SQUALEN: BULETIN PASCAPANEN DAN BIOTEKNOLOGI KELAUTAN DAN PERIKANAN (SQUALEN: BULLETIN OF MARINE AND FISHERIES POSTHARVEST AND BIOTECHNOLOGY)

Vol.13 No.1, May 2018

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FOREWORD

We are very pleased that Squalen, Bulletin of Marine and Fisheries Postharvest and Biotechnology is presenting first issue, volume 13, year of 2018. This bulletin is part of the Research Center for Marine and Fisheries Product Processing and Biotechnology series of publications.

This issue contains 4 original research articles and 1 review in the field of marine biotechnology and fisheries, i.e. Evaluation of antibacterial assays for screening of marine invertebrate extracts, Amino acid and fatty acid compositions of sea cucumber *Stichopus vastus* from salemo island waters, Indonesia, Antioxidant and ACE inhibitor potency of stripe trevally fish (*Selaroides leptolepis*) hydrolysate, Bacterial diversity of a mat from pantai wartawan hot spring, Lampung and its potential as a source of hydrogenases, and Carageenan oligosaccharides: biological activity and its development opportunities in Indonesia.

We would like to thank Prof. Dr. Wibowo Mangunwardoyo, Dr. Noer Kasanah, Ariyanti Suhita Dewi, Ph.D, Dr. Agus Trianto, Dr. Stalis Norma Ethica, Yogiara, Ph.D, Dr. Nisa Mubarik, Dr. Endang Yuli, and Dr. Tri Winarni as reviewers for this issue.

Special thanks, also, go to the contributors of the journal for their trust, patience and timely revisions. We hope that this issue arouses our readers' interest and may inspire new research and new findings which will then be published in our future issues of Squalen Bulletin.

Editors

SQUALEN BULETIN PASCAPANEN DAN BIOTEKNOLOGI KELAUTAN DAN PERIKANAN (SQUALEN: BULLETIN OF MARINE AND FISHERIES POSTHARVEST AND BIOTECHNOLOGY) Vol. 13 No.1, May 2018

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AUTHORS GUIDELINES SQUALEN: BULETIN PASCAPANEN DAN BIOTEKNOLOGI KELAUTAN DAN PERIKANAN (SQUALEN: BULLETIN OF MARINE AND FISHERIES POSTHARVEST AND BIOTECHNOLOGY)

- 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.
- b. Abstract : a concise and factual abstract is required. The abstract should state briefly the purpose of research, the principle method, result and conclusion. Non-standard or uncommon abbreviation should be avoided, but if essential they must be defined at their first mention in the abstract itself. Abstract should not exceed 250 words.
- 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).
 - -Figures and graphics: Prepared in appropriate pattern usable for black and white versions of all the color illustrations.
 - Graphics should be prepared in MS Excel. Figure should have a title and number insequence. Figure and graphics title and their explanation or notes are placed below the figures or graphics, font (Arial 10).
 - -Pictures/photograph: Prepared in contrast color or B/W. Pictures/photographs should have a title and number insequence. TIFF: color or grayscale photographs (halftones) always use a minimum of 300 dpi; bitmapped line drawings use a minimum of 1000 dpi; combinations bitmapped line/halftone (color or grayscale) a minimum of 500 dpi is required.
- g. Conclusion: Concise considering the title, objectives and research results.
- h. Acknowledgement: Collate acknowledgements, if any, in separate sections at the end of the article before the reference and do not, therefore, include them on the title page, as a footnote to the title or otherwise.
- i. Bibliography: Follow the APA (American Psychological Association) style referencing. References in the text should cite the authors' names followed by the date of their publication, unless there are three or more authors when only the first authors' name is quoted followed by et al. e. g. Smith et al. (1999) or Jones & Smith (2000). References at the end of the paper should be listed in the alphabetical order. Please ensure that every reference cited within the text is also present in the reference list (and vice versa).

Latest and primary references at least 80% are strongly advised.

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., Schmeljchann, R., & Inhoff, 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: ORC Press Taylor and Francis Group.

- **Review Paper**, manuscript should be written as a continuous articles sub headings that reflect the matter discussed, not necessarily the same as the sub heading of the research paper (Abstract, Introduction, Discussion, Conclussion, Acknowledgement, References)
- 4. Submission of manuscript: A soft copy of the manuscript should be submitted electronically by Open Journal System (OJS) at website: www.bbp4b.litbang.kkp.go.id/squalen-bulletin. Manuscript should be uploaded as Word (.doc) files (not write-protected) or/ and MS Excel for the figures or graphics. The text file must contain the entire manuscript including title page, abstract, keywords, text, references, tables, and figures. All the manuscripts submitted to 'Squalen: Buletin Pascapanen dan Bioteknologi Kelautan dan Perikanan (Squalen: Bulletin of Marine and Fisheries Postharvest and Biotechnology)' will be reviewed by peer reviewers and editors. Manuscript submitted should not be submitted or under reviewed other journal.
- 5. Manuscript which does not meet the above requirements will be rejected.
- 6. Editor provides reprint for the author(s).