



ALAGAPPA UNIVERSITY

(A State University Accredited with A+ NAAC (CGPA: 3.64)
in the Third Cycle and Graded as Category-I University by
MHRD-UGC)



Karaikudi- 630003, Tamil Nadu, India

DEPARTMENT OF OCEANOGRAPHY & COASTAL AREA STUDIES

Value Added Course

MARINE PLANTS VERMICOMPOST

Course Code : 548910
Duration : 30 Hours

Session: Feb- Apr, 2024

Course Coordinators: Prof. Dr. S. Ravikumar
Dr. G. Palani Selvan



Learning Outcome

- Students will gain knowledge about marine biodiversity & its threats.
- Students will know about taxonomy of earthworms.
- Students will acquire knowledge on different types of marine plants vermicomposting.

Course Content

- General introduction
- Types of Vermicomposting
- Raw materials for composting
- Application of marine plants vermicomposting
- Economical sources of vermicomposting technology.



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Syllabus/ Content
Alagappa University,
Department of Oceanography & Coastal Area Studies
Course: Value added course on Marine Plants Vermicompost
Course code: 548910

S.NO	CONTENT	HOURS
Module I	Marine biodiversity- Definition and Importance, Coastal ecosystem management - Seagrass ecosystem - Coral reef ecosystem - Mangrove ecosystem, Threats to Marine Biodiversity, Marine Pollution.	5
Module II	Classification of earth worms, Morphology, anatomy and Physiology of earthworms. Halotolerant earth worms.	5
Module III	Types of Vermicomposting – Role of earth worms in soil fertility – vermiculture – vermi-cast – vermi-technology and applications – Physical, chemical and biological properties of vermi-compost.	5
Module IV	Raw materials collection for composting – requirements of vermicomposting. Maintenance of composting – Collection of vermicompost – Efficiency of vermicomposting – General problems in production of vermi-composting.	5
Module V	Advantage of marine plants vermicomposting, Applications of marine plants vermicomposting, Preparation of vermicomposting from dried shed mangrove leaves, decomposed seagrass and seaweeds waste, agricultural and urban solid Wastes.	5
Module VI	Small Scale or Indoor vermicomposting – Large scale or outdoor vermicomposting. Effects of vermicompost on soil properties. Economical and Employment opportunity in Vermicomposting field.	5

Books for Reference:

1. R.K. Bhatnagar & R.K. Palta, “Earthworm Vermiculture and Vermicomposting”, Kalyani Publishers, No. 1, Mahalakshmi Street, T. Nagar, Chennai -600 017.
2. P.K. Gupta, “Vermi Composting for Sustainable Agriculture“, AGROBIOS (India), Agro House, Behind Nasrani Cinema, Chopasani Road, Jodhpur – 342 002.
3. E.Sreenivasan, “Handbook of Vermicomposting Technology” The Western India Plywoods Ltd, Kerala, India.