

BIOMA: Berkala Ilmiah Biologi

Available online: <https://ejournal.undip.ac.id/index.php/bioma/index>

Manuscript title (Font: TNR, bold 14, center, in English)

Bioy Faiz¹, Second author^{2*} (Font: TNR, Bold 12, center)

¹Affiliation, City, Postal Code, Country (Font: TNR, Italic 10, center)

²Affiliation, City, Postal Code, Country (Font: TNR, Italic 10, center)

ABSTRACT (Font: TNR, Bold 11)

The abstract should consist of a single paragraph in English and contain 200-250 words with 1.0 line spacing and justified text. It must provide a concise yet comprehensive summary of the study, including the background and rationale, objectives, key methods (if necessary for context), principal findings, and main conclusions. The abstract should be written clearly and informatively to allow readers to quickly grasp the significance and contribution of the paper. Do not include abbreviations, technical jargon, or citations. The abstract must stand alone, without referring to the main text. (Font: TNR, 11, justify)

Keywords: (in bold) Alel; megabiodiversity; plant; *Zygomonas* (Font: TNR, not bold 11, English)

Provide a maximum of five keywords or key phrases. List them in alphabetical order and separate each with a semicolon (;). Select specific, relevant terms that do not appear in the title, to improve the visibility and searchability of your article. Avoid generic or overly lengthy keywords.

1. INTRODUCTION (Font: TNR, BOLD 11)

This guide provides details to assist authors in preparing a paper for publication in Bioma: Berkala Ilmiah Biologi so that there is a consistency among papers. The manuscript must be written in English and formatted on A4 paper, using TNR font, 11-point size, with 1.15 line spacing and justified text. Page margins must be set to 2 cm on the left, 3 cm on the top, and 1.5 cm on the right and bottom. Each paragraph should begin with a first-line indent of 0.5 cm. These instructions give guidance on layout, style, illustrations, and references and serve as a model for authors to emulate. Please follow these specifications closely as papers which do not meet the standards laid down, will not be published.

The Introduction should provide a concise and informative background to the study, identify the research gap, and state the specific objectives. Authors should avoid presenting a comprehensive literature review; instead, they should highlight the relevance and originality of their research. Present tense is used for general truths or established knowledge, while past tense is used for prior studies. All factual claims must be supported by appropriate in-text citations using the author-date format (e.g., Smith, 2020).

Plagiarism, including self-plagiarism, is strictly prohibited. All manuscripts will be checked for originality prior to peer review. This document also serves as a guide for layout, structure, illustration use, and reference formatting. Authors are expected to use this format as a model. Figures and tables should be placed close to their first mention in the text and must include clear, descriptive captions. All references must follow the required citation style and be properly cited in-text and listed in the reference section. (Font: TNR, 11, justify)

2. MATERIAL AND METHODS (Font: TNR, BOLD 11)

This section should describe the materials, tools, and procedures used in sufficient detail to allow the study to be replicated. The writing must be clear, precise, and concise. Use TNR font, 11-point size, with 1.15 line spacing, justified text alignment, and a first-line indent of 0.5 cm for each paragraph. All subheadings must be numbered sequentially (e.g., 2.1, 2.2) and written in sentence case. Avoid excessive detail that is not relevant to understanding the methodology. Units of measurement must follow the International System of Units (SI). Brand names and manufacturers of equipment or chemicals should be included in parentheses upon first mention. If statistical methods were applied, these should be described clearly, including the software and version used. (Font: TNR, 11, justify)

*Corresponding author: email

Received: March 3, 2023, Approved: March 26, 2024

Cite this article as: Faiz et al, (2024) *BIOMA: Berkala Ilmiah Biologi*, XX(XX): XX-XX (Font: TNR, 8)

2.1 Study area (Font: TNR, Bold 11)

Provide a concise description of the geographical, environmental, or laboratory setting where the study was conducted. Include coordinates or location details if relevant. (Font: TNR, 11, justify)

2.2 Materials (Font: TNR, Bold 11)

List and describe the materials used in the study, including biological samples, chemicals, instruments, and other relevant items. (Font: TNR, 11, justify)

2.3 Title of the methods (Font: TNR, Bold 11)

Explain the experimental design, data collection techniques, procedures, and any analysis performed. Ensure all steps are logical and in chronological order. (Font: TNR, 11, justify)

2.4 Title of the methods (Font: TNR, Bold 11)

Explain the experimental design, data collection techniques, procedures, and any analysis performed. Ensure all steps are logical and in chronological order.

2.5 Data analysis

Explain the data analysis, formula and the application that you've been used to validate the research results. Formula should be written like following example:

Simpson's index of diversity:

$$D = \sum P_i^2 \quad (1)$$

where P_i is the proportion of number of individuals of species i to N , and can be used to estimate Simpson's index of diversity ($1-D$) only for an infinite population. However, according to some scientists depending on the sample size, Shannon–Wiener diversity index (H') has a large bias, while Simpson's index of diversity ($1-D$) has not (Lande, 1996). (Font: TNR, 11, justify)

Shannon-Wiener index:

$$H' = - \sum p_i \ln p_i \quad (2)$$

where H' is Shannon-Wiener Diversity Index, p_i is proportion of individuals of species, shannon-Wiener Index categories (Ismaini et al., 2015) are $H' < 1$ for low species diversity, $1 \leq H' \leq 3$ for moderate species diversity, $H' > 3$ for High species diversity. The Shannon-Wiener Diversity Index was used to calculate species diversity (Indriyanto, 2006). (Font: TNR, 11, justify)

3. RESULTS AND DISCUSSION (Font: TNR, Bold 11)

This section should present the findings of the study clearly and logically, supported by appropriate tables and figures. Results should be described objectively, without interpretation, while the discussion should interpret the significance of the results in relation to the research objectives and relevant literature. Figures and tables must be referenced in the text and presented in numerical order (e.g., Figure 1, Table 1). Each figure should be placed *after* the paragraph where it is first mentioned, with the word “**Figure**” in bold followed by the figure number (e.g., **Figure 1.**) in bold, and then followed by the figure title in *TNR, 11 pt, justified*, and not bold. The caption must be **positioned below the figure**. For tables, the word “**Table**” should also be in bold, followed by the table number (e.g., **Table 1.**) in bold, and then the table title in *TNR, 11 pt, justified*, and not bold. However, unlike figures, **the table title must be placed above the table**. Tables should be formatted clearly, without vertical lines, and should use consistent spacing and alignment for readability. Avoid repeating data that is already shown in tables or figures in the body text. Instead, summarize and highlight key trends or patterns. Any comparison with previous studies should be supported by proper in-text citations using the author-date format.

Subheadings may be used and numbered sequentially (e.g., 3.1, 3.2) to organize different parts of the results or themes in the discussion. Use sentence case for subheadings, with TNR font, 12 pt, and bold. Each figure

must be cited in the text and inserted as close as possible to its first mention. The figure caption should appear **below** the image. (Font: TNR, 11, justify).

Each table must also be cited in the text and placed as close as possible to its first reference. The table caption should be placed **above** the table. The format is:

Table 1. (in bold) followed by the title of the table in TNR, 11 pt, justified, not bold.

	River stream	Mixed forest	Pine forest
River stream		77.78%	20%
Mixed forest			10%
Pine forest			

3.1 Yield of xylanase production (Font: TNR, Bold 11)

(Example of a subsection: here you would describe the specific results related to yield.) (Font: TNR, 11)

3.2 Enzyme activity and stability (Font: TNR, Bold 11)

(Another example subsection: present results and interpretations related to enzyme behavior.) (Font: TNR, 11)

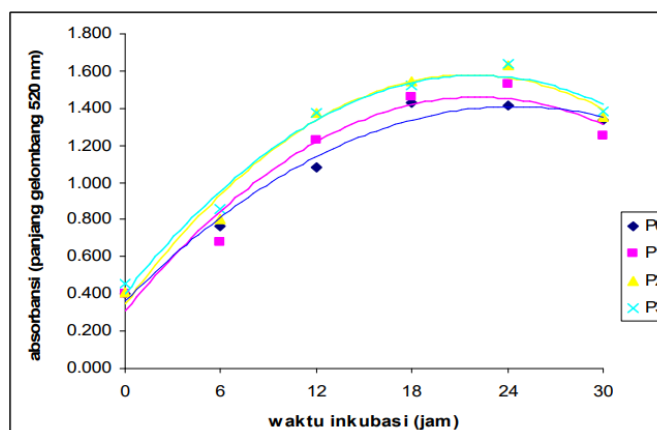


Figure 1. (in bold) followed by the title of the figure in TNR, 11 pt, center, not bold
Note or Abbreviation: Please write it down in TNR, 10 pt, center, not bold.

4. CONCLUSION (Font: TNR, BOLD 11)

Finally, you are responsible for language as editors will not check it. Do a spell and grammar check. This is available in Word. If English is not your native language, get a professional proof-reader to help if possible.

The word “data” is plural, not singular. In American English, periods and commas are within quotation marks, like “this period.” A parenthetical statement at the end of a sentence is punctuated outside of the closing parenthesis (like this). (A parenthetical *sentence* is punctuated within the parentheses.) Use the word “whereas” instead of “while” (unless you are referring to simultaneous events).

Prefixes such as “non,” “sub,” “micro,” “multi,” and “ultra” are not independent words; they should be joined to the words they modify, usually without a hyphen. There is no period after the “et” in the Latin abbreviation “*et al.*” (it is also italicized). The abbreviation “i.e.,” means “that is,” and the abbreviation “e.g.,” means “for example” (these abbreviations are not italicized). (Font: TNR, 11, justify)

ACKNOWLEDGMENT (Font: TNR, Bold 11, capital)

The preferred spelling of the word “acknowledgment” in American English is without an “e” after the “g.” Use the singular heading even if you have many acknowledgments. (Font: TNR, 11, justify)

REFERENCES (Font: TNR, Bold 11, capital)

Authors are expected to include at least 15 primary references (for research manuscripts) and 25 primary references (for article review manuscripts) in the form of books, research results and scientific publications in journals or proceedings, 80% of which have been published in the last ten years. Several applications that can be used to help create bibliography include Zetero, EndNote or Mendeley. Bibliography is typed with double spaces. The citation follows the Harvard style with the following modifications:

Example formats: (Font: TNR, 11, justify)

- Boyce, P.C., Wong, S. Y., Ting, A. P. J., Low, S. E., Ng, K. K., and Ooi, I. H., 2010. The Araceae of Borneo-The genera. *Journal of Aroideana* Vol.33. <https://doi.org/10.19568/joa.v5i2.37>
- Fawzya, Y.N., Putri, S., Noriko, N., and Patantis, G., 2013. Identification of SGS 1609 Cellulolytic Bacteria Isolated from *Sargassum spec.* and Characterization of The Cellulase Produced. *Squalen Bulletin of Marine & Fisheries Postharvest & Biotechnology*. 8 (2): 57-68. <https://doi.org/10.15578/squalen.v8i2.87>
- Fuadi, A. M. and Sulistya, H., 2008. Pemutihan Pulp dengan Hidrogen Peroksida. *Jurnal Reaktor*. 2(12): 123-128. <https://doi.org/10.15578/jr.v8i8.97>
- Helianti, I., Ulfah, M., Wahyuntari, B., Nurhayati, N., and Fajar, D., 2014. Properties of Native and Recombinant Thermoalkalophilic Xylanases from *Bacillus halodurans* CM1, and Application of the Enzymes in Industrial Deinking Process. *The 1st ASEAN Microbial Biotechnology Conference 2014 (AMBC2014)*. 19-21 Feb 2014. Bangkok, Thailand. <https://doi.org/10.15855/.v8i9.87>
- Isaie, M., Padmavathi, and Tallapragada., 2015. Agro wastes residues as strategy to produce cellulase. *International J. Of Chemt Tech*. 8: 89-97. <https://doi.org/10.93578/ijoc.v8i2.87>
- Ji, W., Ming, D., Yan-Hong, L., Qing-Xi, C., Gen-Jun, X., and Fu-Kun, Z., 2003. Isolation of a multifunctional endogenous cellulase gene from mollusc, *Ampullaria crossean*. *Dalam: Al-Arif, M.A., W. Darmanto dan N.T. Puspaningsih, (eds.) 2012. Isolasi dan Karakterisasi Ensim Selulase dari Keong Emas dan Rayap sebagai Bahan Pendegradasi Selulosa. Jurnal JBP Biosains*. 2(14): 86-92. <https://doi.org/10.93778/jjbpb.v6i2.97>
- Johnsen, H.R., and Krause, K., 2014. Cellulase Activity Screening Using Pure Carboxymethylcellulose: Application to Soluble Cellulolytic Samples and to Plant Tissue Prints. *Int. J. Mol. Sci*. 15: 830-838. <https://doi.org/10.96778/ijms.v4i2.97>
- Khiannngnam, S, Y., Pootaeng-on, T., Techakriengkrai, S., and Tanasupwat., 2014., Screening and Identification of Cellulase Producing Bacteria Isolated from Oil Palm Meal. *J. Appl. Pharmaceutical Sci*. 4(04): 090-096. <https://doi.org/10.19378/japs.v8i2.87>
- Kartawinata, N. S., Riswan, A. N., Ginting and Puspitasari., Y., 2001. An Overview Post Extraction Secondary Forest in Indonesia. *Journal of Tropical Forest Science*. 13(4): 621 – 638. <https://doi.org/10.15688/jotfs.v8i2.87>
- Mayo, S.J., Bogner, J., and Boyce, P.C., 2014. The Genera of Aaceae. Media resources Information Services Department. Royal Botanical Garden, Kew. <https://doi.org/10.97578/rbg.v9i4.27>
- Ulfah, M., Helianti, I., Wahyuntari, B., and Hurhayati, N., 2011. Characterization of a New Thermoalkalophilic Xylanase –Producing Bacterial Strain Isolated from Cimanggu Hot Spring, West Java, Indonesia. *Microbiology Indonesia*. 3(5): 139-143. <https://doi.org/10.69578/mi.v7i2.67>