

Instructions to authors

NEW IN 2006. From the first issue of 2006 GRANA has a new A4 format along with a modified journal style. Could all contributors please make themselves aware of the new instructions set out below to ensure that manuscripts conform to the new style and figure sizes.

*****Note to authors:** please make sure your contact address information is clearly visible on the outside of all packages you are sending to the Editorial Office.

GRANA publishes research papers in two categories: 'Original Articles' and 'Short Communications' (preliminary reports of special interest that are given expedited publication). Occasionally 'Book Reviews' will also be printed, and editors will commission 'Review Articles'.

The papers submitted are considered for publication on the understanding that they have not been submitted or accepted for publication elsewhere and authors must provide an E-mail address for contact purposes.

Submission of manuscripts

Authors are asked to study the instructions carefully before preparing manuscripts. Authors are also responsible for ensuring their text is linguistically correct prior to submission. Submit two sets of all material, including illustrations and tables along with the electronic files, and the electronic authors check list (<http://www.nrm.se/pb/grana/authorchecklist.html>) to:

Editor in Chief
Else Marie Friis
Department of Palaeobotany,
Swedish Museum of Natural History,
Box 50007, SE-104 05
Stockholm, Sweden

Please submit the manuscript electronically along with a description of the program used. Files should be labelled in the following format: corresponding author's surname.doc, surnamefigure1.tiff, surnametable1.doc, surnamefig2.eps (eps = encapsulated postscript files). For example, BrownMS.doc, BrownFig1.tiff, BrownTable1.doc.

Please observe that we can receive files from any word processing system; however, styled Microsoft Word files are preferred for text. Illustrations and tables should be supplied as separate files. Electronic files of illustrations should be in TIFF format for pictures and either in CorelDraw or Adobe Illustrator for line art including graphs, detailed information is available below. Tables, Figure Captions and Table Captions should be supplied as separate Word files.

Preparation and organization of manuscripts

Main text

Organize the paper: Title, Abstract, Keywords, Introduction, Materials and methods, Results, Discussion, Conclusions, Acknowledgements, Specimens Investigated, and References.

Papers should be consistently written in British English following the conventions of the Oxford English Dictionary. All text should be formatted as it is to appear in the journal (i.e. italicised text to be *italicised* and bold to be in **bold**). Note that in italicised headings words that would normally be in italics should be in non italic font.

Spell out: all numbers from one to ten inclusively, any number that begins a sentence, generic names that begin sentences, and compass points (i.e. north-east not NE).

Page numbers should appear in the upper right hand corner of each page. Abbreviations and symbols should conform to those in Biological Abstracts. SI units (Système International d'Unités) should be used throughout (see <http://physics.nist.gov/cuu/Units/index.html>). Authorities for species should either be given the first time the name is mentioned in the text or alternatively 'Specimens Examined' lists can be used to cite the authorities of species. Scientific names of genera and taxa of lower rank must be in italics. Contributors to Grana are recommended to use the palynological terms adopted by the International Federation of Palynological Societies (IFPS), 'Glossary of Pollen and Spore Terminology' (Punt et al. 1994, <http://www.bio.uu.nl/~palaeo/glossary>).

Note the difference between contractions and abbreviations. Abbreviations are words that are shortened by deletion of letters including the last letter and should end in a full stop. Contractions are words shortened by the deletion of letters excluding the last letter of the word and should not terminate in a full stop. For example, figures is contracted to figs but figure is abbreviated to fig. Note also that the first paragraph after any main heading is not indented but all subsequent paragraphs in the section are indented.

Headings

Three orders of heading are available. Pay particular attention to the formatting given. Examples:

1. **Results**
2. *Description of pollen grains*
3. *Exine structure*. This heading is followed by text on the same line (as shown here).

Title

The title should be: 1) concise and informative (short subtitles are encouraged), 2) be in bold with no caps except after the colon in a compound title, 3) include a short running headline of no more than 40 characters.

Authors

Full given name(s) and surname(s) of author(s) should be capitalised and appear below the title. In the form:

Example. DAVID J. CANTRILL¹, IMOGEN POOLE² & JANE E. FRANCIS³

Affiliations

Affiliations appear below the authors and are keyed to the authors by superscripted numbers. They should be in italic and separated by a comma or & for the last affiliation.

Example. ¹*Department of Palaeobotany, Swedish Museum of Natural History, Stockholm, Sweden,* ²*Department of Earth Sciences, University of Utrecht, Utrecht, The Netherlands,* and ³*School of Earth and Environment, University of Leeds, Leeds, United Kingdom*

Abstract

A short abstract not exceeding 250 words should appear directly below the affiliations. The abstract must be clear and concise and should distil in brief the important findings of the study. It should not be a summary of the paper.

Where the paper describes new taxa these should also be included.

Keywords: Three to ten Keywords in italics and separated by commas appear below the abstract. These should not include words mentioned in the title.

Note that the editorial office will add: author for correspondence as a footnote on the title page with mail and email addresses. The editorial office will also add the received and accepted date which will appear in parentheses as a footnote on the title page.

Introduction

Begin the Introduction on a new page. This section should be concise but provide the reader with enough up to date background information to understand the problems raised and discussed in the paper. Do not include any results in this section.

Material and methods

This section should outline in enough detail the nature of the material and the methods used so another researcher could repeat them. Do not include any results in this section..

Results

Primary data and observations that form the basis for the Discussion that follows should be included in this section. Avoid the use of statements such as “Table I shows ...” or “... as shown in Figure 1” or “In Table I ...”. Acceptable usage is a statement or sentence followed by the relevant reference in parentheses (Figure 1, Table I). Note that Figure, Table and Appendix are spelt out in full and not abbreviated (i.e. fig. tab., app.) nor contracted (i.e. figs, tabs, apps).

Discussion

This section should provide an interpretation of the results and should not contain any additional primary results or data.

Conclusions

Please include a separate Conclusion outlining the importance of the work and the main findings.

Acknowledgements

Should be inserted after the Conclusions.

Specimens investigated

Where necessary a list of specimens examined can be included here. As a guide format them in the following manner: Taxa, Authority(ies). Country: Province etc., Sampling site. Collector(s), Date; Collection: Name, No; Herbarium (No). New taxa should appear in bold. Please consult the latest issue of the journal for style.

References in text

The references should be cited in the text as, Kuprianova (1973) or where referring to particular text or figures as "... with short colpi spirally arranged (Dessein et al., 1978 figures 55, 56)" or "... distant transport of grass inconsiderable (Hyde & Williams, 1945, p. 95)". Papers with three or more authors should be abbreviated to first author et al. (not italicised and with a period after the 'al.').

Note that the authors are separated from the year by a comma, and that they should appear in chronological order. Where multiple papers are cited the papers should be separated by semicolons (e.g. Cantrill 1995, 1996; Friis et al., 2002; Poole et al., 2005). In the case of authors of plant taxa *Sida ammophila* F. Muell., 1967. In referring to personal communications (P. Sorsa personal communication, date, month, year). Note the usage of 'and' versus the 'ampersand' (i.e. &) so that in a sentence Hyde and Williams (1945) but in parentheses (Hyde & Williams, 1945).

Reference list

Only printed publications cited in the text, tables, and figures should appear in the Reference list. Pay particular attention to ensure all cited references appear in the list and that all references in the list are cited. List references alphabetically under the author or editor name with the single author publications first, followed by papers with two authors, and then three authors and so on. Where more than one publication by the same set of authors is listed these should be listed chronologically. Use Arabic numerals for volume numbers, do not include part numbers except where the journal paginates each part individually from page one. Provide journal titles in full. Pay particular attention to the format of the references; note that there should be a space between author initials. Where a title has been transliterated or translated, the original language should be stated

in parentheses at the end of the reference. In all titles initial capital letters should be used for proper nouns and for all nouns in German.

Examples

Journal article. Erdtman, G., & Praglowski, J. (1959). Six notes on pollen morphology and pollen morphological techniques. *Botaniska Notiser*, 112, 175-184.

Pflug, H. D. (1953). Zur Entstehung und Entwicklung des angiospermiden Pollens in der Erdgeschichte. *Palaeontographica*, B 95, 60-171.

Chapter. Heslop-Harrison, J. (1964). Cell walls, cell membranes and protoplasmic connections during meiosis and pollen development. In H. F. Linskens (Ed.), *Pollen physiology and fertilization* (pp. 40-47). Amsterdam: North Holland Publishing Co.

Book. Faegri, K., & Iversen, J. (1989). *Textbook of pollen analysis* (4th ed). by K. Faegri, P. E. Kaland, & K. Krzywinski. Chichester, New York, Brisbane, Toronto, Singapore: J. Wiley & Sons,

Tables

Each table must start on a separate sheet. They should be numbered with **Roman numerals** according to their sequence in the text, and have a short self-explanatory heading. Use SI units. Tables should not include vertical rules, but horizontal rules should separate column headings from the content. Authors should keep in mind the page layout of the journal when designing tables. Tables that fit onto one printed page are preferred. Detailed explanations of symbols, units, and abbreviations should follow below the table.

Illustrations

Figures for final production should be submitted as electronic files and hard copy so that the editorial office can ensure that the output of electronic files matches the hardcopy. Please pay particular attention to the guidelines below. The editorial office cannot undertake preparation of manuscripts and illustrations not conforming to journal style. Manuscripts of insufficient quality will be returned immediately without refereeing. A high standard of illustration (both line and photo) is an editorial priority.

All illustrations should be prepared for printing to fit 80 x 240 mm (column width) or 169 mm by up to 240 mm (full page) size. **It is preferred that the full-page length is not used and that authors keep in mind that the caption will be placed underneath the figure.** In the event that full-page length is necessary for plates, captions will have to appear on adjacent pages. Figure(s) must be numbered consecutively in the text.

Compound figures with more than one micrograph or photo should be referred by a single figure reference (e.g. Figure 1), and individual parts should be labelled with capitalized letters in the **lower left-hand corner**. Lettering should be of a sans-serif type (i.e. fonts without serifs such as Arial) with a minimum published size of 4.2 mm (12 pt). Lettering should run from left to right and illustrations should be separated from each other by a uniform gutter of 2 mm. Avoid mixing SEM, TEM and light micrographs on the same compound figure, as the differences in contrast and tonal range between each

type of micrograph make it impossible to adequately render the plate during printing. The principle of orientation of pollen grains/spores suggested by G. Erdtman (1952, p.17) should be applied with polar axes oriented vertically. Descriptive labelling in the figures should be clearly readable, and all lettering should have a minimum published size of 6 pt (2.1 mm) for labelling items on photographs or in line art is recommended and a maximum size of 10 pt is suggested. Use a scale bar to indicate magnifications and place in the lower right corner if possible. Note electronic scale bars and lettering produced by SEM graphics packages are inadequate and should be removed. Computer prepared photographic images must be at a minimum of 350 dpi at the final publication size. Lower resolution will result in pixellation and poor quality images. These should be submitted as TIFF files, but encapsulated postscript (EPS) format is also acceptable.

Computer drawn figures are accepted provided they are of high quality. Please note that graphs produced by many statistic packages are rarely adequate. In particular, letter quality on axes and captions are often poor. Such figures should be exported into an accepted graphics package and lettering rendered using a text function. Authors should note that .dot, .bmp, and .pat fills should be avoided. Do not use postscript fill patterns as these are often based on bit map patterns that result in screening patterns during final reproduction. When filling illustrations, use fills such as lines, tints or solids. A minimum of 4% tint can be reproduced. Line width minimum is 0.25 pt (0.09 mm). Also avoid the use of bitmap scans to render text and detail. Text should be saved as text at a minimum text size of 6 pt (2.1 mm). Please submit line art as CorelDraw, Adobe Illustrator, or EPS files. These must be at a minimum resolution of 800 DPI at publication size. High resolution may be necessary where fine line detail is present.

For graphs Excel graphs are also acceptable. Note that vertical axes must all be at the same scale especially where the paper compares between them. Otherwise they should be produced as separate figures. Avoid 3d plots when presenting 2d data.

Where electronic figures are submitted, please submit a hard copy also at final acceptance stage so that it can be checked against the electronic files during proof preparation.

Table and Figure captions

Figure and table captions should be included at the end of the manuscript. Figure captions should include a statement at the end of each caption about reproduction size (e.g. at full page width, at column width). They should be double spaced and typed in the journal format. Explanations should be brief and authors should keep in mind that captions will be placed below figures.

Proofs

Authors will receive proofs directly from the printers. It is the author's responsibility to correct proofs according to the manuscript. After correction, the marked proofs should be returned to the editorial office, along with the offprint order and copyright declaration.

Offprints

Fifty offprints of each article without separate covers will be supplied free of charge if ordered on the offprint order form. Additional copies may be ordered on the same order form as can PDF files of the paper.

