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ALAGAPPA UNIVERSITY

State University | A+ Grade by NAAC (CGPA : 3.64)
in the 3rd Cycle | Category - I University by MHRD – UGC.

Karaikudi - 630 003, Tamil Nadu, India.



Department of Oceanography and Coastal Area Studies

Course: Hatchery Management
Course Code: 548906
Duration : 30 Hours

Session: January – March -2023

Course Co-ordinator : Dr.J.Siva



LEARNING OUTCOMES:

- + Students acquire in depth knowledge in Hatchery Management.
- + Seed production of finfish, shellfish and Crustacean.
- + Students are able to work in the hatchery after completion of this course.



COURSE CONTENT:

- + General introduction
- + Hatchery Management
- + Brood stock Maintenance
- + Seed Production
 - ❖ Crustacean
 - ❖ Shellfish
 - ❖ Fin Fishes



Dr.J.Siva

Department of oceanography and coastal area studies

School of Marine Sciences

Alagappa University

Thondi Campus, Thondi – 623409.

SYLLABUS

ALAGAPPA UNIVERSITY

School of Marine Sciences

Department of Oceanography and Coastal Area Studies

COURSE: VALUE ADDED COURSE ON HATCHERY MANAGEMENT

S.No	CONTENT	30 Hours
Module - I	Introduction: History, current international and national status of finfish, shrimp, crab and Shellfish hatchery.	5
Module - II	Hatchery Design and Construction: Site selection – design – construction – equipments - water filtering systems - layout and design of hatchery sections.	5
Module - III	Brooders Selection and maintenance: Biology and life cycle of cultivable finfish and Shellfishes. Brooders selection, quarantine - brood stock – spawning - larval rearing – post larval and nursery management.	5
Module - IV	Crustacean seed production: Nursery technology - Prawn – Shrimp - Crab and lobster - brood stock collection - stocking – selective breeding - induced breeding - water quality – feed and health management. Shrimp captive brood stock development - SPF seed production.	5
Module - V	Molluscan seed production: Mussel, oyster, abalone and scallop - brood stocks collection, rearing – induced breeding – water quality, feed and health management.	5
Module – VI	Finfish seed production: Fresh water fish – Carp – Catla- Mrigal – Tilapia - Coldwater fish - Trout. Coastal and marine fish – milkfish – mullets – sea bass, grouper – cobia – pompano - brood stock development, induced breeding - larval rearing – water quality – feed and health management.	5

Recommended Books

- S., Mohapatra, B., & Routray, P. (2008). *Textbook of Breeding and Hatchery Management of Carps*. Narendra Publishing House.
- Kannupandi, T., Soundarapandiyam, P., & Anantharaman, P. (2002). *Hatchery manual for Penaeus monodon fabricus*. ENVIS Centre, CAS in Marine Biology, Annamalai University.
- Thomas, P. C., Rath, S., & Mohapatra, K. D. (2013). *Breeding and Seed Production of Finfish and Shellfish*. Daya Publishing House.