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Copy Editors

FOREWORD

We are proud to present that the latest issue of the Squalen Bulletin of Marine and Fisheries Postharvest and Biotechnology has been published. Squalen Bulletin Volume 16 (2), August 2021, features five original research articles on the area of marine and fisheries post-harvest and biotechnology, i.e., Initial Properties Identification of Refined- and Semi Refined-Carrageenans as Raw Materials for Biodegradable Plastic Production; Antipathogenic Activity of Acroporid Bacterial Symbionts Against Brown Band Disease-Associated Bacteria; Seasonal and Spatial Water Pollution Status at The Rivers Estuaries in Cirebon Region; Molecular Identification, Nutritional Profile and Heavy Metals Content of Edible *Caulerpa* from Binuangeun Coast, Banten; and Neuritogenic Activities of Various *Kappaphycus alvarezii* Extracts in Hippocampal Neurons.

Since June 2021, Squalen Bulletin has been ranked Q4 in Aquatic Science with an SJR value of 0.14. Our current CiteScore has also increased to 0.3 (CiteScore tracking for 2021 is 0.8 and counting). As of July 2021, we welcomed the new addition to the Editorial Board members, Dr. Noora Barzkar (University of Hormozgan, Iran) and Dr. Nuning Vita Hidayati (Universitas Jenderal Soedirman, Indonesia) who will assist us in marine biotechnology and ecology areas.

On behalf of the editorial board, we would like to express our profound gratitude to the reviewers for insightful comments and constructive criticisms towards the published articles despite the uncertain times resulting from the current pandemic. We hope these articles will be helpful for the readers and, in return, stimulate further studies on marine and fisheries post-harvest and biotechnology. Thank you for your continuing interest in our publication.

Editors

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- 1. Scope: research paper, short communication and reviews in the field of postharvest, food safety and environment, and biodiscovery of marine and fisheries.
- 2. Language: English. It is preferable that manuscripts are professionally edited. The abbreviated name or expression should be cited in full at first usage, followed by the accepted abbreviation in parentheses. Metric SI units should generally be used. Chemical formulas and solutions must specify the form used, e.g. anhydrous or hydrated and the concentration must be in clearly defined units. Common species names should be followed by the Latin binomial (Italic) at the first mention.
- 3. Manuscript: should be prepared max. 15 pages, double-spaced (except for title, tables, figures, and bibliography which is prepared in single-spaced) in Microsoft Word on A4 paper, font (Arial 10).

Research Paper manuscripts should contain the following sections :

- a. Title: brief, concise and informative, reflecting the manuscript material. Avoid the abbreviation and formula where possible. Author's name, institution, and address are written under the title.
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- c. Key words: contain 3 to 5 words, referred from Agrovocs
- d. Introduction: state the background and objective(s) of the work, avoiding a detailed literature survey or a summary of the results.
- e. Material and Methods: provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference; only relevant modification should be described.
- f. Results and Discussion: results should be clear and concise. Discussion should explore the significance of the results of the work, not repeat them. Avoid extensive citation and discussion of published literature.
 - -Tables: Short, clear and must be able to stand alone. Table should have a title and number insequence and are placed above the table, font (Arial 10).
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- a. Journal with DOI; b. Journal without DOI; c. Thesis or dissertation; d. Book Chapters
- Houbraken, J. A., Frisvad, J. C., & Samson, R. A. (2010). Taxonomy of Penicillium citrinum and related species. Fungal Diversity, 44(1), 117-133. doi: 10.1007/s13225-010-0047-z
- Yu, Z., Lang, G., Kajahn, I., Schmaljohann, R., & Imhoff, J. F. (2008). Scopularides A and B, Cyclodepsipeptides from a marine sponge-derived fungus, Scopulariopsis brevicaulis. Journal of Natural Products, 71(1), 1052-1054.
- Prigent, S. (2005). Interactions of phenolic compounds with globular proteins and their effects on food related functional properties. ph.D. Thesis. Wageningen University, The Netherlands.
- Lanier, T. C., Carvajal, P., & Yongsawatdigul, J. (2005). Surimi gelation chemistry. In J.W. Park (Ed) Surimi and surimi seafood, p. (pp. 435-489). Boca Raton, FL: CRC Press Taylor and Francis Group.
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