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EDITOR'S LETTER

Dear Readers,

Welcome to this new issue of AQUAFOCUS, where we continue our commitment in exploring science-driven, sustainable, and future-ready pathways for global aquaculture. As the sector navigates the twin challenges of productivity and sustainability, innovation across farming systems, nutrition, and materials science is no longer optional, it is essential.

This issue opens with an Integrated Multi-Trophic Aquaculture (IMTA), a holistic farming approach that mirrors natural ecosystems by linking species across trophic levels. IMTA represents a powerful solution for improving resource efficiency, minimizing waste, and enhancing environmental resilience a key priority for modern aquaculture.

We then turn our attention to microalgae, often called the green gold of blue aquaculture. From feed and functional additives to bioactives and carbon capture, microalgae are redefining value chains and unlocking new economic and ecological opportunities for the sector.

Our regional spotlight focuses on oyster aquaculture in Sri Lanka, an emerging industry with strong potential for livelihood generation, coastal resilience, and sustainable seafood production. This article highlights how science, policy, and community engagement can together shape a promising blue economy model.

Feed remains the single largest operational cost in aquaculture, and this issue addresses it from multiple angles. Articles on novel aquafeed additives, cost-effective feeding management, and optimizing aquafeeds by balancing cost, nutrition, and sustainability provide practical insights for farmers, nutritionists, and feed manufacturers striving for efficiency without compromising performance or environmental responsibility.

Finally, we explore a truly unconventional yet exciting space in “The Fungal Frontier”, where mycelium-based materials are emerging as sustainable alternatives for infrastructure and applications within aquaculture systems demonstrating how cross-disciplinary innovation can reshape the industry’s future.

Happy reading.

With Regards,

Dr. Jesu Arockia Raj. A

Editor-in-Chief

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