

INSTRUCTIONS TO AUTHORS

Revised on August 15, 2010

ZOOLOGICAL SCIENCE publishes contributions, written in English, in the form of (1) **Original Articles**, (2) **Reviews**, and (3) **Essays**. *Reviews* and *Essays* are usually invited by the Editor. Authors should consult with the Editor-in-Chief before submitting unsolicited *Reviews* and *Essays*. We welcome the submission of papers from non-members of the Society. Read the INSTRUCTIONS TO AUTHORS carefully when you prepare a manuscript.

A. SUBMISSION OF MANUSCRIPT

All manuscripts should be submitted using the **ZOOLOGICAL SCIENCE** web-based manuscript submission and handling system (**Manuscript Central; MC**) at the URL below. **Manuscript Central (MC) Online Submission System for Zoological Science**
<http://mc.manuscriptcentral.com/zs>

The following electronic files should be prepared for each electronic submission:

- Main body of the text (**Main Document** file in MC) containing title page, abstract, text, references, figure legends, and table captions.
- Figures and/or tables (**Illustration** and **Table** files in MC, respectively).
- Supplementary material (**Supplementary Files** in MC), to be published online only (this is optional and should be kept to a minimum).

MC will automatically convert these uploaded files into single PDF and HTML documents so that they can be viewed and printed for peer reviewing. Authors must verify that the PDF and HTML files are satisfactory and complete. It is the authors' responsibility to submit manuscripts that are written in concise, grammatically correct English. Manuscripts that contain excessive errors in grammar or usage will not be accepted for publication.

Contact the MC Support Desks if you are having trouble accessing the system, the Zoological Science *Editorial Office* for general questions, or the office of the appropriate *Reviewing Editor* for questions concerning your manuscript. Otherwise, refer to the online instructions and help menus at **MC** (click the *Get Help Now* tab at the top of the page). The "Author Quick Tutorial" and "Online Users Guide" are especially helpful.

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Use e-mail for questions

Manuscript submission/handling/proof editing:

E-mail: zs-office@umin.net

Although electronic submission of manuscripts via **MC** is strongly recommended, authors still have the option to submit their illustrations via conventional postal service to the Zoological Science Editorial Office (see Section B below, *Size limit*).

B. NOTES ON PREPARATION OF ELECTRONIC FILES

File formats

Authors should NOT submit PDF file(s) converted from their original document and image files, because the uploaded files will be automatically converted by **MC** into HTML and PDF documents. The **Main Document** file should be prepared in Microsoft Word 6.0 or a later version. Files prepared in other word-processing packages should be saved in rich text format (RTF). The recommended formats for **Illustration** files are TIF, EPS, PSD (Adobe Photoshop), and AI (Adobe Illustrator). The color mode should be set to CMYK, not RGB, and the resolution should be a minimum of 300 dpi. Although JPG, GIF, and PPT (Microsoft Power Point) files are also acceptable, we cannot guarantee the quality of final images online or in print. You should avoid the BMP format. The preferred software for **Table** files is Microsoft Excel (save each table in a file with a single worksheet; multi-sheet Excel files are not acceptable). Useful information about digital art is available at <http://cjs.cadmus.com/da/index.jsp>.

Size limit

Please note that the combined size limit for all uploaded files is **20 MB**. If your files exceed this size limit, please consider submitting illustrations via conventional postal service. Make sure that you complete the "Files to be sent in off-line" section during your submission via **MC**. Send **two complete sets of high-quality illustrations** for electronic reviewing as well as for publishing, to the Editorial Office (see Section E below). Authors are welcome to contact the Editorial Office for further details.

C. PREPARATION OF *Main Document* FILE

Manuscripts should be prepared using a proportional font such as Times or Times New Roman in 12-point size. The entire text should be double-spaced with appropriate margins. The right margin should NOT be justified. All pages should be numbered consecutively. The use of footnotes to the text should be avoided as far as possible. Sentences should be separated by a single space. For spelling, American style is preferred; e.g., use homolog, analyze, center, and behavior rather than homologue, analyse, centre, and behaviour. Common Latin

abbreviations such as *ibid.*, etc., e.g., i.e., and 'et al.', and short, commonly used Latin terms such as 'in vitro', 'in vivo', and 'in situ', should NOT be italicized.

The preferred organization of the **Main Document** of an original paper is as follows: (1) Title page, (2) Abstract and Key words, (3) Introduction, (4) Materials and Methods, (5) Results, (6) Discussion, (7) Acknowledgments, (8) References, and (9) Figure legends and table captions. The **Table** and **Illustration** files should be prepared separately from the **Main Document** file (see Section D, E below). However, authors are not obliged to adhere rigidly to this organization. They may modify the style when such modification makes the presentation clearer and more effective. There is no restriction on the style of review articles.

Following are descriptions of the sections in a **Main Document** file listed above:

1. TITLE PAGE

The first page of the manuscript should contain the title; the authors' names; the authors' affiliations and addresses; an abbreviated title (40 characters or less, including spaces) to be used as the running header; the name and contact information (phone and fax numbers and e-mail address) for the corresponding author; and any title-page footnotes. Authors with different affiliations should be identified by the use of a numerical superscript linking the name and affiliation. In addition, the authors should select from the following list, and indicate on the first page, the discipline in which they wish the submitted paper to be reviewed and published: Behavioral biology, Biochemistry, Cell biology, Developmental biology, Diversity and evolution, Ecology, Endocrinology, Genetics, Immunology, Molecular biology, Morphology, Neurobiology, Phylogeny, Physiology, Reproductive biology, or Taxonomy.

2. ABSTRACT AND KEY WORDS

All manuscripts must include a brief but informative ABSTRACT, preferably not exceeding 250 words, intelligible without reference to the main text. The abstract should not be divided into multiple paragraphs, and should not include reference citations. Five or more key words should be provided below the ABSTRACT to assist with indexing of the article.

3. INTRODUCTION

This section should provide enough background information to make it clear why the study was undertaken and should clearly describe the objectives of the study. Lengthy literature reviews are discouraged.

4. MATERIALS AND METHODS

This section should provide the reader with all the information necessary to repeat the work. For a modification of published methodology, only the modification needs to be described, with reference to the original source. **Statistical analysis** of the data (where applicable) is mandatory, using appropriate methods, which must be cited.

5. RESULTS

Results should be presented by referring to tables and figures and without discussion. Avoid repeating in the text lists of numerical values that are also presented in tables; however, reference to peak or other noteworthy values is permissible.

In taxonomic descriptions of new species, the following order of topics is preferred: species name (centered), reference to relevant figures & tables (centered on next line); synonymies; diagnosis (if used); material examined (holotype, paratype[s], and other material); etymology; description; taxonomic remarks; other information, if any (e.g., natural history, behavior); and finally occurrence/distribution.

6. DISCUSSION

This section should at least include a concise summary of the principal findings, a discussion of the validity of the observations, a discussion of how the findings relate to other published works dealing with the same subject, and a discussion of the significance of the work.

7. ACKNOWLEDGMENTS

In this section, the authors should acknowledge assistance to their study, including, for example, sources of financial and material support, people who assisted in fieldwork, or reviewers of the manuscript.

8. REFERENCES

References should be cited in the text as follows:

One author: Matsuda (1995) or (Wada, 1994; Matsuda, 1995).

Two authors: Matsuda and Yamada (1994) or (Wada, 1992; Matsuda and Yamada, 1993)

More than two authors: Matsuda et al. (1990) or (Wada et al., 1986, 1989; Matsuda et al., 1990a, b)

All references cited in the text should be listed in the REFERENCES section in alphabetical order according to the surname of the first author. For two-author papers with the same first author, the order is alphabetical by the second author's name. For three-or-more-author papers with the same first author, the order is chronological. The REFERENCES section should be double spaced like the rest of the manuscript, and without a blank line between separate references.

The following examples illustrate the format to be used for different types of references:

Books:

Campbell RC (1974) *Statistics for Biologists*. 2nd ed, Cambridge University Press, London

Journal articles:

Shima A, Ikenaga M, Nikaido O, Takabe H, Egami N (1981) Photoreactivation of ultraviolet light-induced damage in cultured fish cells as revealed by increased colony forming ability and decreased content of pyrimidinedimers. *Photochem Photobiol* 33: 313–316

Articles in edited volumes:

Nakahara H (1991) Nacre formation in bivalve and gastropod molluscs. In "Mechanisms and Phylogeny of Mineralization in Biological

Systems" Ed by S Suga, H Nakahara, Springer Verlag, New York, pp 343–350

Wiersma CAG (1961) Reflexes and the central nervous system. In "The Physiology of Crustacea, Vol 2" Ed by TH Waterman, Academic Press, New York, pp 241–279

Journal names should be abbreviated, without punctuation; lists of standard journal abbreviations are accessible via the World Wide Web (e.g., <http://home.ncifcrf.gov/research/bja/> or <http://library.caltech.edu/reference/abbreviations/>) by searching with the keywords 'scientific journal abbreviations'.

Manuscripts accepted for publication but not yet published should be listed in the Reference section as "in press." The use of "in preparation", "submitted for publication", or "personal communication" is not allowed in the reference list. Instead, the phrases "unpublished data" or "personal communication" should appear parenthetically following the relevant name(s) in the text.

9. FIGURE LEGENDS AND TABLE CAPTIONS

Figure legends, table captions and footnotes, and captions for supplementary files (if any; see section H below) should be included in a section entitled FIGURE LEGENDS AND TABLE CAPTIONS following the REFERENCES section within the **Main Document** file. This is to facilitate the editing and proofreading of legends and captions.

D. PREPARATION OF TABLES

Tables can include essential data relevant to important points in the text, or other information (e.g., DNA primers or collecting localities) that would otherwise appear as long lists in the text. Avoid presenting data in both a table and a figure, or repeating in the text all the data presented in a table. All tables should be referred to in the text, and the approximate position of each should be indicated in the margin of the manuscript, if possible. Each table should be prepared in a separate **Table** file prepared with a spread-sheet program, such as Microsoft Excel, and should have an explanatory caption (see Section B above). For editing purposes, table captions and footnotes should also be repeated in the "FIGURE LEGENDS AND TABLE CAPTIONS" section of the **Main Document** file submitted (see Section C-9 above).

E. PREPARATION OF FIGURES

All figures should be appropriately labeled with letters and numbers of a font size that will be at least 1.5 mm high in the final reproduction. Abbreviations should be consistent between illustrations and the text. All figures should be referred to in the text and numbered consecutively (Fig. 1, Fig. 2, etc.). Multiple parts or panels of a single illustration must be labeled by a capital letter (A, B, C, ...) in the upper or lower left corner of each part, with the font size used to label figure panels larger than the labels used in the figure to label structures and other features. See Section B for recommended file formats. Illustrations that are substandard and require corrections may delay publication. It is costly to publish color illustrations, and these will be published at the author's expense (see section J. PAGE CHARGES).

Each figure should be accompanied by an explanatory legend. The legends for all figures should be typed consecutively together, double-spaced, on one or more pages in a section of the submitted **Main Document** file under the heading "FIGURE LEGENDS AND TABLE CAPTIONS" (see Section C-9 above). Sufficient detail should be given in each legend to make it intelligible without reference to the text. However, please avoid repeating in figure legends long, detailed explanations of methodology that are also presented in Materials and Methods.

Maps included as figures should include appropriately labeled lines indicating latitude and longitude, and should have major geological features, country names, and place names also be labeled to help orient the reader.

Note: If you are submitting the material via conventional postal service, two sets of original, high-quality artwork in the form of high-resolution computer printouts or glossy prints, mounted if necessary on appropriate mounting cardboard (less than 21×30 cm), must be submitted for reproduction. Authors may indicate size preference by marking on the back of figures (e.g., "Do not reduce", "Two-column width" (no wider than 17 cm), or "One-column width" (no wider than 8 cm)). Lines must be dark and sharply drawn. Solid black-and-white or bold-patterned filling should be used for histograms. Continuous-tone prints should be submitted at the exact magnification that is to be used in the published paper and trimmed to conform to the page size. Xerox copies of photomicrographs are not acceptable. Figures must be identified on the reverse side with the author's name, the figure number, and the orientation of the figure (top and bottom).

F. ABBREVIATIONS

Abbreviations of obscure or specialized measurement units, quantity units, chemical names, and other technical terms in the body of the paper should be used only after these have been defined clearly in the place they first appear in the text. However, abbreviations that would be recognized by scientists outside the author's field may be used without definition, such as *PCR*, *P*, *SD*, *SE*, *DNA*, *RNA*, *ATP*, *ADP*, *AMP*, *EDTA*, *UV*, and *CoA*. The metric system should be used for all measurements, and standard metric abbreviations should, in general, be expressed without periods. Units of measurement not preceded by a number should not be abbreviated, e.g., "all units are given in millimeters". There should be a space between a value and its unit, e.g., 20 mM, 42 μ l. However, °C and % have no space, e.g., 10°C, 85%. Mathematical symbols such as =, \pm , >, <, etc. should be preceded and followed by a space, e.g., "length = 5 mm" rather than "length=5 mm".

Authors should ensure that the nomenclature, abbreviations, and conventions of italicization and capitalization are correct for the names of genes and proteins appearing in their manuscript. Conventions differ among different groups of organisms. An informative website courtesy of the journal *Biology of Reproduction* is: <http://www.ssr.org/NomenBullets.html>

G. NUCLEOTIDE SEQUENCE SUBMISSION

New nucleotide data must be submitted and deposited in the DDBJ/EMBL/GenBank databases and accession numbers obtained before the paper can be accepted for publication. Submission to any one of the three collaborating databanks is sufficient to ensure data entry in all. Accession numbers should be included in the manuscript, either in the text, in a table, or as a title-page footnote in the form [Note: Nucleotide sequence data reported are available in the DDBJ/EMBL/GenBank databases under accession number(s) —]. If requested, the database will withhold the release of data until publication.

The most convenient method for submitting sequence data is by the World Wide Web:

DDBJ via SAKURA: <http://sakura.ddbj.nig.ac.jp/>

EMBL via WEBIN: <http://www.ebi.ac.uk/embl/Submission/webin.html>

GenBank via BankIt: <http://www.ncbi.nlm.nih.gov/BankIt/> or the stand-alone submission tool Sequin: <http://www.ncbi.nlm.gov/Sequin/>

For special types of submissions (e.g., genomes, bulk submissions, etc.), additional submission systems are available by contacting the following databases:

DDBJ: Center for Information Biology and DNA Data Bank of Japan, National Institute of Genetics, Yata, Mishima, Shizuoka 411-8540, JAPAN; telephone, 0559-81-6853; fax, 0559-81-6849; e-mail, ddbj@ddbj.nig.ac.jp; WWW URL, <http://www.ddbj.nig.ac.jp>

EMBL: EMBL Nucleotide Sequence Submissions, European Bioinformatics Institute, Wellcome Trust Genome Campus, Hinxton, Cambridge, CB10 1SD U.K.; telephone, +44 123 494400; fax, +44 1223 494472; e-mail, datasubs@ebi.ac.uk; WWW URL, <http://www.ebi.ac.uk>

GenBank: National Center for Biotechnology Information, National Library of Medicine, Bldg. 38A, Rm 8N-803 Bethesda, MD 20894, USA; telephone, +1 301 496 2475; fax, +1 301 480 9241; e-mail, info@ncbi.nlm.nih.gov; WWW URL, <http://www.ncbi.nlm.nih.gov>

H. SUPPLEMENTARY FILES

Zoological does not permit the inclusion of Appendices in the published version. Data tables or figures relevant but peripheral to the main text may be submitted as **supplementary files**, for online publishing only (this is optional and should be kept to a minimum; the maximum permitted is five files of up to 5 MB each, with the total file size not exceeding 10 MB). All supplementary material must be peer-reviewed and approved by the Editors in order to be published online. Authors should state in their cover letter that they have supplied supplementary material with their manuscript submission. Once an issue is available online, the supplementary material automatically becomes available to the readership. The following file extensions are acceptable for supplementary material: html, jpg, mov, mpg, avi, pdf, and xls. For review and posting purposes, each submission of supplementary material must include both the data and a corresponding caption. Supplementary files should be labeled, in order, "Supplementary Figure S1, S2, ..." for figures, "Supplementary Table S1, S2, ..." for tables, or "Supplementary File S1, S2 ..." for movie clips, etc. References to supplementary files in the printed version should be in the form: (see Supplementary Figure S1 online), (Supplementary Table S1 online), etc. For editing purposes, the captions of supplementary files should be included in the FIGURE LEGENDS AND TABLE CAPTIONS section of the submitted manuscript (see Section C9 above).

I. CONDITIONS OF PUBLICATION AND COPY RIGHTS

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J. PROOFS AND REPRINTS

A galley proof and a reprint order form will be sent to the corresponding author via e-mail. The first proofreading is the author's responsibility, and the proof should be returned within 48 hours from the date of receipt. Please e-mail the Zoological Science Proofreaders for help in proof editing (see Section A above).

Authors will receive a PDF file of their published article in lieu of conventional reprints (see Section J below); the PDF file will be e-mailed to the authors after it has been published on-line. No free reprints are available; authors who wish to purchase reprints must complete and submit the reprint order form. The minimum quantity for a reprint order is 50.

K. PAGE CHARGES

As of 1 February 2009, the authors of regular papers will be requested to pay a flat publication fee of Japanese Yen (JPY) 20,000 for articles of up to eight printed pages in length. *Review Articles* and *Essays* of up to 15 printed pages will be published free of charge. For pages over these limits, the charge will be JPY 5,000 per page. With the payment of publication fees, the author(s) will automatically receive a PDF file of their published article. All authors will be charged for color illustrations (JPY 20,000 for the 1st page and JPY 80,000 per page for the 2nd and additional pages). Because color illustrations are charged by the page, we encourage authors to keep color illustrations to a minimum and to try to arrange them to fit onto as few pages as possible. Authors who have difficulties in paying the publication fees have the option to contact the Journal's Editor-in-Chief at saizo@cdb.riken.jp