GOVT. DEGREE COLLEGE, BELLAMPALLY, DIST.MANCHERIAL

DEPARTMENT OF CHEMISTRY

FIELD TRIP SUMMARY 2019-2020

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1. **Name of the organizer**:   M. GOPAL,

                                      M. KUMARSWAMY

2. **Title of the trip:** Importance of water quality parameters in fish survivality

3. **No. of students involved:** 20

4. **Date of visit:** 29/01/2020

5. **Place of the visit:** Krishi Vigyan Kendra Bellampally,

   District: Mancherial.

6. **Objectives of the trip:**

                 B.Sc Ist Year students for field visit to Krishi Vigyan Kendra to create the awareness on fish farming and importance of water quality parameters in fish survivality and Production

                 Water quality is of almost importance in fish and shrimp farming

DISSOLVED OXYGEN (DO): DO is one of the most important Parameters in aquaculture. Students were taken water sample from the pond and estimated DO in water. It was observed 4-5 ppm. A sub – optimal level of dissolved oxygen is very stress full for fish and shrimp. Lower levels eg.3ppm immune response and levels of below 1ppm can be lethal. It is therefore the important to keep dissolved oxygen levels in aquaculture systems above 4 parts per million.

WATER TEMPERATURE: Students were observed water temperature 32-35c^o in different ponds

Water temperature can affect fish and shrimp metabolism, Feeding rates and the degree of ammonia toxicity. Temperature also has a direct impact on biota respiration rates and influences the solubility.

P^H: Students were observed p^H 7.5-8.0 in different location in the KVK farm.

P^H is measure if acidity or alkalinity of water. Fir fresh water fish culture p^H levels should be in the range of 7.5-8.5

If the p^H increase or decrease it affect the metabolism and other physiological processes of fish

SALINITY: Student were observed salinity in the water <0.5 salinity represents the total concentration of dissolved inorganic ions or salts, in water. It plays a significant role towards the growth of cultured organisms through osmoregulation of body minerals from that if the surrounding water. If salinity is too high, fish and shrimp will start to lose water to the environment.

NITRITE: Student were estimated percentage of nitrites in pond water. It was observed 1.2 ppm

Nitrite is another form of nitrogenous compound that result from feeding and can be toxic to shrimp and fish. At 2 ppm and above, nitrites are toxic to many fish and shrimp.

ALKALINITY AND HARDNESS: Alkalinity represents its amount of carbonates and bicarbonates in water. Harrdness referrers to the concentration of Ca^{+2} and Mg^{+2} in water.It was observed 65 ppm and its suitable for aquaculture.

7. Expenditure incurred and resources required: NIL.

8. Problems encountered: NIL

9. Outcome of the visit: Students got with the knowledge of pond water quality parameters in fish survivality and fish production.
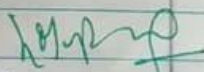
Resource persons:

 Dr. Rajeshwar Naik (Professor and Programme Coordinator)

S.No	Name of the student	Group	Signature
1	D. Sai Krishna	BSC (BZC) 1st year	Suky
2.	y. vamshi	BSC (BZC) 1st year	Y. Vamshy
3.	S. Vamshi Krishna	BSC (B ZC) 1st year	S. Vamshi
4	v vamshi krishna	BSC (BZC) 1st year	V. vamshi krishe
5	S. Madhu	BSC (Bze) 1st year	S. Madhu
6.	A. Raviteja	BSC (Bzc) 1st year	A. Ravitja
7	B. Shirisha	BSC (Bzc) 1st year	B. Shirisha
8.	M. Chandrakala	BSC (BZC) 1st year	M. Chandrakala
9.	Purra. Manasa.	BSC BZC 1st year	P. Manasa.
10)	Sangani Laxemi	BSC. Bzc 1st year	E. Ray
11).	Pudhari Anjamma	BSC. Bzc 1st year	P. Anjamma
12.	E. Maheshwari	BSC. Bzc 1st year	E. Maheshwari
13.	D. pravalika	BSC BZC 1st year	D. pravalika
14.	B. Sandhyarani	BSC BZC 1st year	B. Sandhyarani
15.	S. shireesha	BSC (MPC) 1st year	S. shireesha
16	T. sravanthi	BSC (MPC) 1st year	T. sravanthi
17).	B. Rajitha	B SC (MPC) 1st year	B. Rajitha
18)	ch. swapna	B.SC (MPC) 1st year	ch. swapna
19)	P. Ramadevi	B. SC (MPC) 1st year	P. Ramadevi

M. Kumaraswamy
Coordinator