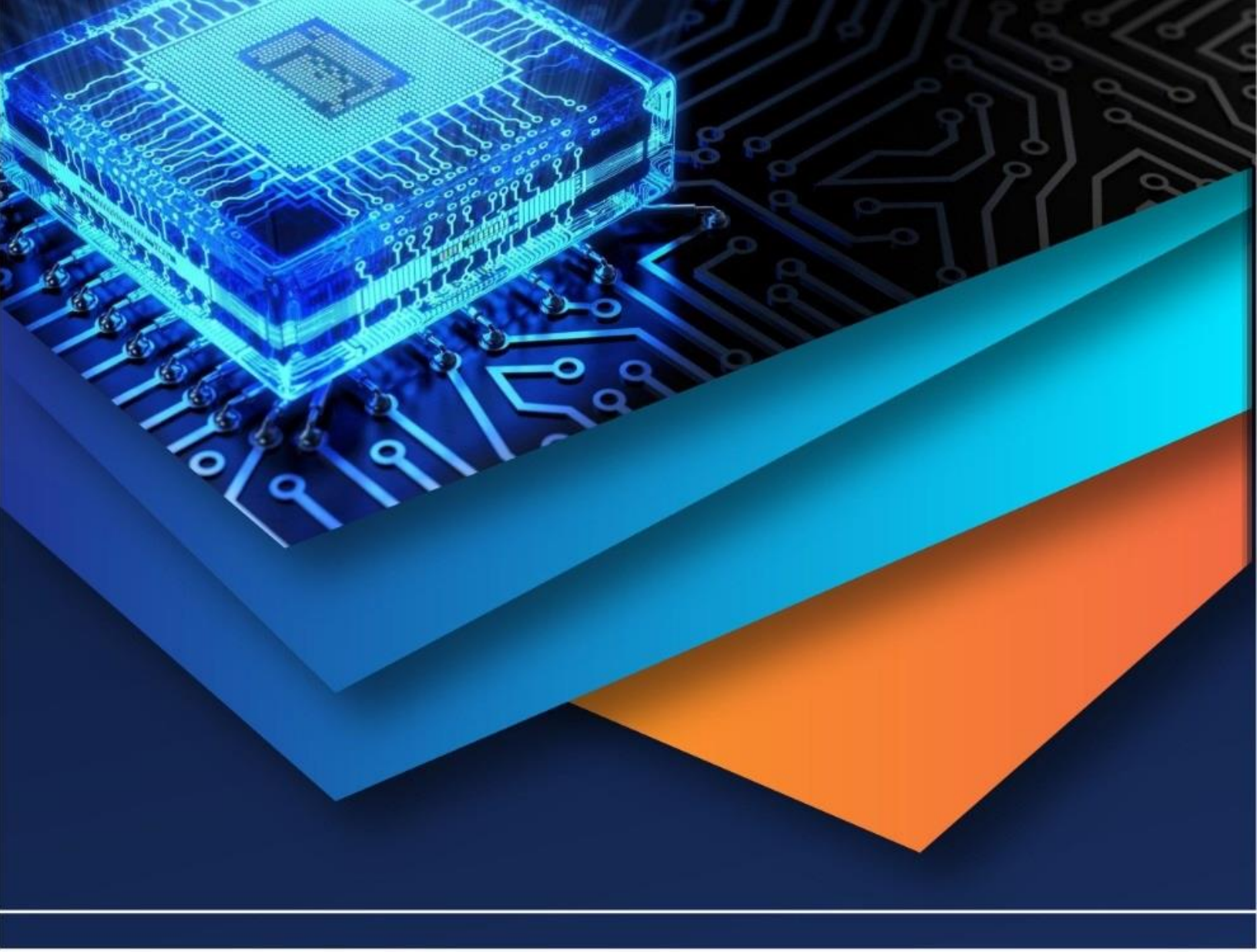
The food is given in the form of pellets which contain large amount of nurtients. It is made from rice bran and oil cake to scientifically feed the shrimps.



Water purification is done by using phosphate and other components to the required amount and Calgon is used for removal of dirt particles from the bottom part, It has to be done periodically for ensuring the sustainability of prawns.



Shrimps serve in vital roles as cleaners that help rid host fishes of external parasite and fungi ,bacteria and dead tissue found on skin, many ither species are active scavengers.



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