Journal of Soil and Plant Interactions

Guideline for Authors

Journal of Soil and Plant Interactions publishes research articles in the following subject areas:

- Plant and water relations
- Soil water and nutrient availability for plant
- Physical and chemical processes of the rhizosphere
- Interactions, pools and biological fluxes in the rhizosphere
- Rhizosphere plant-growth promoting microorganisms
- Molecular interactions of plant-microbe in the rhizosphere
- Rhizosphere priming as affected by soil and plant characteristics
- Carbon sequestration and soil structure in the root zone and rhizosphere
- Effect of plant roots on soil biophysical and biochemical characteristics and processes
- Biogeochemistry of pollutants in the soil-plant system
- Plant growth in stressful conditions
- Modeling soil water-plant relationships and root water uptake
- Relationships between soil health and soil-plant interactions
- Role of plant and soil functional characteristics in moderating the effects of climate change
- Soil (growth medium) and plant relationships in greenhouse cultivation

1. It is necessary that the submitted manuscripts have not been published or are not under review in other scientific journals. Of course, research presented in scientific seminars and conferences or published in the form of monthly, annual and similar reports can also be reviewed and published in this journal. Submitted manuscripts will be refereed and if approved, they will be published according to the priority of receipt and acceptance.
2. The responsibility of the manuscript's content and determining the order of the names of the authors (with their written consent) is the responsibility of the person submitting the manuscript to the journal (i.e., corresponding author) and all communications will be done with the corresponding author.
3. MSc and PhD students (or graduated students) must obtain the written consent of their supervisor(s) to submit an article extracted from their thesis (dissertation).
4. Manuscripts must be sent electronically through the journal website (**jspi.iut.ac.ir**). This allows for quick and easy submission of manuscripts by authors, review procedures and subsequent correspondences between author(s), reviewers, journal associate editor and editor in chief. It is also possible for the author(s) to be informed about the status of their article at any stage by referring to the relevant section in the personal page.

Steps for sending an article electronically are as follows:

1. Fill out the registration form and log in to the website with a unique username
2. Entering the article submission section, receiving a unique code for each article and specifying the article's specifications
3. Filling the article submission form and relevant information and specifications
4. Checking the article in the personal page and adding attachments and related information
5. Final approval of the article to start its' reviewing process

If there is any problem in sending the article through the website, you can send the article file to the journal's email address: jspi@of.iut.ac.ir.

Require files:

1. Pre-requisite files for the article: assignment of the right to publish the article and the conflict-of-interest form, which are completed after receiving from the journal site and uploaded to the attached files section.
2. Main manuscript file: the entire manuscript along with its specifications sheet (placed at the beginning of the article before the Farsi abstract) in accordance with the guideline of the journal, which is uploaded in the relevant section.
3. Main manuscript file without authors' names: the entire manuscript is uploaded without any details of the authors in the relevant section.

Ethics:

1. After registration, authors are required to complete the "copyright assignment form" and upload it as a prerequisite file in order to prevent possible violations and preserve their rights and intellectual property.
2. The corresponding author is responsible for the content of the submitted manuscript and the order of authors' names. All communications will be done with the corresponding author. The corresponding author (assigned with an asterisk in the submission system) cannot be a student and must be a faculty member or researcher of a research institute.

Manuscript preparation:

- Manuscripts should be prepared in single-column with 12 to 16 pages, keeping a margin of 2.5 cm on each side and inserting page and line numbers and line spacing of 1.5 cm in MS Word software with Persian font 12 B Lotus and English font 10 Times New Roman.
- In the main text, indentation of 0.5 cm should be applied for the first line of paragraphs except for the first paragraph in each part.
- Order of different parts of the manuscript: cover sheet including title, Farsi abstract, keywords, introduction, materials and methods, results and discussion, conclusions, acknowledgment, references and English abstract.

Technical guide:

Manuscript cover sheet: This sheet will include the manuscript title, first and last names of authors, academic rank and affiliation of the author(s), email and contact phone number, and ORCID ID of the corresponding author. It is suggested to write the ORCID ID of other authors (co-authors) on this sheet.

Title: The manuscript title consists a maximum of 20 words and expresses the content of the article (Persian font 16 B Lotus).

Persian abstract: A structured abstract of 250 to 300 words should be written and divided into the following sections:

- Background and Objective
- Methods
- Results
- Conclusion

Keywords: 4 to 6 words related to the main aim of the research and are not included in the manuscript title.

Introduction: In this section, the background of the work should be introduced by literature review and the research gap, aim and hypothesis should be defined. The most important research works done are mentioned in this section and the necessity and objective of the research is given.

Materials and methods: This section includes the materials used and the description of the new methods and formulas used. The well-known routine methods can be referred to the relevant literature. Equations and

formulas are numbered and should be prepared with Mathematical Tools Type 6 or newer versions in MS Word.

Results: It includes research results in the form of text, tables, figures and images. Repeating the results in different forms (tables, figures, etc.) should be avoided.

Discussion: In this part, the causes-effects and relationships between variables and factors are discussed and analyzed by citing relevant scientific references. The results and discussion can be combined (optional) under the title "Results and Discussion".

Conclusions: This section contains the final conclusion of the research and possible recommendation(s) and/or application(s).

Acknowledgment: Acknowledgment of individuals, financial support and research projects with an official number is one of the essential parts of the article. The name of the supplier organizations must be mentioned in full and in compliance with the rules of the organization in question. Organizational affiliation of the sponsor of the article (if any) should be written in this section.

If there is no sponsor or research credit provider, use the following phrase instead:

“In conducting this research, there was no special financial support from government, industrial and non-profit institutions.”

Conflict of interest: If there is no conflict of interest, use the following phrase:

“The authors of the article acknowledge that they have no conflict of interest with any person, company or organization for this research.”

References: The scientific references cited in the manuscript text must have been previously published in the form of a book, book chapter, article in the scientific journals or articles in conferences and congresses and be available to the reader. All of the references listed at the end of the article should be cited in the text and prepared according to **Elsevier-Harvard (with titles)** style. All Persian and English references cited in the manuscript text must be written in English in the list of references. Therefore, for the Persian references, the solar year should be converted to the Gregorian year, and the correctness of authors’ names, publication title etc. carefully checked.

In-text citations should be given in parentheses with the author's name and year (and, if necessary, the specific page number). For example: (Glinski and Lipiec, 1990; Holloway et al., 1991; Kirkham, 2014; Northup, 2013).

The reference style of the journal in EndNote is available through the following link:

https://iutbox.iut.ac.ir/index.php/s/qLkf8BnBpWeRDNS

Examples of different reference types in the list of references are given as follows:

Whole book according to author(s), year, book title, period, publisher, and city of publication:

1. Kirkham, M.B., 2014. Principles of Soil and Plant Water Relations, Second ed. Elsevier Academic Press, Amsterdam.
2. Glinski, J., Lipiec, J., 1990. Soil Physical Conditions and Plant Roots, CRC Press, Boca Raton, Florida.

Book chapter according to the chapter author(s), year, chapter title, editor(s), book title, edition number and period (if applicable), publisher, city or country of publication, and chapter pages:

1. Jungk, A.O., 2002. Dynamics of nutrient movement at the soil–root interface. In: Waisel, Y., Eshel, A., Kafkafi, U. (Eds.), Plant Roots: The Hidden Half. CRC Press, Boca Raton, Florida, pp. 455–481.
2. Dastogeer, K.M.G., Wylie, S.J., 2017. Plant-fungi association: role of fungal endophytes in improving plant tolerance to water stress. In: Singh, D. P., Singh, H.B., Prabha, R. (Eds.), Plant–Microbe Interactions in Agro–Ecological Perspectives. Springer, Singapore, pp. 143–159.

Article in a scientific journal according to the author(s), year, title of the article, abbreviated name of the journal, volume, number and pages, DOI identifier (if any) is required at the end of each article:

1. Hallett, P.D., Young, I., 1999. Changes to water repellence of soil aggregates caused by substrate-induced microbial

activity. Eur. J. Soil Sci. 50(1), 35–40. https://doi.org/10.1046/j.1365-2389.1999.00214.x.
2. Hinsinger, P., Bengough, A.G., Vetterlein, D., Young, I.M., 2009. Rhizosphere: biophysics, biogeochemistry and ecological relevance. Plant Soil 321(1-2), 117–152. https://doi.org/10.1007/s11104-008-9885-9.

MSc thesis and PhD dissertation according to the student name, year of defense, title, type of thesis/dissertation, name of the university, city and country:
1. Northup, J.I., 2013. Biochar as a Replacement for Perlite in Greenhouse Soilless Substrates. MSc Thesis, Iowa State University, USA.
2. Brolsma, K.M., 2014. Linkages between Plant Traits and Soil Ecology in The Rhizosphere and Through Litter Decomposition. PhD Thesis, Wageningen University, The Netherlands.

Full articles of conferences according to author(s), year, title of article, conference name, date, city and country of conference:
1. Holloway, R.E., Alston, A.M., Dexter, A.R., 1991. Mechanical and chemical factors limiting rooting depth of wheat in a semi-arid environment. In: Proceedings of 12th Conference of International Soil & Tillage Research Organization, July 8–12, Ibadan, Nigeria.
2. Lynch, D.H., Sharifi, M., Clegg, E., Owen, J., Hammermeister, A.M., Burton, D.L., 2009. Management-induced changes in nitrous oxide emission from organic potato rotations in Eastern Canada. In: 29th Guelph Organic Conference, January 22–25, Guelph, Canada.

Internet article or document according to author(s), year, last updated time (if available), title, access time (if available), and website address:
FAO. 2008. Land and Plant Nutrition Management Service [Online]. Available: http://www.fao.org/ag/agl/agll/spush/.

If several references from the same author are cited, their order in the list of references will be based on the year of publication from the oldest to the newest. If there are several references from the same author with the same year of publication, they are distinguished from each other by placing the letters a, b, and c in front of the publication year. If the individual (single-authored) and joint (multi-authored) articles of the same author are cited, the individual articles are listed first and then the joint articles are sorted in the alphabetical order of the co-authors. Refrain from listing of references with non-English languages (e.g., French, Arabic, Russian, etc.).

Persian references: Persian references should be written in English based on the original title of the document (not your translation) as in the example below. For Persian references with an English abstract, the phrase (In Persian with English Abstract) and for Persian references without an English abstract, the phrase (In Persian) should be given in parentheses at the end of the reference. Example:
Akbari, M., Afshari, H.R., 2014. Comparison of synthetic chelates and compost for phytoremediation of Cd, Ni and Pb from contaminated soil. J. Water Soil 28(4), 217–230. https://doi.org/10.22067/JSW.V0I0.1694. (In Persian with English abstract)

English abstract: The English abstract is the complete translation of Persian abstract. It is strongly recommended that before submitting the article, its title and English abstract should be carefully edited and reviewed by people or colleagues who have sufficient command of the English language:

English abstract should be written using the following structure with Times New Roman font (11 pt) and single–line spacing.

Paper Title Should be Arial, Font Size 14 pt, Bold, First Caps, Centered (The Scientific Name in the Title Should be *Italic*)

Author's Name and Surname[1], Author's Name and Surname[2,*] (font size 12 pt)

Authors' affiliations should be given as footnotes. Corresponding author should be shown by asterisk (*) and his/her E-mail should be provided in the footnote as well.

Abstract: A structured abstract of 250 to 300 words should be written and divided into the following sections:

- Background and Objective
- Methods
- Results
- Conclusion

Keywords: The authors should provide 4 to 6 keywords which are consistent with those in Persian and separated with comma.

(It should be noted that the keywords are complete translations of "Persian keywords" in English and are presented in alphabetical order.)

Technical guide:

1. Text structure: The font of the article title and the main headings of the article (including introduction, materials and methods, results, discussion, general conclusions and the list of references) should be in bold. It is okay to use subheadings, but avoid using multiple subheadings. Punctuation rules must be observed in writing the text. For example, period (.), comma (,) and question mark (?) are attached to the previous sentence or words, and a space is required with the following sentence or phrase. It is necessary to use a half space in compound and plural words.
2. Avoid using foreign words in the text of the article as much as possible, and if necessary, write the English equivalent of names and scientific words, places, compounds and other foreign words as footnotes. The scientific name of living organisms should be mentioned in English (Latin) and italic style in the footnote.
3. All contents and titles of tables and figures should be presented in both Persian and English (under Persian title).
4. Tables should be numbered in the order cited in the text. The title of the tables should be centered and written in the top of tables. Tables should be presented without internal horizontal and vertical borders, and the first row in the tables should have top and bottom borders. The last row in the table should also have the bottom border. The units of each property or trait must be given in parentheses. In the tables and figures, statistical analyses should be followed and significance letters, signs, units, etc. should be written in the table footnote or in the caption of figure, which shows the statistical comparison. Significance letters and symbols should be written as superscript in the right of numbers and should be defined in the table footnote. An example of presenting a table in the article is as follows:

Table 1. Mean comparisons of soil organic carbon (SOC), basal soil respiration (BSR), percent of water-stable aggregates (WSA), water dispersible clay (WDC) and water repellency index (RI) as affected by application rate of plant residues

Residue (%w/w)	SOC (g kg^{-1})	BSR (mg CO_2 kg^{-1} soil)	WSA (%)	WDC (g kg^{-1} clay)	RI (–)
0.5	8.2^{b}	208^{b}	30^{c}	60^{a}	3.54^{c}
1	11.0^{b}	390^{ab}	40^{b}	49^{ab}	4.67^{b}
2	13.3^{a}	445^{a}	55^{a}	44^{b}	6.25^{a}

In each column, numbers with similar letters are not significantly different (LSD, $p < 0.05$)

5. Figures are numbered in the order cited in the text. The captions of the figures are centered and written below them. Figures should be presented without borderlines and with sufficient clarity. The figures in two dimensions and with black and white patterns are preferred. Statistical letters and symbols should be clearly stated and defined in the figure caption. The unit related to the axes in each graph should be mentioned in parentheses. Graphs must be copied into the article file to be editable. The axes of the figures should start from zero and English numbers should be used in the grading of the horizontal and vertical axes. The example of presenting a figure in the article is as follows:

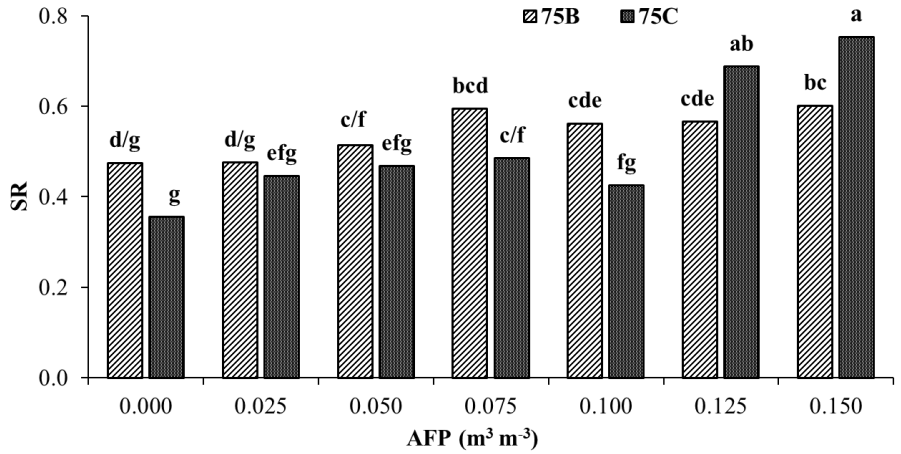

Fig. 1. Mean comparisons of interaction effect of soil air-filled porosity (AFP) and tall fescue genotype (75B and 75C) on soil stability ratio (SR); Bars with similar letters are not significantly different (LSD, $p < 0.05$).

6. The number of decimals related to the data of each of the measured characteristics must be in accordance with the accuracy of the measurement method and the device used. In the case of a property, figures with the same number of decimals should be presented uniformly throughout the article. Numbers greater than 100, 10–100, and smaller than 10 should be presented without decimals, with one and two decimals, respectively. Avoid using more than two decimal places as much as possible.
7. If you use mathematical symbols (such as ×, +, -, >, < and =), you must leave a space between these symbols and adjacent numbers or words.
8. If a sentence starts with a number, use letters instead of numbers. In this case, the unit of measurement must also be written with letters. Example: "Twenty milligrams per liter of zinc was added to the solution."
9. To express units of quantities, properties and parameters, use SI units, examples of which are given below:

- Length: meter (m), millimeter (mm), micrometer or micron (μm), nanometer (nm)
- Area: hectare (ha), square meter (m^2)
- Volume: cubic meter (m^3), liter (L)
- Mass: kilogram (kg), gram (g), milligram (mg), microgram (μg), nanogram (ng)
- Yield: kilogram per hectare (kg/ha)
- Energy: Joule (J)
- Water pressure and potential: hectopascal (hPa), kilopascal (kPa), megapascal (MPa)
- Temperature: degree of Celsius (°C)
- Transpiration: millimoles (water) per square meter per second (mmol H_2O m^{-2} s^{-1})
- Photosynthesis: micromoles (CO_2) per square meter per second (μmol CO_2 m^{-2} s^{-1})
- Concentration: gram per liter (g L^{-1}), mole per liter (mol L^{-1}), millimole per liter (mmol L^{-1}), micromole per liter (μmol L^{-1}), nanomole per liter (nmol L^{-1})

Reminder:

1. The author(s) are responsible for the opinions and ideas contained in the article.
2. Journal of Soil and Plant Interactions is free to edit the contents of articles.
3. The articles received will be reviewed by the editorial board of the journal with the cooperation of specialists, and if accepted, they will be published according to their schedule.