

**SQUALEN: BULETIN PASCAPANEN DAN BIOTEKNOLOGI
KELAUTAN DAN PERIKANAN**
(SQUALEN: BULLETIN OF MARINE AND FISHERIES POSTHARVEST AND BIOTECHNOLOGY)
Vol.11 No. 3, December 2016

- Publisher** : Research and Development Center for Marine and Fisheries Product Competitiveness and Biotechnology (RDCMFPCB)
- Managing Director** : Head of Research and Development Center for Marine and Fisheries Product Competitiveness and Biotechnology (RDCMFPCB)
- Editor in-Chief** : Dr. Ekowati Chasanah (Biotechnology of Marine and Fisheries, RDCMFPCB, INA)
- Editors** : 1. Dr. Achmad Poernomo (Food Safety, Ministry of Marine and Fisheries, INA)
2. Dr. Bagus Sediadi Bandol Utomo (Fisheries Product Development, RDCMFPCB, INA)
3. Dr. Puspita Lisdiyanti, M.Agr.Chem (Microbiology, Indonesian Institute of Science, INA)
4. Dr. Noer Khasanah (Marine Biotechnology, University of Gadjah Mada, INA)
5. Dr. Antonius Herry Cahyana (Natural Product Chemistry, University of Indonesia, INA)
6. Prof. Dr. Jose Alberto Ramirez de Leon (Food Processing, Universidad Autonoma de Tamaulipas, Mexico)
7. Prof. Dr. Anthony D. Wright (Marine Natural Product Chemistry, University of Hawaii, USA)
- Peer Reviewers** : 1. Prof. Dr. Sharr Azni bin Harmin (Sains and Biotechnology, Unisel, Malaysia)
2. Prof. Dr. Rijkelt Beumer (Food Microbiology, Agrotechnology and Food Sciences, Wageningen University The Netherlands)
3. Prof. Dr. Nurul Huda (Food Processing, University Sains Malaysia, Malaysia)
4. Prof. Dr. Hari Eko Irianto (Fisheries Product Processing, INA)
5. Prof. Dr. Soottawat Benjakul (Food Processing, Faculty of Agro-Industry, Prince of Songkla University, Thailand)
6. Yogiara, Ph.D (Microbiology, Unika Atma Jaya, INA)
7. Prof. Dr. Jörn Piel (Bacterial Natural Products, Institute of Microbiology, ETH Zurich)
8. Dr. Diana Elizabeth Waturangi (Biotechnology, Faculty of Techno Biology, Atmajaya University, INA)
9. Dr. Junhui Chen (Research Center for Marine Ecology, The First Institute of Oceanography, State Oceanic Administration, Qingdao 266061, China)
10. Dr. Ir. Alim Isnansetyo (Marine Natural Product, University of Gadjah Mada, INA)
11. Dr. Supriyadi (Food Processing and Flavor, University of Gadjah Mada, INA)
12. Dr. Agus Heri Purnomo (Fisheries Product Processing, RDCMFPCB, INA)
13. Dr. Dedi Noviendri (Biotechnology, RDCMFPCB, INA)
14. Dr. Nisa Rachmania Mubarik, M.Si (Microbiology, Bogor Agricultural University, INA)
15. Dr. M. Taher (Natural Product, International Islamic University Malaysia, Malaysia)
16. Ir. Yusro Nuri Fawzya (Microbiology, RDCMFPCB, INA)
- Copy Editors** : 1. Sinta Nurwijayanti, MA
2. Syamdidi, M.AppSc
3. Nurrahmi Dewi Fajarningsih, M.Biotech (Adv.)
4. Muhamad Darmawan, MT
5. Diah Ikasari, M.Biotech
- Administration Address** : Research and Development Center for Marine and Fisheries Product Competitiveness and Biotechnology
K.S. Tubun Petamburan VI, Jakarta, 10260
Phone/Fax : +62 (21) 53650157/+62 (21) 53650158
E-mail : squalenbulletin@kcp.go.id
squalenbulletin@gmail.com

Squalen: Buletin Pascapanen dan Bioteknologi Kelautan dan Perikanan (Squalen: Bulletin of Marine and Fisheries Postharvest and Biotechnology) published periodically three times a year i.e. May, August, and December by Research and Development Center for Marine and Fisheries Product Competitiveness and Biotechnology

Accredited Number: 631/AU2/P2MI-LIPI/03/2015

CITATION IS PERMITTED WITH ACKNOWLEDGEMENT OF THE SOURCE

FOREWORD

We would like to present, with great pleasure, the third issues of the Squalen, Bulletin of Marine and Fisheries Postharvest and Biotechnology Volume 11 Number 3, 2016. This Bulletin is part of the Research and Development Center for Marine and Fisheries Product Processing and Biotechnology series of publications. This issue contains the latest research in the field of marine and fisheries postharvest and processing as well as biodiscovery and biotechnology.

This issue comprises 5 original research articles in the field of marine biotechnology and fisheries, i.e. Purification and Characterization of Transglutaminase from Local *Streptomyces* sp. TTA 02 SDS 14; The Optimal Conditions of Xylanase Production using Empty Fruit Bunch Raw Biomass by Marine Isolate LBF-001; Proximate Composition, Texture Performance and Sensory Evaluation of Lindur Fruit-Potato Simulation Chips Enriched with Shrimp (*Penaeus vannamei*) Shell Powder; Nutritional and Albumin Content of Swamp Fishes from Merauke, Papua Indonesia; Fatty Acid Profile, Carotenoid Content, and *In Vitro* Anticancer Activity of Karimunjawa and Lampung Sea Cucumber.

We would like to thank all the reviewers for their contribution for this issue. Our deep appreciation goes to the members of our editorial board, authors, and also section editors and administration team for their tremendous help in preparing this issue. 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. 11 No. 3, December 2016

CONTENT

	Page
FOREWORD	i
CONTENT	iii
Purification and Characterization of Transglutaminase from Local <i>Streptomyces</i> sp. TTA 02 SDS 14 Lia Siti Nur'amaliyah, Dewi Seswita Zilda and Nisa Rachmania Mubarik	75-83
The Optimal Conditions of Xylanase Production Using Empty Fruit Bunch Raw Biomass by Marine Isolate LBF-001 Hans Wijaya, Ahmad Thontowi, Nanik Rahmani and Yopi Sunarya	85-94
Proximate Composition, Texture Performance and Sensory Evaluation of Lindur Fruit-Potato Simulation Chips Enriched with Shrimp (<i>Penaeus vannamei</i>) Shell Powder Diah Ikasari and Ema Hastarini	95-105
Nutritional and Albumin Content of Swamp Fishes from Merauke, Papua, Indonesia Rini Susilowati, Sugiyono and Ekowati Chasanah	107-116
Fatty Acid Profile, Carotenoid Content, and <i>In Vitro</i> Anticancer Activity of Karimunjawa and Lampung Sea Cucumber Ekowati Chasanah, Yusro Nuri Fawzya, Kustiariyah Tarman, Hedi Indra Januar, and Muhammad Nursid	117-124
CURRENT CONTENT	
KEYWORDS INDEX	
AUTHOR INDEX	

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 bio-discovery 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 in sequence 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 in sequence. 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 in sequence. 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., 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.

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, Conclusion, 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).