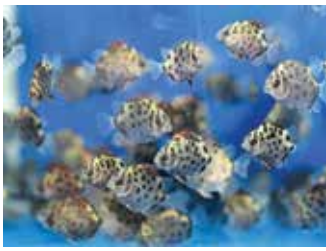
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Editor,
Fish Tech Digest



From the desk of Dean…

Dear esteemed Authors and Readers

It gives us immense pleasure to present this special issue of Fish Tech Digest, dedicated to the fisheries wealth, aquatic ecosystems, and coastal communities of Kanniyakumari District. Located at the southernmost tip of India, Kanniyakumari is blessed with diverse marine and inland aquatic resources that support livelihoods, biodiversity, and economic development.

This issue features insightful articles on the Ramsar wetlands of Vembannur and Suchindram–Theroor, the rich seaweed resources of Cape Comorin, and the vital role of Thengaipattinam Fishing Harbour in the marine fish export chain and coastal economy. Together, these contributions highlight the district's unique ecological and fisheries significance.

We are particularly pleased to showcase articles contributed by the faculty and students of St. Devasahayam Institute of Fisheries Science and Technology (DIFST), reflecting the institution's commitment to fisheries education, research, innovation, and sustainable development.

As the Blue Economy gains momentum, Kanniyakumari stands as a model where natural resources, traditional knowledge, scientific research, and community participation converge to create opportunities for sustainable growth. We hope this issue inspires readers to appreciate, conserve, and responsibly utilize these valuable aquatic resources for future generations.

I extend my heartiest congratulations to all the authors for their invaluable contributions. Your insights significantly enrich our collective academic knowledge and will undoubtedly inspire future research pathways. I trust that this issue of Fish Tech Digest will serve as a highly inspiring and practical resource for you all, as we continue to uphold our institutional benchmark for excellence in fisheries education, research, and community extension.

Best regards,
Prof. S. Felix
Chief Editor
Fish Tech Digest

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CAPE CAMERON'S SEAWEED BOUNTY: A REPORT

N. Mukeshbabu and V. Mary Kensa

PG & Research, Department of Botany

S.T. Hindu College, Nagercoil - 600 002

A Unique Coastal Treasure

At the southernmost tip of India, Kanniyakumari lies at the confluence of three seas—the Arabian Sea, the Bay of Bengal, and the Indian Ocean. Its rocky shores and clear coastal waters create ideal conditions for rich marine biodiversity, particularly seaweeds.

Rich Diversity of Seaweeds

The coast hosts a wide variety of green, brown, and red algae. Common genera include Ulva, Caulerpa, Sargassum, Turbinaria, and Gracilaria. This diversity makes Kanniyakumari one of the important seaweed-rich regions along the Tamil Nadu coast.

Ecological and Economic Importance

Seaweeds play a crucial ecological role as primary producers and as habitats for many marine organisms. Economically, they are valuable raw materials for agar, alginate, and carrageenan industries. They are also increasingly used in food products, pharmaceuticals, cosmetics, and organic fertilizers. Importantly, seaweed collection provides livelihood support to many coastal families, especially women.

Current Challenges

Despite their importance, seaweed resources are under pressure. Overharvesting, coastal pollution, habitat destruction, and climate change are contributing to declining stocks. The lack of organized and large-scale seaweed farming further limits sustainable utilization.

The Way Forward

Sustainable management is the need of the hour. Regulating harvesting practices, promoting scientific seaweed farming, and protecting natural habitats are essential. Community participation, especially involving fisherfolk and women's groups, can strengthen conservation efforts. In addition, research, value addition, and improved market access can enhance economic benefits.

Conclusion

Kanniyakumari's seaweed resources represent both ecological wealth and economic opportunity. With proper conservation and sustainable utilization strategies, this valuable resource can significantly contribute to coastal livelihoods and the emerging blue economy.

Fig.1 Seaweeds Collected and identified from Cape Comorin Coast

1. Caulerpa sertularioides



2. Ulva lactuca



3. Chaetomorpha antennina



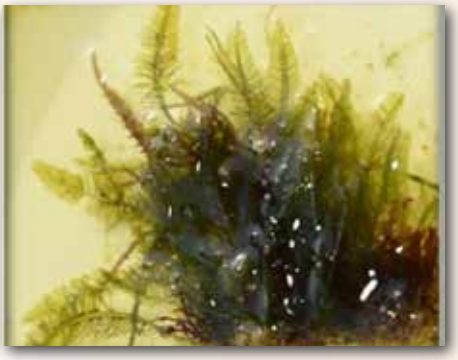
4. Caulerpa lentillifera



5. Ulva fasciata



6. Bryopsis plumosa



7. Halimeda opuntia



8. Caulerpa scalpelliformis



9. Chaetomorpha crassa



10. Padina gymnospora



11. Turbinaria ornata



12. Sargassum wightii



13. Colpomenia sinuosa



14. Dictyota dichotoma



15. Sargassum ilicifolium



16. Ahnfeltiopsis pygmaea



17. Gracilaria debilis



18. Palmaria palmata



19. Jania rosea



20. Gracilaria corticata



21. Acanthophora spicifera



22. Gracilaria edulis



23. Chondracanthus acicularis



24. Gracilaria foliifera

