# Academic Report on Internship of B.Sc. Aquaculture Sem. 4 Students (Batch 2) at Multispecies Aquaculture Complex (MAC) of MPEDA, Vallarpadom, Kochi.

Department of Aquaculture, M E S Asmabi College

**From February 14th to 16th, 2024, 17 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 pivotal component of their academic training, offering them practical exposure and in-depth understanding of advanced aquaculture techniques. Certificates were awarded to the students upon the successful completion of the internship.

## 2. Internship Objectives

The primary objectives of the internship were:

- To gain hands-on experience in cage farming and seed production.
- To learn about aquaculture practices for GIFT Tilapia, Seabass, and Pearlspot.
- To bridge the gap between theoretical knowledge and practical application through direct involvement in aquaculture operations.

## **3.** Overview of Activities

#### **3.1 Cage Farming**

Students were introduced to cage farming techniques, which are essential for sustainable aquaculture. The key learning points included:

- **Construction and Maintenance of Cages**: Understanding the materials, design principles, and regular maintenance necessary for effective cage farming.
- **Stocking Density and Feeding Practices**: Training on optimal stocking densities, feeding regimes, and types of feed to promote healthy growth and minimize environmental impact.
- **Monitoring and Health Management**: Emphasis on the importance of regular monitoring of water quality parameters, disease prevention, and health management practices.

#### **3.2 Seed Production**

Seed production is a critical stage in the aquaculture lifecycle, and 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 engaged 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 provided a balanced mix of theoretical knowledge and practical skills:

- **Theory Classes**: Lectures and presentations by experts from MAC covered various aspects of aquaculture science and technology, including 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 firsthand 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.

SlNo.	Uty. Reg. No.	Name of the Student	Male/Female
1.	AIAWSAQ001	HANAZAINAB E	F
2.	AIAWSAQ003	AL AMEEN N	М
3.	AIAWSAQ004	V M MUHAMMED SHUAIB	М
4.	AIAWSAQ005	KRISHNAPRIYA K S	F
5.	AIAWSAQ010	PRINCE K P	М
6.	AIAWSAQ011	ASHITHA SIVADASAN	F
7.	AIAWSAQ012	DEVAGANGA A S	F
8.	AIAWSAQ015	LENITHA BINU	F
9.	AIAWSAQ016	MALAVIKA PRADEEP	F
10.	AIAWSAQ019	RIDHA SHERIN A	F
11.	AIAWSAQ026	ANANTHAKRISHNAN K P	М
12.	AIAWSAQ027	ANSAF V A	М
13.	AIAWSAQ028	ARJUNKRISHNA K M	М
14.	AIAWSAQ029	GOKUL K S	М
15.	AIAWSAQ033	PARTHIV SURESH C	М
16.	AIAWSAQ035	RAHUL P S	М
17.	AIAWSAQ037	VIJUN M	М

## M.E.S. ASMABI COLLEGE, P. VEMBALLUR IV Semester B.Sc. AQUACULTURE (2022 Admission)

Boys – 10, Girls – 7, Total – 17







