Academic Report on Internship of B.Sc. Aquaculture Sem. 4 Students (Batch 1) at Multispecies Aquaculture Complex (MAC) of MPEDA, Vallarpadom, Kochi.

Department of Aquaculture, M E S Asmabi College

From January 29th to 31st, 2024, 16 students from the IV semester Aquaculture program at M E S Asmabi College participated in a three-day internship at the Multispecies Aquaculture Complex (MAC) of the Marine Products Export Development Authority (MPEDA) in Vallarpadom, Kochi. This internship was a crucial part of their academic curriculum, providing practical experience and exposure to advanced aquaculture techniques. The students were awarded certificates upon the successful completion of the internship.

2. Internship Objectives

The primary objectives of the internship were:

- To gain practical knowledge and experience in cage farming and seed production.
- To understand the aquaculture practices for species such as GIFT Tilapia, Seabass, and Pearlspot.
- To integrate theoretical knowledge with practical skills through hands-on training and demonstrations.

3. Overview of Activities

3.1 Cage Farming

The students were introduced to cage farming techniques, an essential method for sustainable aquaculture. Key learning points included:

- **Construction and Maintenance of Cages**: Students learned about the materials used, design principles, and regular maintenance practices to ensure the longevity and productivity of the cages.
- **Stocking Density and Feeding Practices**: Training sessions covered optimal stocking densities, feeding regimes, and types of feed used to promote healthy growth and minimize environmental impact.
- **Monitoring and Health Management**: The importance of regular monitoring of water quality parameters, disease prevention, and health management practices was emphasized.

3.2 Seed Production

Seed production is a critical phase in the aquaculture lifecycle, and the students received comprehensive training in this area for various species:

- **GIFT Tilapia**: Techniques for broodstock selection, breeding, larval rearing, and nursery management were demonstrated. Students participated in the entire process from spawning to the rearing of fry.

- **Seabass**: The focus was on hatchery operations, larval feeding protocols, and the management of juvenile fish. Students learned about the specific environmental conditions required for optimal growth.
- **Pearlspot**: Students were taught the nuances of seed production for this indigenous species, including broodstock management, egg collection, and larval care.

4. Educational Components

The internship was structured to provide a balanced mix of theoretical knowledge and practical skills:

- **Theory Classes**: Lectures and presentations were conducted by experts from MAC, covering various aspects of aquaculture science and technology. Topics included the biology and ecology of the species, advanced aquaculture techniques, and sustainable practices.
- **Demonstrations**: Live demonstrations of cage construction, broodstock handling, spawning techniques, and feeding practices allowed students to observe and understand the practical application of theoretical concepts.
- **Hands-On Training**: Students actively participated in daily operations, gaining first-hand experience in the various stages of aquaculture production. This hands-on approach reinforced their learning and enhanced their practical skills.

5. Impact and Learning Outcomes

The internship provided numerous benefits and learning outcomes for the students:

- **Enhanced Practical Skills**: Direct involvement in cage farming and seed production processes allowed students to develop and refine their technical skills.
- **Understanding of Sustainable Practices**: Exposure to sustainable aquaculture methods helped students appreciate the importance of environmentally friendly practices in the industry.
- **Improved Problem-Solving Abilities**: Handling real-life challenges in the field improved the students' problem-solving and decision-making skills.
- **Increased Motivation and Career Insight**: The experience provided valuable insights into potential career paths in aquaculture and motivated students to pursue further specialization in this field.

6. Conclusion

The three-day internship at the Multispecies Aquaculture Complex (MAC) was a highly beneficial and enriching experience for the IV semester Aquaculture students of M E S Asmabi College. The combination of theoretical knowledge, practical demonstrations, and hands-on training provided a comprehensive understanding of advanced aquaculture techniques. The skills and knowledge gained during this internship will significantly contribute to the students' academic and professional development, preparing them for successful careers in the aquaculture industry.

7. List of Participated Students : Batch I - (29th to 31st January 2024).

LIST OF B.Sc. AQUACULTURE (II YR.) STUDENTS RELIEVED FOR INTERNSHIP AT MAC OF MPEDA

Sl. No	Roll No	Name	Male/Female
1.	UG22SAQ39	VINMESH KUMAR K.A	MALE
2.	UG22SAQ14	AKHIL KRISHNA P.H	MALE
3.	UG22SAQ06	ATHULKRISHNA I.P	MALE
4.	UG22SAQ28	P.B NISSIN BABU	MALE
5.	UG22SAQ11	ADITHYAN A.S	MALE
6.	UG22SAQ25	MOHAMMED SALIH P.Y	MALE
7.	UG22SAQ09	P.M SIVA NANDAN	MALE
8.	UG22SAQ05	ALWIN RISON	MALE
9.	UG22SAQ01	ABDU RAHMAN ELLATH	MALE
10.	UG22SAQ12	ADITHYAN ANILKUMAR	MALE
11.	UG22SAQ21	HARSHA K HARI	FEMALE
12.	UG22SAQ29	P.J KRISHNAPRIYA	FEMALE
13.	UG22SAQ22	HRIDYA SANTHOSH	FEMALE
14.	UG22SAQ37	VIGITHA V	FEMALE
15.	UG22SAQ34	SHAHANAS N.A	FEMALE
16.	UG22SAQ08	MUHSINA MUSTHAFA	FEMALE

Batch Strength: Girls: 6 Boys :10 , Total: 16

Report Prepared By: Dr. Kesavan K (Class Tutor and HoD).