

INSTRUCTIONS FOR AUTHORS

<http://ps.ueb.cas.cz/notice-contributors>

PHOTOSYNTHETICA

publishes peer-reviewed, original, scientific papers, brief communications, reviews, letters to editors, announcements, and reports concerning all research on photosynthesis. Papers dealing with diverse aspects of photosynthesis are welcome, namely if they bring novelty and further understanding in this field.

The language of the journal is English (British or American).

All manuscripts are submitted and peer-reviewed exclusively in their electronic versions via on-line system: <http://ps.ueb.cas.cz/submission-new-paper>.

If necessary, correspondence should be sent to the editorial office by e-mail: photosynthetica@ueb.cas.cz.

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All manuscripts are assigned by EIC to Associate Editors (AE), specialists in a particular field, and then peer-reviewed at least by two reviewers familiar with the relevant field of photosynthesis research. Authors can follow a state of paper evaluation by the online system. A final decision is done by EIC, usually based on recommendations of AE and reviewers. Papers accepted for the publication are published according to the order they were accepted. Papers are launched as soon as possible in their online version accessible at Springer website. Later, the issue of the journal is completed and printed. The author receives a PDF file with the final version of the paper free of charge.

Papers already published or those elsewhere under consideration are not published.

Plagiarism-suspected papers are checked by the iThenticate plagiarism checker software (<http://www.ithenticate.com>).

The electronic version of the manuscript should be prepared in MS Word for Windows in .doc or .docx format.

The authors are strongly recommended to use a native English speaker to check their papers before the submission. For professional language editing services, see <http://www.enago.com/> or <http://www.editage.com/get-quote>.

Manuscripts should be typed double-spaced.

Authors are requested to prepare figures ready for printing. The preferred formats are TIFF and JPG. The accepted papers should be completed with *Excel* or *SigmaPlot* files for graphs, which enable their final modification for press.

• ORIGINAL PAPERS

Original papers should not exceed **8 printed pages** of a text (e.g. about **8,000 words**). The paper should be divided as follows: *Title* (up to 140 characters), names and addresses of the author(s), *Abstract*, *Introduction*, *Materials and methods*, *Results*, *Discussion*, and *References*.

■ *Abstract* should be concise and accurate and contain all necessary information and data of your paper. Its length should not exceed **150 words**.

■ *Additional key words*, together with the title and the abstract, are used for indexing purposes. They should list words (max. 6) not present in the title and in the abstract; avoid plural terms and multiple concepts.

■ *Acknowledgements* list all individuals or supporting programmes that provided help during the research.

■ *Abbreviations* should be defined if not standard in this field (see [Detailed instructions](#) for the list of abbreviations used without explanation). After the first mention of a term together with its abbreviation in parentheses, use only the abbreviation in the following text. Abbreviation can be used in *Abstract* only if unavoidable (if the term is used more than once there).

A separate paragraph of *Theory* can be included in case of papers containing theoretical models and comprehensive calculations. *Appendix* should contain more voluminous formulae, equations, or tables and figures.

■ *Introduction* provides adequate background, objectives, and goals of the work. Avoid summary of results in this section.

■ *Materials and methods* should provide sufficient details and correct descriptions of experimental conditions and plant materials to enable the work to be reproduced.

Plant (algae, bacteria, virus, and fungi) should be given in a full name at least in this section of the manuscript according to corresponding nomenclature: Prokaryotic names: www.bacterio.cict.fr; Bacteria and Archaea: www.taxonomicoutline.org/index.php/toba;

Bacterial nomenclature:

www.dsmz.de/downloads/bacterial-nomenclature-up-to-date-downloads.html;

Virus nomenclature:

www.ictvonline.org/codeOfVirusClassification_2002.asp);

Plant nomenclature: <http://www.ipni.org>.

The shorter version of the name can be used in the following text.

The conditions of cultivation should be described in details (place, season, length of day, temperature, air humidity, light intensity, nutrition, growth regime). The ontogenetic stage of plants should be given.

Use *text tables* to present experimental sets of several different parameters. For details, see guidelines on: <http://www.ease.org.uk/guidelines/index/shtml>.

Instruments or specific materials (chemicals) should be identified by its *type, producer, town, and country of origin*.

All enzymes assayed in the work should be identified by its corresponding EC number. Enzyme activities should be expressed as amount of product (e.g. μmol) per time (e.g. s^{-1} or min^{-1} or h^{-1}) calculated per sample amount [e.g. g^{-1} (fresh or dry mass, protein, leaf area, etc.)]. Gene nomenclature should conform to accepted community standards. Some helpful resources follow.

www.arabidopsis.org/portals/nomenclature/guidelines.jsp (*Arabidopsis*)

www.maizegdb.org/maize_nomenclature.php (maize)

http://http://www.shigen.nig.ac.jp/rice/oryzabase_submission/gene_nomenclature/ (rice)

<http://wheat.pw.usda.gov/ggpages/wgc/98/> (wheat)

<http://tgrc.ucdavis.edu> (tomato)

www.brassica.info/info/reference/gene_nomenclature.php (*Brassica*)

www.chlamy.org/nomenclature.html

(*Chlamydomonas*)

Chemical and protein nomenclature should be used according to: www.chem.qmw.ac.uk/iupac

www.uniprot.org/docs/nomlist

Gene and protein symbols and abbreviations should be used consistently throughout the manuscript to clearly distinguish proteins and genes. Use schemes for the description of gene constructs used in the work.

Units, dimensions, terms, symbols, abbreviations, etc., recommended by the Système International d'Unités (SI) should be used (www.bipm.org/en/si/). See also [Detailed instructions](#)

Statistical treatment should be described in details including methods and software used for the evaluation.

■ *Results*

This section should bring the most important results of the work. **Total number of tables and figures is limited to 8.** A single table or figure should not exceed 1 printed page. Longer and additional tables or figures can be published as supplementary files in the online version.

The figures should be exclusively in a recommended format (see [Detailed instructions](#)) and have to be sent **in a quality suitable for press**.

Photographs must be of the highest quality. The scale bars should be shown. Image manipulation for purposes of deception or fraud is seen as scientific ethical abuse and is dealt with accordingly. No specific feature of the image may be enhanced, obscured, removed, or introduced. Adjustments of brightness, contrast, and colour balance are acceptable as long as they do not eliminate any information present in the original.

For figures formatting, the authors may also use the services of professional editing companies (e.g. American Journal Experts etc.) or the figures can be partly formatted in the editorial office (see [Detailed instructions](#)).

Coloured artwork is published in the electronic version free of charge. For colour reproduction in print, **EUR 160 per 1 page** is charged.

The legends to tables and figures should be typed on separate pages and should be self-explanatory without reference to the text. Statistical bars should be shown together with the number of replicates.

■ *Discussion* should evaluate the significance of the results without repeating them. Avoid excessive overview of the field of study and mere speculations. Soundly based hypothesis may be included.

Quotations in the text should contain the authors' names followed by the year of publication in parentheses, if more references, then arranged chronologically.

■ *References* at the end of the paper should be arranged alphabetically (by authors' names).

The abbreviations of the journal titles should follow the generally accepted form according to [Web of Science, Journal Title Abbreviations](#). Use full stops after the abbreviations, not after the unabbreviated names.

Titles of articles (not books) written in languages other than English are given only in their English translation, the original language is mentioned in square brackets.

More than three authors are cited as *et al.* For more examples see [Detailed instructions](#).

Golik K.N.: [Dark respiration and photosynthesis of buckwheat during ontogeny.] – Fiziol. Biokhim. kul't. Rast. **21**: 118-123, 1989. [In Russian]

Perrier A.: Leaf temperature measurement. – In: Šesták Z., Čatský J., Jarvis P.G. (ed.): Plant Photosynthetic Production. Manual of Methods. Pp. 632-671. Dr W. Junk Publ., The Hague 1971.

Farquhar G.D., Sharkey T.D.: Stomatal conductance and photosynthesis. – Ann. Rev. Plant Physiol. **33**: 317-345, 1982.

Flexas J., Ortuño M.F., Ribas-Carbó M. *et al.*: Mesophyll conductance to CO₂ in *Arabidopsis thaliana*. – New Phytol. **175**: 501-511, 2007.

Krishnamurthy L., Vadez V., Devi M.J. *et al.*: Variation in transpiration efficiency and its related traits in a groundnut (*Arachis hypogaea* L.) mapping population. – Field Crops Res.: doi:10.1016/j.fcr.2007.06.009, 2007.

● BRIEF COMMUNICATIONS

Manuscripts are not longer than **4 pages** (about **4,000 words**) of a text (including title, abstract, text without subdivision, references) plus maximum of **1 table and 1 figure or 2 figures or 2 tables**. Brief Communications are peer-reviewed in the same way as Original Articles.

● REVIEWS

Short, but comprehensive reviews on specialized topics are welcome. The manuscript should not exceed **12,000 words** and up to **10 tables or figures** in total. The written permission from a copyright owner is needed in case of already published tables or figures. Reviews are peer-reviewed similarly as above mentioned.

● ANNOUNCEMENTS AND REPORTS

The journal publishes short announcements and reports from conferences, symposia, *etc.* in all fields of photosynthesis research.

● LETTER TO THE EDITOR

A short commentary on a paper published earlier in the journal is possible as a Letter to the Editor. This form is not considered an original paper and should not contain unpublished results. Answers or counter-arguments of the authors of the original paper may be published in the next journal issue.