CERTIFICATE

This is to certify that the work of the student study project entitled TUBIFEX CULTURE –A BOON TO AQUACULTURE FEED MANAGEMENT has been carried out by G.BHARATH KUMAR and group under my guidance and supervision for the JIGNASA PROGRAM at the department of zoology, Govt. Degree College (Autonomous), Siddipet. This work has not been submitted earlier, either in part or in full for any other purpose.

(M.GUNAKAR)

Project supervisor

Place: Siddipet

Date: 25-01-2020

DECLARATION

We hereby, declare that the work contained in this project entitled TUBIFEX CULTURE –A BOON TO AQUACULTURE FEED MANAGEMENT is original and no part of it has been submitted to any institution for the competition, publication or for any other purpose.

(G.BHARATH KUMAR AND GROUP)

Place: SIDDIPET

Date: 25-01-2020

CERTIFICATE

This is to certify that the work of the student study project entitled TUBIFEX CULTURE –A BOON TO AQUACULTURE FEED MANAGEMENT that is being submitted by B.Sc., FZC students in partial fulfilment for the Jignasa Student Study Project – 2019-20 in Zoology to CCE is a record of bonafide work carried out by them under the guidance and supervision of M. Gunakar, Asst. Professor of Zoology, GDC (A), Siddipet.

(DR. CH. PRASAD)

Principal

Place: Siddipet

Date: 25-01-2020

ACKNOWLEDGEMENT

It is our privilege to convey our sincere and deep sense of gratitude to our project supervisor **M.GUNAKAR,** Asst. Professor and Head, Dept. of Zoology, Government Degree College (A), Siddipet, for his guidance and constant encouragement given to us during the course of project work.

We are indeed highly indebted to **Dr. CH.PRASAD**, Principal Government Degree College (A), Siddipet for his support and providing the necessary facilities in the college throughout this work.

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We wish our special thanks to office subordinates Smt. Lakshmi for her help and cooperation during Project work.

Our humble thanks to friends and well wishers for their constant encouragement.

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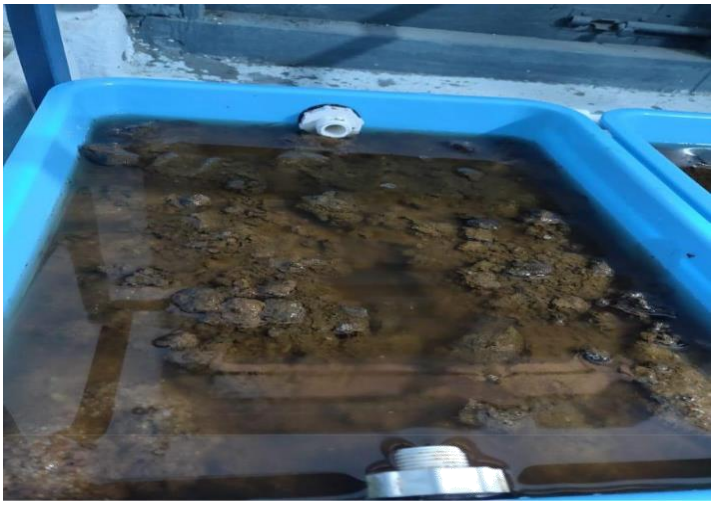

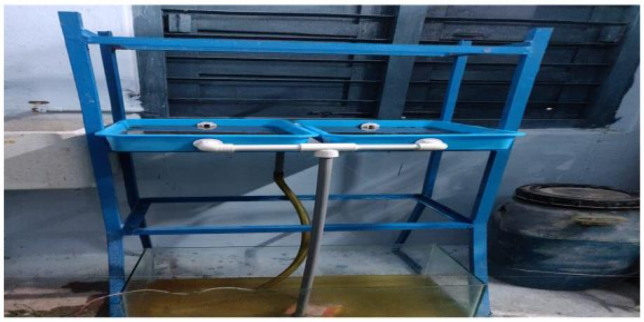

STUDENT STUDY PROJECT 2021 – 2022

CONSTRUCTION OF PORTABLE FISH HATCHERY

AND INDUCED BREEDING

B.SAI THARUN B. Sc FZC III YEAR (6025-19-461-019)

J. SAI PRIYA B. Sc FZC III YEAR (6025-19 461-063)

K. SOWMYA NANDINI B. Sc FZC III YEAR (6025-19-461-076)

K. PRANAYA RAGINI B. Sc FZC III YEAR (6025-19-641-069)

P. BHAVANI B. Sc FZC III YEAR (6025-19-461-105)

Under the guidance of:

K. VISHWANATHAM

M. Sc, B. Ed, SET

Lecturer in Zoology

CONTENT


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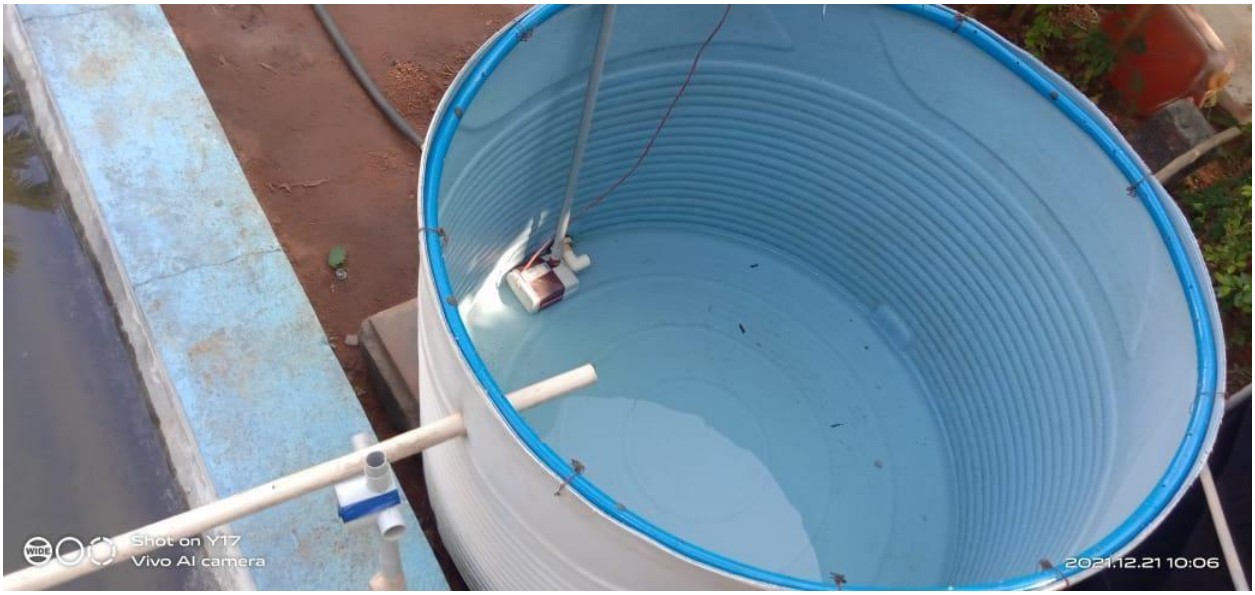
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PORTABLE HATCHERY
IN LOW COST MANAGEMENT
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SEWAGE TREATMENT & PISCICULTURE

Introduction:

To treat the sewage water with natural material. In this method water can be purified with some natural materials. This purified water is useful for growing plants and culturing fishes. It changes its alkalinity, turbidity etc.

Relevance of the topic:

Water is one of the very precious natural resources. Wastage of any natural resource is be detrimental to our future prospects. Hence we should not only conserve the water but also find out the various ways to treat the used and sewage water, so that we can use this water for farming and any other purpose.

Objectives:

- To treat Sewage water with natural method and to purify the waste water.
- To use this purified water for growing plants.
- Water is also used for pisiculture (culture of fishes).

Working Principle:

●Step- 1. Usage of stones/pebbles for purification of large solid particles in the sewage water.

●Step- 2. Usage of Charcoal to remove dissolved toxins.

●Step- 3. Usage of fine sand particles for the removal of micro pollutants and to decrease the turbidity.

●Step- 4. Usage of pieces of Banana plant material to change the water colour and decrease the salinity.

●Step-5. Usage of corn plant pieces duly dried up, to change the turbidity, alkalinity and colour of Sewage water.

Materials and Methods:

We used naturally available material such as Stones (or) pebbles, coal, sand, banana branches and corn.

- The total project is undertaken by using the natural material and natural methods only.

Result and Analysis:

Before treatment ofsewage water pH is 6.77- acidic medium.

After treatment – pH is as under.

1-Step- Ph-7.33.

2-Step- Ph-7.40.

3-Step- Ph- 7.69.

- Turbidity test by using turbidity meter. Before treatment = -0.05, range : 1000 NTF
  After treatment the values are as under:

  1-Step - 0.07

  2-Step - 0.11

  3-Step - 0.14

Conclusion:

After treating sewage water with the above natural material we can conclude that water can be purified by this method. And this purified water can be used for pisciculture and plantation purposes.

Process of treating sewage water Introducing fish into the treated water

JIGNASA STUDENT STUDY PROJECT

Name of the Project : **SEWAGE WATER TREATMENT AND PISCICULTURE**