

# **Horticultural Science**

## **INSTRUCTIONS for AUTHORS**

| GENER                       | AL INFORMATION                      | . 2 |
|-----------------------------|-------------------------------------|-----|
| The art                     | ticle processing charge             | 2   |
| Conflic                     | t of interest                       | 2   |
| Copyri                      | ght                                 | 2   |
| PEER-R                      | REVIEW PROCESS                      | 2   |
| MANU                        | SCRIPT SUBMISSION                   | 3   |
| MANU                        | SCRIPT FILE LAYOUT                  | 4   |
| Man                         | uscript extent                      | 4   |
| Lang                        | guage                               | 4   |
| Tabl                        | es                                  | 4   |
| Figu                        | res                                 | 4   |
| Equa                        | ations                              | 4   |
| Nom                         | nenclature, abbreviations and units | 4   |
| Stati                       | istics                              | . 5 |
| MANU                        | SCRIPT PARTS                        | . 5 |
| i.                          | Title                               | 5   |
| ii.                         | Abstract                            | . 5 |
| iii.                        | Keywords                            | . 5 |
| iv.                         | Introduction                        | . 5 |
| ٧.                          | Material and Methods                | 6   |
| vi.                         | Results and Discussion              | 6   |
| vii.                        | Conclusion                          | 6   |
| viii.                       | References                          | 6   |
| ix.                         | Supplementary Material              | 8   |
| PROOF                       | -SHEETS                             | 8   |
| OFFPR                       | INT                                 | 8   |
| TABLES AND FIGURES EXAMPLES |                                     |     |
| SELF AS                     | SSESMENT                            | 11  |
| LICT OF                     | ADDREVIATIONS                       | 1 2 |

#### **GENERAL INFORMATION**

The journal publishes original scientific papers, short communications, and up-to-date review articles from the disciplines concerned. The authors alone are responsible for the manuscript content and writing. The manuscript must be both original (original (not published previously elsewhere) and formally correct. Papers are published in English (British spelling). Manuscripts must be grammatically and linguistically correct to avoid acceptance problems.

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Conflict of interest. Any conflict of interests must be declared.

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#### Peer-review process steps

- 1. **Manuscript submission** the corresponding author submits the manuscript to the journal, online via an online editorial system.
- **2. Editorial office assessment** the editorial office checks the manuscript's composition and arrangement against the Instructions for Authors.
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- 8. **The decision is communicated.** The Executive Editor sends a decision e-mail to the corresponding author including any relevant comments.

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- (ii) Manuscript file including title, abstract, keywords, content/text of the manuscript, tables and figures (see Manuscript file layout), blinded (follow the instructions below) (templates).
- (iii) **Figures graphs** preferably in MS Excel (editable .xls or xlsx); and images (photographs, schemas, diagrams, maps)
- (iv) **Cover letter** explaining the significance and novelty of the work, the problem that is being addressed, and why the manuscript belongs in this journal.
- (v) Authors' Declaration form (link for Authors' Declaration, signed, scanned, .pdf)

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Manuscript extent. Original paper should not exceed 25 000 characters including spaces, tables, references, and figure captions. Short communication format is intended for the presentation of important observations that can be clearly described in an abbreviated format. A short communication must have an abstract and must not exceed 10 800 characters with spaces. There are no subheadings and a description of materials and methods must be integrated into the text. Review articles' extent is not limited.

**MS Word editor** should be used for creating the text (Times New Roman, 12, lines 1.5; 2.5 cm margins on each edge of the page. The document must not be formatted in columns, heading styles etc. Pages and lines of the manuscript must be numbered in the left-hand margin. If any abbreviations or acronyms are used in the main text, they must be explained appropriately when used for the first time.

Language. The manuscript must be grammatically and linguistically correct (British English). The authors who are not native English speakers are strongly advised to get their manuscript checked by a native English-speaking colleague or by an English Editing Service prior to the submission to avoid acceptance problems.

Tables must be formatted in MS Word (will not be accepted as an image file). Each item must be placed into a separate cell. Tables are to be numbered with Arabic numerals in the order in which they are included in the text, and have a brief, but self-explanatory title. Explanatory footnotes to tables should be indicated by superscript letters (or asterisks for significance values). Abbreviations or symbols used in the tables must be explained either in the table title or as a footnote. For an explanation of abbreviations or symbols used in tables, it is not possible to refer to the main text.

Figures should be restricted to material essential for documentation and understanding of the text and accompanied by a concise, descriptive legend. **Graphs** should be provided in MS Excel and supplied with original data. Centred captions, parallel to axes, are used to indicate the measured attributes and their dimensions (in brackets). All **illustrative material** must be of publication quality. High-contrast photographs and autotypes must be submitted in .jpg/.tiff format at high resolution (min. 300 dpi). All photos, graphs, illustrations and diagrams must be referred to as a figure and numbered (Figure 1), continually according to the order in which they are included in the text, using Arabic numerals. Abbreviations or symbols used in the figures must be explained either in the figure title or as a footnote.

Duplicated documentation of data in both Tables and Figures is not acceptable.

Equations should be numbered using Arabic numerals (1). Each equation should be followed by a legend (where: y – refers to; x – indicates ...), explaining all variables and acronyms used, which were not explained previously. The equations should be further editable (use MathType, MS Word equations editor).

Nomenclature, abbreviations and units. The Latin binomial or trinomial (in italics) and authority must be shown for all plants, insects, animals, and pathogens when first used in either the abstract, the main text, or in a table. **SI units should be used**, e.g.: mg, g, km, m, cm, mm, ppm, cpm, Ci (Curie), L (litre), mL, s (seconds), min (minute), h (hour), mol, etc. Use mg/L instead of mg·L<sup>-1</sup>. The definitive SI website is that of the Bureau International des Poids et Mésures at <a href="http://www.bipm.org/">http://www.bipm.org/</a>. Units must be indicated on each occurrence of numerical information and at the axes of all graphs. To express a unit of measurement, use a space between the number and the unit (5 g; 20 ha, 3 °C) except for

percentages (37%). In a series of measurements, indicate the unit at the end (3, 6, and 8 mm). Abbreviate units only after a numeric value (24 h; several hours later, 12 days). In chemical formulae the valence of ions must be given as, for example, Ca²+ and CO₃² rather than as Ca⁺+ and CO₃⁻. Isotope numbers should precede the symbols (e.g., ¹8O). The decimal marker is a point (e.g., 0.1 m), while the thousand's separator is a space on either side of the decimal period (e.g., 25 562.987 05). The decimal point in all numbers between 1 and −1, except 0, must be preceded by 0 (e.g., 0.26). In general, use words for numbers one through nine, and use digits for 10 and over. For a series of numbers, any of which are over 10, use all digits. Don't use the MathType or MS Word Equations editor for symbols or variables written in the running manuscript text (use the Symbol letters). For more details see the List of abbreviations at the end of this file. Currency. Use euro or U.S. dollar as a currency in the computations and results. Currency codes based on the ISO 4217 Currency Code norm should be used (EUR, USD). When a monetary unit is referred to generally, but an amount is not included, it is spelt out in letters, except in tables (e.g. an amount in euros). In the text, use: EUR 30; EUR 30 per year per ha; EUR 10 million. In tables in case of the main unit for a column (table), use: (EUR), (million EUR).

Statistics. Describe statistical methods with enough detail to enable a knowledgeable reader to verify the reported results. Give details of randomisation and blocking, as well as the number of replications, blocks, or observations. Clearly distinguish between true replications and subsamples within a replication/treatment combination. Always specify the experimental design and indicate whether the design was balanced. When means (or medians) are followed by  $\pm x$ , indicate whether x refers to the standard deviation, standard error, or half the confidence interval; error bars should similarly be defined. Except for simple procedures (e.g., t-tests, one-way analysis of variance, simple linear regression), cite an appropriate and accessible statistical text and indicate the version of the SW used (Name, Version). In general, statistical techniques should be described in the Materials and Methods. The level of significance should be normally indicated by using the following conventional standard abbreviations for significance (P < 0.05, P < 0.01, and P < 0.001). In tables, levels of significance should be indicated by \*, \*\*, and \*\*\*, respectively.

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- Title should be short and informative (preferably not exceeding 100 characters, no subtitles and commonly unknown abbreviations or acronyms). No subtitles or numbering of serial articles should be used.
- ii. Abstract is a short summary of the scientific paper including an outline of the objective, method, results and conclusions of the paper (preferably not exceeding 200 words). It should describe all the essential facts of the paper and basic numerical data including any statistical evaluation should be incorporated. Being published in world databases, the abstract is a significant part of the paper, and it is therefore recommended that it is precise. The abbreviations can be used only when explained.
- iii. Keywords are words most aptly describing the studied problem. A maximum of six keywords without overlapping with the manuscript title are recommended. Write them in lower case letters and separate them using semicolons.
- iv. Introduction should provide information on the present state of research in the field concerned, supported by selected references to literary sources. It briefly justifies the research, specifies the hypotheses to be tested, and gives the objective(s).

- v. Material and Methods describe in detail all preliminary material, experiments conducted, their extent, conditions and course. Specify the mentioned products used for the experiments by giving their exact name/type, name of the producer, and country of the producer's headquarters in parentheses. All original procedures that were used for the processing of experimental material and all analytical methods used for evaluation should also be detailed. The whole methodology is only to be described if it is an original one, in other cases, it is sufficient to cite the author of the method and to mention any particular differences. Data verifying the quality of acquired data should be indicated for the used methods. Methods of statistical processing including the software used should also be listed in this section. The methods and models of statistical analysis must be indicated and sufficient statistical details given to allow replication of the experiment.
- vi. Results and Discussion (in two parts or under one heading). Results obtained from the experiments, including their statistical evaluation and commentary, should be presented graphically or in table-form, and the author should comment on the results and confront them with data published elsewhere.
- vii. Conclusion summarises the paper's main points and outlines its contribution to the present state of research in the field concerned.
- viii. References. The authors are recommended to include references to papers from peer-reviewed periodicals only and avoid citations from non-available sources (reports, national journals, proceedings, thesis, etc.). Only papers cited in the text should be included in the reference list (and the sources of the data). The authors are responsible for the accuracy of their references. The authors are arranged alphabetically by the first authors' surnames. If more than one paper by the same author(s) published in the same year is cited, the papers should be differentiated by YEAR a, b, c both in the text and the reference list. Literary sources should be cited in English. If English is not the original language, the original language should be mentioned at the end of the citation (e.g.: in Czech). The title of the periodical should be preferably typed in full.

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## **Examples** of the Reference's format:

**Journal article**: Author(s) (Names of authors should be separated by commas, not by & or and) (Year): Article title. Full journal title, Volume number: page—page.

Bulíř P. (2009): Testing of Koch method applied for evaluation of ornamental trees in the Czech Republic. Horticultural Science (Prague), 36: 154–161.

Chen X., Yang D., Su M., Cheng H., Xing H., Chai S., Li W. (2014): Genetical characteristic of stay-green of flag leaf after flowering in Recombinant Inbred Lines (RILs) of wheat and its correlation analysis with grain weight under drought stress. Agricultural Research in the Arid Areas, 32: 57. (in Chinese)

In press article: Author(s) (Year): Article title. Full journal title, Volume number (in press).

**Electronic journal article**: Author(s) (Year): Title of article. Name of the electronic journal, Volume number: page—page. (accessed ...)

Hartmann T.E., Wollmann I., You Y.W., Müller T. (2019): Sensitivity of three phosphate extraction methods to the application of phosphate species differing in immediate plant availability. Agronomy, 9: 29. (accessed Jan 2, 2020)

**Book**: Author(s) (Year): Title. Edition volume (if relevant). Place of publisher, Publisher name.

Tullock J. (2005): Growing Hardy Orchids. Portland, Timber Press.

**Chapter in a book**: Author(s) of the chapter (Year): Title of the chapter. In: editor(s): Title of the book. Edition or volume, if relevant. Place of publisher, Publisher name: page—page.

Farrar J.S., Wittwer C.T. (2017): High-resolution melting curve analysis for molecular diagnostics. Chapter 6. In: Patrinos G.P. (ed.): Molecular Diagnostics. 3<sup>rd</sup> Ed. Amsterdam, Academic Press: 79–102.

**Conference proceedings**: Author(s) (Year): Title of publication. In: editor(s): Proceedings Name of Conference, place, date (a month from-to), year: page—page.

Bovolenta R., Passalacqua R., Federici B., Sguerso D. (2016): LAMP – Landslide Monitoring and Predicting for the analysis of landslide susceptibility triggered by rainfall events. In: Proc. 12<sup>th</sup> Int. Symp. Landslides and Engineered Slopes. Experience, Theory and Practice, Napoli, June 12–19, 2016: 517–522.

**Patent:** Inventor(s) (Year): Name of patent. Labelled patent No., Issue date.

Norman L.O. (1998): Lightning rods. US Patent, 4, 379, 752, 9 September 1998.

**Dissertation:** Author(s) (Year): Title. [PhD. Thesis.] Town, Name of the university.

Šimek P. (2001): Hodnocení dřevin a jejich porostů pro pěstební účely v zahradní tvorbě. [Ph.D. Thesis.] Brno, Mendel University in Brno: 1–159.

#### Papers published in collections and proceedings:

Lu C., Chandler S.F. (1995): Genetic transformation of *Dianthus caryophyllus*. In: Bajaj Y.P.S. (ed.): Biotechnology in Agriculture and Forestry. Berlin, Heidelberg, Springer-Verlag: 156–170.

Steele W.K. (1996): Large scale production of North American *Cypripedium species*. In: Allen C. (ed.): Proceedings North American Native Terrestrial Orchids Propagation and Production, Washington, March 16–17, 1996: 11–26.

#### Internet publications/On-line documents:

Malmgren S. (2005): Orchid propagation, 1–12. Available at <a href="https://www.lidaforsgarden.com">www.lidaforsgarden.com</a>

Weinert M. (2008): International *Cypripedium* forum. Available at www.cypripedium.de (accessed Dec 23, 2019).

ix. Supplementary Material. Authors can include original, so far unpublished supplementary material (SM) which may comprise additional tables, data sets, figures, and other non-essential files. SM will appear only in the electronic version. SM will be published as submitted and will not be corrected or checked for scientific content, typographical errors or functionality. SM must be relevant to the parent manuscript, but the manuscript must stand alone without SM for those readers who will be reading the hard copy only. It should be submitted along with the main manuscript in a separate file and identified as "Supplementary file – for online publication only". SM should be identified and mentioned in the main text as Table S1, Table S2, etc. for tables or Figure S1, Figure S2, etc. for figures or Supplementary Material S1, Supplementary Material S2, etc. for other material. SM should be submitted with the captions and source. Individual file sizes should be restricted to 10 MB maximum (zipped or unzipped).

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Compliance with these instructions is obligatory for all authors. If a manuscript does not comply with the above requirements, the editorial office will not accept it for consideration and will return it to the authors without reviewing.

#### **TABLES AND FIGURES EXAMPLES**

Tables:

Table 2. Number of floral lateral shoots developed and evaluation of "degree of primocane fruiting" (1–5) according to the scale of Gambardella et al. (2016)

| Cultivar     | No. of differentiated | Degree of               |
|--------------|-----------------------|-------------------------|
| Cultival     | nodes                 | primocane fruiting      |
| UC103        | 18.1 <sup>a</sup>     | 4, highly primocane     |
| Autumn Bliss | 10.7 <sup>b</sup>     | 3, moderately primocane |
| Heritage     | 3.5°                  | 2, slightly primocane   |
| Meeker       | -                     | 1, floricane            |
| Tulameen     | -                     | 1, floricane            |

Data are to averages of four replications, each represented by three plants; different letters within the column indicate significant differences (P < 0.05) according to the Tukey test

Table 4. Effect of cold treatment on height and number of nodes in the five genotypes

| Cultivar     | Treatment       | Height (cm)        | No. of nodes        |
|--------------|-----------------|--------------------|---------------------|
| UC 103       | no cold storage | 119.7 <sup>c</sup> | 35.3 <sup>de</sup>  |
|              | cold storage    | 118.9 <sup>c</sup> | 36.4 <sup>cde</sup> |
| Autumn Bliss | no cold storage | 124.9 <sup>c</sup> | 35.7 <sup>de</sup>  |
|              | cold storage    | 118.0 <sup>c</sup> | 31.7 <sup>e</sup>   |

All data correspond to averages of four replications, each represented by three plants; different letters within the columns indicate significant differences (P < 0.05) according to the Tukey test

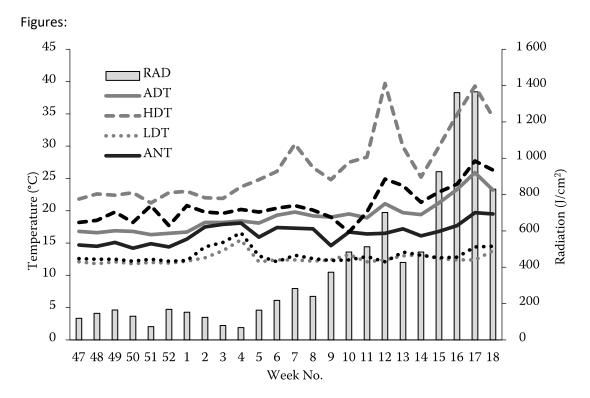


Figure 1. Weekly average (A), lowest (L), highest (H) day (D) and night (N) temperatures (T) and radiation (RAD) during the experiment (weeks year: from 47<sup>th</sup> of 2012 to 18<sup>th</sup> of 2013)

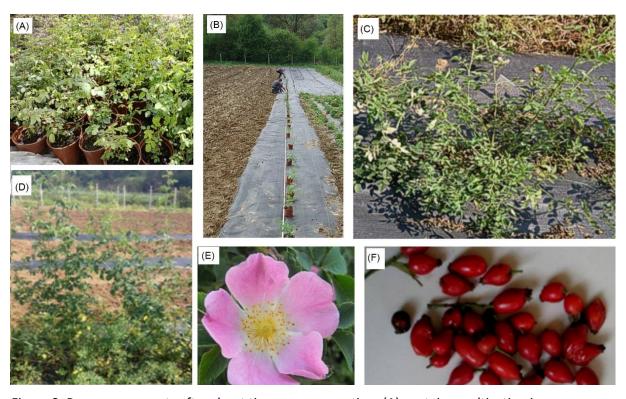


Figure 2. Roses regenerants after shoot tips cryopreservation: (A) container cultivation in greenhouse; (B) establishment of open-field trial; (C) 1<sup>st</sup> year of field cultivation; (D) 3<sup>rd</sup> year of cultivation, plant material for assessment regenerants fidelity; *Rosa dumalis* samples collected for experiments: (E) flowers; and (F) hips

#### **SELF ASSESSMENT**

Self-assessment questions to be answered by the authors before submission of the manuscript:

- 1. Is the information to be published new, and thus worthy of publication?
- 2. Is novelty expressed in the title and discussed properly in the discussion?
- 3. Is the hypothesis sound and original?
- 4. Were the experiments well-designed and appropriate methods used?
- 5. Is the paper written with essential clarity?
- 6. Has the English been validated by a native-speaker knowledgeable about the field?
- 7. Is the list of references comprehensive, and are all the references relevant?
- 8. Where appropriate, are the results statistically significant?
- 9. Are the titles and legends for tables and figures complete and self-explanatory?
- 10. Were the Instructions to Authors thoroughly followed?

Please do not submit the manuscript if any of the above questions have been answered in the negative.

## **LIST OF ABBREVIATIONS**

The metric system is adopted as standard. You should use the international system of units. If non-standard abbreviations must be used they should be defined in the text.

# Use the fundamental quantity with appropriate prefix:

| kilo  | k |
|-------|---|
| mega  | M |
| giga  | G |
| tera  | T |
| milli | m |
| micro | μ |
| nano  | n |
| pico  | р |
|       |   |

## Units of length:

| meter      | m  |
|------------|----|
| kilometer  | km |
| centimeter | cm |
| millimeter | mm |
| micrometer | μm |
| nanometer  | nm |

## Units of area:

| square meter                     | $m^2$           |
|----------------------------------|-----------------|
| kilometer                        | km²             |
| hectare (10 000 m <sup>2</sup> ) | ha              |
| square centimeter                | cm <sup>2</sup> |
| square millimeter                | $mm^2$          |

## Units of volume:

| cubic meter      | $m^3$           |
|------------------|-----------------|
| cubic centimeter | cm <sup>3</sup> |
| liter            | L               |
| milliliter       | mL              |
| microliter       | μL              |

#### Units of mass:

| gram      | g  |
|-----------|----|
| kilogram  | kg |
| tonne     | t  |
| milligram | mg |
| microgram | μg |

# Units of density:

 $g/cm^3$ ,  $kg/m^3$ ,  $t/m^3$ , g/L, kg/L

## Units of pressure:

| pascal     | Pa  |
|------------|-----|
| megapascal | MPa |

## Units of time:

| second | S   |
|--------|-----|
| minute | min |
| hour   | h   |

day, week, month, year - not abbreviated

## Units of temperature:

| Celsius | °C |
|---------|----|
| Kelvin  | K  |

# Additional physical units:

| dalton | Da |
|--------|----|
| hertz  | Hz |
| joule  | J  |
| volt   | V  |
| watt   | W  |

## Relative units:

| parts/million parts  | ppm |
|----------------------|-----|
| parts/billion parts  | ppb |
| parts/trillion parts | ppt |
| percentage           | %   |
| weight               | W   |
| volume               | V   |

## Units of electrical conductivity:

| siemens per meter      | S/m  |
|------------------------|------|
| millisiemens per meter | mS/m |
| (mS/cm; μS/cm)         |      |
| ohm                    | Ω    |

## Units of concentration:

| mole per kilogram (liter) | mol/kg  |
|---------------------------|---------|
| (mol/L)                   |         |
| millimole (micromole)     | mmol/kg |
| per kilogram              | μmol/kg |
| gram per kilogram         | g/kg    |
| milligram per kilogram    | mg/kg   |
| microgram per kilogram    | μg/kg   |

#### Similar units for volume:

g/L, mg/L, mg/mL,  $\mu$ g/L,  $\mu$ g/mL

#### Units of irradiation:

watt per square meter W/m<sup>2</sup>

## Units of photon flux density:

mol per square meter per second mol/m²/s

## Units of yield, sampling and rate:

kilogram per hectare kg/ha
tonnes per hectare t/ha
liter per hectare L/ha
gram per hectare g/ha
gram per square meter g/m²
gram per kilogram g/kg
milligram per kilogram mg/kg

## Statistical symbols and abbreviations

analysis of variance **ANOVA** coefficient of variation CV degree of freedom df F F-distribution least significant difference LSD sample size n Ρ probability simple correlation coefficient simple correlation of determination  $r^2$ multiple correlation coefficient multiple correlation  $R^2$ coeff. of determination  $s^2$ variance (sample) standard deviation (sample) SD standard error SE standard error of the differences of means SED standard error of mean SEM t-(or Student) test t mean Χ

#### Additional use symbols

dry weight (matter) DW (DM) fresh weight FW (FM) water use efficiency WUE

Revised: September 30, 2024