

Editor-In-Chief: Motomitsu Kitaoka

Associate Editor: Kiyohiko Igarashi

Managing Editors: Naoko Fujita

Kazumi Funane

Naoto Isono

Kazuo Ito

Kimiko Itoh

Kanefumi Kitahara

Takahiro Noda

Tomio Yabe

Editorial Board: James N. BeMiller

James R. Ketudat Cairns

Jay-Lin Jane

Štefan Janeček

Seung-Taik Lim

Thomas W. Okita

Kwan-Hwa Park

Jack Preiss

Birte Svensson

Advisory Board: Yoshihiko Amano

Yasunori Nakamura

Editorial Secretary: Yoko Machida

Instructions for Authors

(Revised Jan. 1, 2011)

1. **Policy:** The Journal of Applied Glycoscience publishes papers in the broad field of general and applied glycoscience. The manuscript to be submitted must be a report of original research that has not been published and is not under review elsewhere.
2. **Types of contributions:** Papers are limited to three types: Regular papers, Notes and Reviews.
 - 1) Regular papers must be reports in final form and complete in themselves.
 - 2) Notes may be short research reports describing a new experimental method, an especially interesting finding, or other material that may not be suitable for publication as a Regular paper.
 - 3) Reviews are articles that offer general discussion of a subject.
3. **Manuscript preparation:** Manuscripts must be written in English and be prepared in accordance with the "Instructions for Manuscript Preparation."
4. **Publication fee:** No publication fee will be applied if the corresponding author is a member of the Japanese Society of Applied Glycoscience. If the corresponding author is not a member, 10,000 Japanese yen (JPY) will be charged as a publication fee.
5. **Length of papers:** Papers should be six printed pages for Regular papers, three printed pages for Notes, 10 printed pages for Reviews. To encourage more concisely written articles, authors are required to pay a page charge (members: 15,000 JPY/page; non-members: 20,000 JPY/page) in excess of these pages. Approximately 100 lines of manuscript are equivalent to one printed page, and one figure or table is generally equivalent to 20 lines.
6. **Color charge:** Authors will be charged 50,000 JPY/page if figures and/or tables are printed in color. Color printing is provided at the request of authors. The editor may request that authors prepare figures and/or tables in color.
7. **Supplemental information:** Supplemental information can be added as Supplementary Materials. The supplemental information

of an accepted manuscript is generally available to the public through the Internet, at the Journal's Web site. The existence of supplemental information must be indicated in the text (e.g., "Fig. S1; see J. Appl. Glycosci. Web site"). Movies must be saved in a format that is viewable with free software for Windows and Macintosh. Materials whose copyright belong to a third party are not acceptable as supplemental information.

8. **Copyright:** Copyrights of manuscripts published in the Journal of Applied Glycoscience belong to the Japanese Society of Applied Glycoscience. For publication, all authors must transfer the copyright to the Society. The copyright covers the exclusive and unlimited right to reproduce and distribute the article in any form. It also covers translation rights for all languages.
9. **Submission:** The manuscript for submission should be prepared as a single PDF file and should include the items listed in the Instructions for Manuscript Preparation. The size of the PDF file is limited to 5 MB. The file, accompanied by the submission form and a scan of the executed and signed copyright transfer form (available as a PDF file at the Journal's submission site), as well as the file of supplemental information, if applicable, should be sent to the editorial office via the e-mail address listed on the Journal's submission site. The executed and signed copyright transfer form may be sent to the editorial office by fax or postal mail.
10. **Review process:** The receiving date is the date on which the editorial office receives the manuscript. If the corresponding author does not receive notification of receipt of the manuscript within five working days, he or she should contact the editorial office. Any manuscript not prepared in accordance with the "Instructions for Authors" or the "Instructions for Manuscript Preparation" will be returned to the author prior to the review process. During that process, the editorial committee selects an editor for the manuscript, and that editor consults two or more referees to evaluate the manuscript and judge it for acceptance or rejection and to provide comments. The corresponding author should provide a list of more than three possible referees who are free of any conflict of interest; he or she may also provide names of persons who should be excluded from consideration as a referee. The authors' referee suggestions notwithstanding, the editorial committee retains the right to choose referees, and the names of the referees shall remain confidential; the editorial committee also makes the final decision regarding acceptance or rejection. The acceptance date is the date on which the editorial committee decides upon acceptance. If the manuscript is returned to the corresponding author for revisions following the review process, he or she should revise the manuscript within three months; if the corresponding author does not revise the manuscript within that period, the manuscript is automatically withdrawn from consideration. If the revised manuscript is resubmitted beyond the deadline or is considerably different from the original manuscript, it will be considered a new submission.
11. **English editing:** It is recommended that authors whose native language is not English have their manuscripts checked by a native speaker of English prior to submission. The author should indicate on the submission form whether any English-language editing of the manuscript has been performed. In cases where the content of the manuscript is acceptable for publication in the Journal but the quality of its English is not sufficient, the editorial office may have the manuscript edited, upon approval from the authors. In such a case, an English-language editing fee will be charged to the authors.

(continue to inside backcover)

- 12. Advance publication:** Manuscripts that have been accepted for publication will soon after be made available online (as a PDF file) on J-STAGE, as an advance publication. If the authors do not wish to have advance publication, they should notify the editorial office. A digital object identifier (DOI) number will be issued at this stage.
- 13. Final manuscript:** Following acceptance, the corresponding author will be asked to submit the final manuscript for printing by the editorial office.
- 14. Proof review by author:** The corresponding author is asked to correct only the first proof. At this stage, only printing-error corrections are allowed.
- 15. Publication:** The accepted manuscript is published with a bibliography according to the Journal's topic schedule.
- 16. Invited article:** The editorial committee may invite an author to submit a Review article. Invited Review articles need not adhere to the page-limit numbers described in section 5 above. In addition, publication fees, page charges and color charges will not be charged to the author.
- 17. Inquiry:** Any inquiry should be sent by e-mail.
Editorial Office
Managing editor: Yoko Machida
Journal of Applied Glycoscience
Center for Academic Publications Japan
2-4-16 Yayoi, Bunkyo-ku, Tokyo 113-0032, Japan
E-mail: applglycosci@capj.or.jp
Tel. +81-3-3817-5821 Fax. +81-3-3817-5830

Instructions for Manuscript Preparation (Revised May. 1, 2013)

- 1. Before starting:** Please check the "Instructions for Authors" and "Instructions for Manuscript Preparation" and refer to the latest issue of the Journal. A template file is available at the Journal's submission site (URL: http://www.capj.or.jp/jag/JAG_submission_en.htm).
- 2. Typing:** The text should be approximately 12 points, and there should be 25 lines per page with margins of approximately 30 mm on the top, bottom and each side of A4-size pages. To allow for ease of reference during the reviewing process, line numbers should be added to the left margin, and page numbers should be added to the bottom-center of all pages. The font should be Times New Roman or Times. For special characters, a Unicode of the font used or Symbol font should be used. Do not use Asian two-byte fonts such as Japanese, Chinese, or Korean.
- 3. Style:** The manuscript should be arranged as follows: title page, abstract and key words, text, acknowledgments, references, tables, figure legends and figures.
- 1) Title page: The first page of each manuscript must contain the following information:
- (1) Article type: Specify whether the manuscript is a Regular paper, Note, or Review
 - (2) Running title, not to exceed 80 characters (including spaces)
 - (3) The full title of the manuscript
 - (4) Full names and affiliations of the authors: Please prepare these in accordance with the following example. The corresponding author should be indicated with an asterisk (*).
Masafumi Hidaka,^{1,2} Mamoru Nishimoto,² Motomitsu Kitaoka,² Takayoshi Wakagi,¹ Hirofumi Shoun¹ and Shinya Fushinobu^{1*}
¹Department of Biotechnology, The University of Tokyo (1-1-1

Yayoi, Bunkyo-ku, Tokyo 113-8657, Japan)

²National Food Research Institute, National Agriculture and Food Research Organization (2-1-12 Kannondai, Tsukuba, Ibaraki 305-8642, Japan)

(5) The phone number, fax number and e-mail address of the corresponding author should be presented as follows:

*Corresponding author (Tel. +81-XX, Fax. +81-XX [or Tel. & Fax. +81-XX], E-mail: xxx@yyy.zz.jp)

(6) A complete list of abbreviations used more than twice in the text

(7) Any necessary footnotes

2) Abstract and key words: The abstract should be no longer than 250 words for Regular papers and Reviews. The abstract for Notes should contain fewer than 150 words. After the abstract, four to 6 key words should be given.

3) Text: Major headings are in bold capitals and the text follows on the next line. Minor headings are italicized and followed by a period and the text follows on the same line.

Regular papers consist of the INTRODUCTION, MATERIALS AND METHODS, RESULTS and DISCUSSION as major headings. The RESULTS and DISCUSSION sections may be merged as RESULTS AND DISCUSSION. The MATERIALS AND METHODS section may be placed after the DISCUSSION section as EXPERIMENTAL. In Notes, no major headings are used in the text; if necessary, EXPERIMENTAL may be used in Notes. The section styles for Reviews are not defined.

4) Acknowledgments: ACKNOWLEDGEMENTS may be placed after the text as a major heading, if necessary.

5) References: References should be numbered in the text in superscript as ¹⁾, ^{2,3)}, or ⁴⁻⁶⁾ and listed in the order of their appearance in the text. Follow the style shown in the examples below. The reference list starts with the major heading REFERENCES. To cite articles that are in press, digital object identifiers (DOIs) should be provided, if available. Citations of unpublished results, papers in preparation and Web sites should be included in the text in parentheses, but not in the reference list.

<Examples>

Citation of journal articles

1) H. Chaen: Studies on novel enzymes for synthesis of trehalose from starch. *J. Appl. Glycosci.*, **44**, 77-82 (1997).

2) J.D. McCarter and S.G. Withers: 5-Fluoro glycosides: a new class of mechanism-based inhibitors of both α - and β -glucosidases. *J. Am. Chem. Soc.*, **118**, 241-242 (1996).

3) A. Kumagai, S. Tada, K. Nozaki, M. Mizuno, T. Kanda, S. Suzuki, K. Kusumoto, T. Sasaki, Y. Kashiwagi and Y. Amano: Enzymatic production of glucosylxylose using a cellobiose phosphorylase-yeast combined system. *J. Appl. Glycosci.*, in press, DOI: 10.5458/jag.jag. JAG-2010_008.

Citation of book chapters

4) A.H. Young: Fractionation of starch. in *Starch: Chemistry and Technology*, R.L. Whistler, J.N. BeMiller and E.F. Paschall, eds., 2nd Ed., Academic Press, New York, pp. 249-283 (1984).

Citation of book chapters in annually issued books with serial volume numbers

5) K.B. Hicks: High-performance liquid chromatography of carbohydrates. *Adv. Carbohydr. Chem. Biochem.*, **46**, 17-72 (1988).

6) M.R.J. Salton: Chemistry and function of amino sugars and derivatives. *Annu. Rev. Biochem.*, **34**, 143-174 (1965).

7) L. Lehle and W. Tanner: Synthesis of raffinose-type sugars. *Methods Enzymol.*, **28**, 522–530 (1972).

Abstracts of conferences

8) Y.L. Chen and N.A. Morrison: Unique functional properties of microfibrillar cellulose. in *Abstract Book of XIX International Carbohydrate Symposium*, AP 111, San Diego, CA (1998).

Patents

9) Nihon Shokuhin Kako Co., Ltd., M. Muramatsu, T. Nakakuiki, S. Kainuma and T. Miwa: Production Method of Branched Fructooligosaccharides, *U.S. Patent* 5,334,516 (1994).

6) Tables: Tables are prepared as text data. They must be numbered with Arabic numerals (e.g., "Table 1") according to their sequence in the text. Each table must be prepared and submitted on a separate page. Horizontal lines should be used to separate components in rows, but vertical lines should not be used to separate columns. Each table should have a brief and self-explanatory title. Any explanation essential to the understanding of the table (e.g., abbreviations) should be given as a footnote beneath the table.

7) Figures: Figures are prepared as files. The editorial office accepts PPT, PPTX, PDF, TIF, JPG and EPS files. For other formats, please inquire with the editorial office when submitting the final manuscript. Figures must be numbered with Arabic numerals (e.g., "Fig. 1") according to their sequence in the text. Each figure should be submitted on a separate page. Figures should be in the desired final size and should match the size of either the column width (80 mm) or the printing area (175 mm). The editorial office may ask authors to revise a figure if its resolution is not sufficiently high for printing.

8) Figure legends: Figure legends containing the title and explanation are prepared as text data on a separate page. One blank line or more should be inserted between the legend of a figure and the one that follows. If the authors wish to have a color figure printed in gray scale, they should make this stipulation here; otherwise, the manuscript will be reviewed "as is," and the figure will be printed in color at the authors' expense.

9) Supplemental information: Supplemental information can be added as Supplementary Materials. The supplemental information of an accepted manuscript is generally available to the public through the Internet, at the Journal's Web site. The existence of supplemental information must be indicated in the text (e.g., "Fig. S1; see J. Appl. Glycosci. Web site"). Movies must be saved in a format that is viewable with free software for Windows and Macintosh. Materials whose copyright belong to a third party are not acceptable as supplemental information.

4. Numbers and formulae: Formulae should be prepared on one line, if possible, (e.g., $v = k_{cat}[E]_0[S]/(K_m + [S])$). If necessary, formulae are numbered as (1) (2) and each number is given at the right end of the same line of each formula. Large numbers should be divided at every third digit, as in "123,456,789."

5. Descriptions: The SI system should be used for all scientific and laboratory data.

1) Units: length: m, Å; area: m²; volume: L (liter); mass: g, mol; time: year(s), month(s), week(s), day(s), h, min, s; temperature: °C, K; concentration: M (molar = mol/L), %, ppm, ppb; energy: cal, J; gravity: G; force: N, dyn, kgf (= g × N); pressure: Pa, kgf/cm²; power: W; current: A; electric potential: V; resistance: Ω; viscosity: Pa·s, BU (Brabender unit); radioactivity: Bq, cpm, R; angle: ° (degree), ' (minute), " (second); sedimentation coefficient: S (Svedberg unit = 10¹³ s). Others: I₂ g/100 g (iodine

affinity), U (enzyme activity, μmol/min) and mesh (size of particles).

2) Names of compounds: Basically according to IUPAC rules. Abbreviations of natural amino acids, nucleic acids and co-enzymes that are commonly used may be used without definition. For abbreviations of amino acids, one-letter abbreviations can be used only to show peptide sequence (such as D263). Otherwise, three-letter abbreviations should be used.

3) Names of enzymes: Use trivial or systematic names. If the article is discussing the character of the enzyme, its accepted name and EC number, as recommended by the Nomenclature Committee of the International Union of Biochemistry and Molecular Biology (Enzyme Nomenclature, <http://www.chem.qmul.ac.uk/iubmb/enzyme/>) should be used.

4) Scientific names of living organisms: Use full binominal name at the first appearance (e.g., *Aspergillus niger* and *Manihot esculenta* Crantz). From the second appearance, the name should be abbreviated (e.g., *A. niger* and *M. esculenta*), as long as such abbreviations do not cause confusion.

5) Deposit of data: Before submitting the manuscript, new DNA and peptide sequences must be deposited to certain public databases such as DDBJ; new atomic coordinates must be deposited to certain public databases, such as PDB and CCDC. Accession numbers should be provided in the MATERIALS AND METHODS section.

Notice about photocopying:

In order to photocopy any work from this publication, you or your organization must obtain permission from the following organization which has been delegated for copyright clearance by the copyright owner of this publication.

<Except in the USA>

Japan Academic Association for Copyright Clearance, Inc. (JAACC)

6-41 Akasaka 9-chome, Minato-ku, Tokyo 107-0052, Japan

Tel. +81-3-3475-5618 Fax. +81-3-3475-5619

E-mail: info@jaacc.jp

<In the USA>

Copyright Clearance Center, Inc.

222 Rosewood Drive, Danvers, MA 01923, USA

Tel. +1-978-750-8400 Fax. +1-978-646-8600

Published by:

The Japanese Society of Applied Glycoscience

c/o Mainichi Academic Forum Inc.

1-1-1 Hitotsubashi, Chiyoda-ku, Tokyo 100-0003, Japan

URL: http://jsag.jp/index_e.html

E-mail: jsag@mynavi.co.jp

Typesetter and printer:

Shobi printing Co., Ltd.

©The Japanese Society of Applied Glycoscience