



Instructions for Authors

As of July 10th, 2019

Plant Root publishes scientific papers related to all aspects of plant roots, which are peer reviewed by its referees in minimal time. This Journal is published by the Japanese Society for Root Research (JSRR).

[Authorship]

Submission of a manuscript to this Journal is an affirmation that the work has not been published previously, except in the form of an abstract or as part of a published lecture or academic thesis, and that it is not under consideration for publication elsewhere. Submission also indicates that publication of the study is approved by all other authors, if any, as well as by the responsible authorities where the work has been carried out. After the manuscript is accepted for publication, it may not be published elsewhere in the same form, in English or in any other language, without the written consent of the Publisher. Upon acceptance of an article, authors will be asked to transfer copyright (please see the copyright policy of *Plant Root* on a separate page: <http://www.plantroot.org/copyright.htm>).

[Article Types]

1. Original research articles
2. Review articles
3. Mini-review articles
4. Short reports

1. Original research articles are original full-length papers that have not been published previously elsewhere, except in a preliminary form.
 2. Review articles are normally solicited by the Editors. Submission of review articles is also welcome, but please contact one of the Editors or the editorial office (Editor2018@plantroot.org) before submission.
 3. Mini-review articles provide an overview of a single theme or topic for the broad plant root researchers. Manuscripts for mini-review articles must not exceed 5,000 words excluding references, and the numbers of tables and figures are limited up to five (5).
 4. Short reports are intended to present important new information, not to publish preliminary results or to be a reduced version of original articles. These papers are expected to announce technical advances, or to present bioinformatics or insightful findings of root development and function. Manuscripts for Short reports must not be longer than five (5) printed pages (roughly 3,000 words, and figures and tables).
- Other types of articles might be welcome, but please contact the Editor in advance.

[Publishing charges]

Plant Root does not charge for review articles. Publishing charges are also basically free for all other academic articles submitted in 2007-2019.

[Submission of manuscripts]

Submission to this journal is conducted entirely on-line. Papers for consideration must be submitted to the submission e-mail address (Editor2018@plantroot.org). An acknowledgement of receipt will be delivered to the corresponding author via email from the Editors in Chief.

The title of the e-mail must be **[submission of manuscript]** and the text part of the e-mail is useful as the **cover letter** (See sample at <http://www.plantroot.org/index.htm>). Your recommendation of potential reviewers who might appropriate to review the study is welcomed. Please indicate names of five potential reviewers with their contact addresses, especially e-mail addresses in the cover letter.

All manuscript, table and figure files of must be attached to the submission e-mail. If possible, please embed a series of tables and figures in the end of the main text file. Name(s) of the file must be readily comprehensible: i.e. if the first author is Carrot, the file name would be [CarrotMS].

Acceptable formats for the manuscript in the review process are MS Word, PDF and Rich Text Format (RTF). When the manuscript is accepted, the Editorial Board will require the authors to submit an MS Word or RTF version to edit.

It is recommended that manuscripts be subdivided into these sections: *Abstract, Introduction, Materials and*

Methods, Results, Discussion, Acknowledgments, References, Figure legends.

[Manuscript preparation]

The entire manuscript must be **1.5-spaced** in A4 (297 mm × 210 mm) or US Letter (279 mm × 216 mm) size. Leave margins of at least 2.5 cm on all sides of each page. All pages of text must have a page number (select *Insert* tab or *Insert – Page Numbers* from the MS Word menu) and line numbers (select *Page Layout* tab or *File – Page Setup* from the MS Word menu to call the line-numbering function).

Use of a Times font (e.g., Times New Roman) with 12-point type size is recommended. Scientific names and the symbols for all variables and constants, except Greek letters, must be italicized. Do not use Symbol font for a Greek letter (e.g., 'μ'), as it might be replaced by another letter (e.g., 'm') in typesetting process. Instead, use *Insert – Symbol* function of MS-Word.

In principle, units of measure must conform to the International System of Units (SI), except where they conflict with current practice or are confusing. If measurements were made in other units, include the SI equivalents. Separate units by a space and use negative exponents for units in a denominator (e.g., g m⁻² d⁻¹). Use a capital L as the symbol for liter, even when combined with a prefix, e.g., mL, μL.

Accepted manuscripts will be typeset to produce PDF files as a virtual A4-size paper with two columns in a 240 mm × 170 mm printing area, which contains ca. 800 words per page.

Manuscripts must be written in clear and comprehensible English. If English is not your first language, or if you have concerns about the level of English in your submission, please ensure that the manuscript is proofread for correct usage and clarity before submission by a native English speaker or a scientific editing service.

The front page must contain the title, authors' information, subject area, Abstract, Keywords, number of figures and tables, and Abbreviations.

Title: The title of the paper should be concise and informative. (A running title is not required.)

Author's information: List all authors' full names, academic or professional affiliations, and postal addresses. In addition, please indicate an e-mail address, phone and fax numbers (including the country number) of the corresponding author.

--- Example ---

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Subject areas: List those subjects to which the study is most relevant. Select one or two subject areas from among the following.

- 1) Morphology, anatomy and structure
- 2) Physiology, growth and movement
- 3) Soil environmental stress
- 4) Plant nutrition and water uptake
- 5) Rhizosphere ecology and biology
- 6) Molecular biology, biotechnology and genetics
- 7) Tree root science
- 8) Applied technology for plant production
- 9) Methodology for root study

Abstract: The abstract must not be longer than 250 words for an original article and review article, and 150 words for short report.

Keywords: List 3–6 keywords or short phrases in alphabetical order. If possible, include the common name or scientific name, or both, of the materials. They should be selected for the compilation of the subject index and for any subsequent retrieval.

--- Example ---

Keywords: fertilization, microorganism, nematode, rice (*Oryza sativa* L.), root hair

Abbreviations: It is not recommended to use abbreviations, but, if necessary, show the abbreviations and their full spellings after the *Keywords*.

--- Example ---

Abbreviations: R/I ratio, rhizosphere/interrow ratio; SIR, substrate-induced respiration

Pages subsequent to the front page contain the following items in order:

Main text – Acknowledgments – References – Tables – Figure captions and Figures.

If possible, please embed a series of tables and figures into the file of main text following the *References*. If impossible, please prepare separate files that are named with the number of table or figure.

Main Text: Original research articles and short reports must include *Introduction, Materials and Methods, Results, Discussion* and, if necessary, the *Conclusion*. *Results and Discussion* may be combined into one section if the Section Editor (handling editor) agrees. If necessary, *Acknowledgments* may be included between *Discussion* (or *Conclusion*) and *References*. Do not use a first-page footnote to describe financial support for the study; it should be included in the *Acknowledgments*.

Footnote is acceptable only in review articles if it is really necessary; in other articles footnote must not be used.

Do not use tabs or spaces for indentation at the beginning of paragraphs. If you want to indent, use the function of *Indentation* of MS Word.

References: Literature citations in the text must be made by name(s) of author(s) and year. For references with more than two authors, use the name of the first author followed by ‘et al.’, as in the following: Karahara and Oyanagi (2000) reported that ...

The results have been interpreted (Oyanagi et al. 2002, Araki and Abe 2004) as...

References must be cited in full in the reference list, including the title and the first and last page numbers. References must be listed in alphabetical order according to the respective first authors' last names. For the same first author, references must be arranged chronologically. If more than one publication exists in the same year for the same author, arrange the publications in order of second author's name alphabetically: the letters ‘a’, ‘b’, etc. must be added to the year. Do not use indentations in typing references. Use one line of space to separate each reference.

In the *Reference* list, [1] periodicals, [2] books, and [3] multi-author books [4] web contents must accord with the following examples:

[1] Periodicals

Tamaoki D, Karahara I, Schreiber L, Wakasugi T, Yamada K, Kamisaka S 2005 Effects of hypergravity conditions on elongation growth and lignin formation in the inflorescence stem of *Arabidopsis thaliana*. *J. Plant Res.* 119: 79-84.

Eo J, Nakamoto T 2007 Evaluation of root effects on soil organisms under different fertilization regimes by comparing rhizosphere and interrow soil in a wheat field. *Plant Root* (in press).

Taga M, Goto H 2003 Recovery of tree vigor by root pruning in weeping-type Japanese flowering cherry. *Root Res.* 12: 41-49. (in Japanese with English abstract)

[2] Books

Bengochea T, Dodds JH 1986 *Plant protoplasts*. Chapman & Hall, London, New York, pp. 1-90.

[3] Multi-author books

Bohnert HJ, Crouse EJ, Schmitt JM 1982 Organization and expression of plastid genomes. In: Parthier B, Boulter D, Eds., Encyclopedia of plant physiology. New series 14B, Springer-Verlag, Berlin, Heidelberg, Germany, pp. 475-530.

[4] Web contents

IRRI 2009 Farm data-Rice ecosystems, 30. Distribution of rice crop area, by environment, 2004-2006. In: IRRI ed., IRRI World Rice Statistics. International Rice Research Institute, Los Banos, Phillipines. <http://beta.irri.org/statistics> (latest update: January 28, 2009)

Rost TL 1996. Virtual crops. <http://www-plb.ucdavis.edu/labs/Rost/Virtual%20crops.htm> (retrieved: June 5, 2010)

Unpublished data and personal communications must not be cited as literature citations, but must instead be given in the text in parentheses. 'In press' articles that have been accepted for publication may be cited in *References*. Include in the citation the journal in which the 'in press' article will appear, along with the publication date if a date is available.

--- Editor's tip for **EndNote** users ---

An EndNote citation style file for *Plant Root* is downloadable from <http://www.plantroot.org/formatarc.htm>

Tables: Each table must be prepared on a separate page and numbered consecutively with Arabic numerals. First mention of tables in the text must be in sequential order. Explanatory material must be given in the table legends and footnotes. Submission along with the DOC and RTF are preferred for smooth editing. The width of tables must not be greater than 80 mm for one-column tables or 170 mm for two-column tables. Use of 0.5 pt lines is recommended.

Put a period after the table number (e.g., Table 1.) and do not include a period at the end of the table title. Notices must be written under the table.

To avoid numbers with many digits, express such numbers as powers of 10. The unit may be changed using prefixes such as "m" or "μ." For example, 0.001 and 1000 g must be expressed respectively as 1×10^{-3} and $\times 10^3$ g. Express a concentration of 0.0015 M as 1.5 with "concn. (mM)."

--- Example ---

Please see the example included at the end of this document.

Figure legends: Legends must be typed on a separate sheet. Put a period after the figure number (e.g., Fig. 1. The relationship). Explanatory information must be placed in the legend and not in the figure itself.

Figures: Each figure must be prepared on a separate page and numbered consecutively with Arabic numerals. Please type figure numbers consecutively in the figure sheets according to the order in which they are called out in the text.

Figures must be converted to JPEG, TIFF, PDF or MS Office metafile (picture in Word or Powerpoint) format. Use of color images is free of charge. The width of figures must not be greater than 80 mm for one-column figures or 170 mm for two-column figures. Dot-shading and hatching figures should be prepared in print size, because size reduction in typesetting process may cause an irregular pattern of shading.

Line drawings must be clear with high contrast. In general, we require 200–300 dpi resolution for review and publishing. Please advise Editors in Chief (Editor2018@plantroot.org) after the manuscript is accepted if authors want to use higher resolution. Figures submitted in color will be displayed in color on *Plant Root* web-site, but the degree of calibration and color reproducibility is not ensured. For useful information on preparing figures for publication, go to <http://cpc.cadmus.com/da>.

For the review process, to keep the file(s) of the manuscript smaller than 5 MB, please consider attaching low-resolution figures that are still sufficiently clear for reviewing.

[Revised Manuscript Preparation]

The corresponding author will receive a review report via e-mail with the decision of the Subject Editor and reviewers' comments. Please revise the manuscript accordingly. **All changes should be indicated with red font** in the revised manuscript. Prepare the **cover letter** containing the manuscript number and

point-by-point responses to the reviewers' comments.

Revised manuscripts attached with the cover letter must be returned to the Plant Root editorial board (Editor2016@plantroot.org) within 60 days. A revised manuscript received after this period will be considered as a new submission. Please show the previous manuscript number in a cover letter.

For provisionally accepted articles, authors are asked to revise and submit them within two (2) weeks.

[After the Manuscript is Accepted]

The Editors in Chief will inform the corresponding author what the authors need to do when the manuscript is accepted. The corresponding author will be asked to submit the "**Copyright Transfer Agreement**" on behalf of all the authors, the form of which can be downloaded from <http://www.plantroot.org/copyright.htm> . The Editors in Chief may request that the authors submit the materials (main text, figures, etc.) in the proper format. Revision may be required from the Editors in Chief if the manuscript does not fully accord with the "*Instructions for Authors*".

Brief introductions of all or some of the authors (around 40 words for each) can be added at the end of the paper. A small portrait photo may accompany each introduction. Please send the manuscript to the Editors in Chief (Editor2018@plantroot.org), if you would like to add the introduction.

--- Example ---



Dr Maciej T. Grzesiak's research interest is focused on structure and development of plant roots and effect of different abiotic stresses (drought, waterlogging) on plant growth and productivity.

[Proofs]

When the manuscript is received by the Editor, it is considered to be in its final form. Proofs are not to be regarded as 'drafts'.

One set of page proofs in PDF format will be sent by e-mail to the corresponding author, to be checked for typesetting and editing. No changes in, or additions to, the accepted (and subsequently edited) manuscript will be allowed at this stage. Proofreading is solely the author's responsibility.

A form with queries from the Editors in Chief might be included with the proofs. Please answer all queries and make any corrections or additions required.

The Editors in Chief reserves the right to proceed with publication if corrections are not communicated. Return corrections within a week after receipt of the proofs. Should there be no corrections, please confirm that fact.

[Enquiries]

In case of problems or questions, you may contact the Editorial Board:

Plant Root Editors in Chief

E-mail: Editor2018@plantroot.org

Table examples

If your MS Word does not show gridlines in tables, select a table and then click *Table Tools – Layout* tab to show *View Guidelines* icon (or select *Table – Show Gridlines* in the menu of Word 2003).

Size for one-column tables

Maximum width and height are 80 mm and 240 mm, respectively.

Table 1. Virtual root aspiration rate in C3 and C4 plants at 15°C and 30°C media

	Aspiration rate (mmol CO ₂ g ⁻¹ s ⁻¹)	
	15°C	30°C
C3 Plants		
Soybean	150.2± 10.5 [†] a	363.5± 20.2 a
Rice	70.3± 5.5 b	150.2± 15.6 c
Sweet potato	75.6± 6.3 b	162.3± 19.9 c
C4 Plants		
Maize	127.9± 10.3 ab	250.1± 13.8 b
Sorghum	100.4± 6.8 b	139.6± 10.3 c
Millet	70.4± 9.6 b	99.9± 7.5 a

[†]Data are means ± standard errors from six replications. Values followed by the same letter within a column are not significantly different ($P < 0.05$).

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Title

Make the table number bold, and put a period after it. No period should be placed at the end of the table title.

Letters

Use Times New Roman 9 pt font for all items in the table.

Column

Use separate columns to align values or words in a column.

Letter arrangement

In general, letters should be arranged at the vertical center of a column (Go to *Table – Table Properties – Cell* to change the vertical arrangement).

Line

Use 0.5 pt lines.

Size for two-column tables

Maximum width and height are 170 mm and 240 mm, respectively.

Table 2. Virtual mineral contents (μmol mg⁻¹) in cortex and stele cells for rice and maize exposed to flooded and well-drained soil

Species	Treatments	Cortex cells					Stele cells				
		Total ion	K	Ca	Mg	Cl	Total ion	K	Ca	Mg	Cl
Rice	Flood	161.2 a [†]	50.5 a	20.2 b	15.0 b	11.2 ns	80.1 a	41.6 ab	19.8 b	6.5 a	0.5 ns
	Well-drained	150.5 a	60.1 a	19.9 b	23.0 a	7.8 ns	90.1 a	50.5 a	24.3 a	5.0 a	0.7 ns
Maize	Flood	80.5 c	30.1 b	15.2 c	12.2 b	9.1 ns	60.5 b	30.7 b	15.0 c	3.0 b	1.0 ns
	Well-drained	120.6 b	60.7 a	30.2 a	14.4 b	10.1 ns	80.9 a	47.9 a	19.0 b	3.8 b	2.0 ns

[†]Data are means from six replicate roots. Values followed by the same letter within a column are not significantly different ($P < 0.05$).