

April 2, 2025

Prof. Dr. I Nyoman Adiasmara Giri
Editor-in-Chief
Indonesian Aquaculture Journal

Dear Prof. Dr. I Nyoman Adiasmara Giri:

I am pleased to submit our original research article entitled **“Effect of different substrates on biofilm growth and lipid content of the diatom *Thalassiosira* sp.”** by Joan T. Tabaquirao, Cleresa S. Dionela, Fredson H. Huervana, and Rex Ferdinand M. Traifalgar for your consideration for publication in the *Indonesian Aquaculture Journal (IAJ)*.

In this study, we evaluated the effects of polycarbonate (PC) and polyvinyl chloride (PVC) substrates on the cell density, growth rate, biomass accumulation, and crude lipid content of *Thalassiosira* sp. Microalgae are typically cultivated in suspension; however, this method often results in low product yields and high operational costs. In contrast, the attached cultivation system, where microalgae are grown on solid surfaces, offers several advantages, including operational efficiency, reduced energy consumption, and enhanced product yield. This alternative approach can address key bottlenecks in algal production, making diatoms a more sustainable and valuable resource for polyunsaturated fatty acids (PUFAs) and animal feed.

We believe this manuscript aligns well with the scope and objectives of the *Indonesian Aquaculture Journal*, particularly in promoting innovative research on biofilm formation, natural food production, and sustainable aquaculture practices. Our findings support the potential of surface-attached diatom cultivation as a viable method to improve algal productivity in aquaculture systems.

Each author has made significant contributions to the manuscript. I, Fredson H. Huervana, conceptualized, designed, and supervised the experiment, and participated in the manuscript review and editing. Joan T. Tabaquirao conducted the experiment, laboratory analyses, data collection, interpretation of results, and wrote the initial draft. Cleresa S. Dionela provided assistance in laboratory work, data gathering, result interpretation, and contributed to the manuscript review and editing. Rex Ferdinand M. Traifalgar co-conceptualized the study and also contributed to the manuscript's review and editing. All authors have reviewed and approved the final version of the manuscript.

This manuscript is original, has not been published, and is not under consideration for publication elsewhere. We declare no conflicts of interest.

Thank you for considering our manuscript for publication. We look forward to your favorable response.

Sincerely,



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