



# ISHS authors guide: publishing in *Acta Horticulturae*

## GENERAL INFORMATION

### ISHS publication policy

All **oral** presenters, including **invited** and **keynote** speakers, **must submit** a manuscript for *Acta Horticulturae*. If this is not agreed to by the author(s), the work can be presented as a **poster** instead. Authors of **posters** are welcomed to submit their **manuscript** for *Acta Horticulturae* but posters cannot be published as such. The manuscript should be submitted **by the deadline set by the convener** in order to avoid unnecessary delay in the reviewing process and editing of the *Acta Horticulturae* volume.

**Submission** of a manuscript implies: **that the work described has not been published before** (except in form of an abstract or as part of a published lecture, review or thesis); that it is not under consideration for publication elsewhere; that its publication has been approved by all co-authors, if any, as well as - tacitly or explicitly - by the responsible authorities at the institution where the work was carried out.

The copyright to an article submitted for publication is transferred to The International Society for Horticultural Science (for government employees in certain countries: to the extent transferable) effective if and when the article is accepted for publication. The author warrants that his/her contribution is **original** and that he/she has **full power** to make this grant. The author signs for and accepts responsibility for releasing this material on behalf of any and all co-authors. The copyright transfer covers the exclusive right to reproduce and distribute the article, including reprints, translations, photographic reproductions, microform, electronic form (offline, online) or any other reproductions of similar nature.

An author may self-archive an **author-created** version of his/her article on his/her own website. He/she may also deposit **that** version on his/her institution's and funder's (funder-designated) repository at the funder's request or as a result of a legal obligation, including his/her final version, provided it is not made publicly available **until after 12 months** of official publication. He/she may **not** use the **publisher's PDF** version which is posted on [www.actahort.org](http://www.actahort.org) for the purpose of self-archiving or deposit. Furthermore, the author may only post his/her version provided **acknowledgement** is given to the original source of publication and a DOI link is inserted to the published article on ISHS's website. The link must be accompanied by the following text: "**The original publication is available at [www.actahort.org](http://www.actahort.org)**".

**Important elements of the publisher's role in the scientific communication process are reviewing, recognition and consistent quality assurance. In order to guarantee that the requirements of these elements are fully met, control of the dissemination of the final article is necessary. Permitting an article to be published elsewhere on public servers without a clear connection to the final article can potentially confuse readers who use the article for their own research and will not be in the interest of science. The transfer of copyright from the author to the publisher assists ISHS to protect the mutual interests of both the author/researcher and the publisher. Articles disseminated via [www.actahort.org](http://www.actahort.org) are indexed, abstracted and referenced by many abstracting and information services, bibliographic networks, subscription agencies, library networks and consortia.**

### REFERENCES: VITAL

Please go to **PubMed** (<https://www.ncbi.nlm.nih.gov/pubmed/citmatch>) and **CrossRef** (<https://apps.crossref.org/simpleTextQuery>) to check your references. If your references are not correct, ISHS will be forced to format them in the final stage of technical editing according to the PubMed and CrossRef databases.

### Length of the printed paper

All symposium verbal and poster presentations are eligible for publication in the proceedings if a suitable manuscript is prepared according to the “**ISHS Authors Guide**” and submitted on time. The manuscript will be reviewed by an Editorial Board prior to publication.

Manuscripts should be as concise as possible in order to reduce to a minimum the number of pages of *Acta Horticulturae*. As a general rule the maximum recommended length of an invited paper is 16 pages and of a submitted oral or poster paper is 8 pages, including figures and tables. An average page of text will contain about 500 words. Manuscript reviewers will cut unnecessary information and will advise on the number of pages each manuscript should have taking into account its content and characteristics.

### Language

English is the official language of *Acta Horticulturae*. However, if the original contribution is presented at a bilingual symposium, a manuscript in Spanish or French is also acceptable, provided it includes a **one page** extended abstract in English. An abstract in French or Spanish can be added to manuscripts in English.

### Spelling

ISHS has no preference whether English or American spelling is used although uniformity within each paper is required. Latin words or phrases are in *italics*, with the exception of very common expressions such as “i.e.,” “e.g.,” “et al.,” “in vitro,” “ex vitro” and “etc.” The expression “etc.” for “and so forth” should be used only with series, such as 1, 2, 3, etc.

### Units

Use the metric system exclusively. Use abbreviation L for liter, mg L<sup>-1</sup> for milligram(me) per liter, mL for milliliter, µL for microliter and t for tonne (metric ton). SI units can be used where appropriate.

### Font and type size

Use **Cambria** font. Titles are printed in 18 point, references in the Literature cited section in 9 point, and the rest of the manuscript, including tables should be 11 point. When italic typeface is required use italic type, do not underline.

### Plant names

Scientific names are to be included for all plant species and are to be in italic font except for the abbreviations “var.,” “subsp.,” “f.,” etc. which indicate rank at infraspecific level (e.g., *Cedrus libani* subsp. *atlantica*, *Phytophthora parasitica* var. *nicotianae*).

Author citation should only be used when helpful for historical or taxonomic reasons, and then it should only be used when the name is first mentioned in the body of the text (do not use author citation in the abstract or title). Author names are to be abbreviated in accordance with the international standard provided by Brummitt, R.K. & Powell, C.E., “Authors of Plant Names”, Royal Botanic Gardens, Kew 1992. An on-line updated version of this work may be consulted via <https://www.ipni.org/index.html>.

Common names may be used for well-known plants once the scientific name has been provided (e.g., apple, pear, potato, rose, tomato).

Cultivated varieties which are the product of selection and/or breeding are to be referred to as “cultivars” and not “varieties”. Cultivar names are to be written in accordance with the *International Code of Nomenclature for Cultivated Plants*. The current (2016) edition is obtainable from ISHS via <https://www.ishs.org/scripta-horticulturae/international-code-nomenclature-cultivated-plants-ninth-edition>. In particular, the part of a name, which denotes the cultivar, is to be placed within single quotation marks. The abbreviation “cv.” is not to be used within a name (e.g., *Malus domestica* ‘Golden Delicious’, not *Malus domestica* cv. Golden Delicious).

If indicating hybrid status, the multiplication symbol should be used before the name of the genus or the species epithet as appropriate (e.g., *×Cupressocyparis leylandii*, *Mentha ×piperita*), or within the formula denoting the hybrid (e.g., *Mentha aquatica × M. spicata*). If the multiplication symbol is not available in your font set, use the letter “x” in lower case, but leave a space between it and the word to which it should be applied (e.g., *x Cupressocyparis leylandii*, *Mentha x piperita*). Neither the multiplication symbol nor the letter “x” are to be in italics.

Use the multiplication symbol “×” to indicate a cross such as “red × yellow” and for the term “by” in measurements (2×4 cm). Use italic *n* and *x* when indicating sporophytic or basic chromosome number (e.g.,  $2n=4x=48$ ).

### Headings ranks and format

Papers contain one to four headings, all aligned at the left hand margin, as follows:

#### RANK ONE

Use **boldface** and all capital letters. Use a space before this rank but subsequent paragraph(s) continue without a space. Subsequent paragraphs within this section are indented without spaces between paragraphs. Headings such as **INTRODUCTION, MATERIALS AND METHODS, RESULTS, DISCUSSION, ACKNOWLEDGEMENTS** are **RANK ONE** headings. Do not use a period after this heading.

#### Rank two

This heading subdivides **RANK ONE** headings, thus there must be at least two or more **Rank two** subheads. Titles are **boldface** and “sentence case”. **Rank two** headings are separated by a space above the heading as in **RANK ONE** headings. No period after **Rank two** headings. The paragraph starts on the first line after the **Rank two** heading and is indented.

#### 1. Rank three.

This heading may be used to divide **Rank two** headings. Initiate this heading with Arabic numerals (1, 2, 3, etc.) with numbers and title in **boldface** and in “sentence case”. The subheading ends with a period in **boldface**. **Rank three** headings are separated by a space above the heading as in **RANK ONE** headings. The paragraph starts on the first line after the **Rank three** heading and is indented.

#### *Rank four.*

This heading subdividing **Rank three** headings will be used rarely. Align left and end with a period. The font is *italic*, non-**boldface**, “sentence case”. *Rank four* headings are separated by a space above the heading as in **RANK ONE** headings. The paragraph starts on the first line after the *Rank four* heading and is indented.

#### Paper

The printable area on your sheet of paper is **strictly fixed** (15.3 × 23.5 cm = 6.02 × 9.25 inches) irrespective of paper size. For A4 size paper this printable area is obtained by entering following margin settings in the “page set-up” of MS Word: **top: 2.7 cm (1.06”); bottom: 3.5 cm (1.38”); left: 2.8 cm (1.10”); right: 2.9 cm (1.14”)**.

#### Spacing and indentations

The final text should have line spacing exactly 12 pt. Titles of subheadings should not be underlined. Text should be “**justified**” in order to fill the entire printable area.

First lines of all paragraphs should have a 1-cm indentation. Do not include blank lines between paragraphs within a section.

## ORGANIZATION OF A RESEARCH PAPER

### Title

Use “sentence case” except for proper names, genus names, etc. Do not include authorities for binomials in titles. Keep titles as concise as possible. Binomials will be in *italics*. [Note: title font & style - Vista Sans OT Medium, 18 point, blue color, will be applied by ISHS Secretariat staff during technical editing prior to publication].

### Bylines

The byline under the title includes the name of author(s) (without titles) and affiliations. The given name of authors should be listed by initials. Initials are followed by a period. If two initials are listed, do not include a space between them but provide a space before the family name. The family name is always presented after the given name, even for those countries that use a different sequence (Spanish names are alphabetized by the paternal family name). Accents should be kept in names so as not to violate their spelling rules. If there are two authors, separate the author name by “and” e.g. A.B. Smith and C.D. Jones; three authors would be A.B. Smith, C.D Jones and E.F. Brown.

The affiliation or address of author(s) is included below the name(s) in font size 9 pt. The address of the author may be in the language of the country, but spell out the country name in English. E-mail addresses can be added as footnotes using superscript letters a, b, c, etc. Write the affiliation of authors as follows, e.g.

A.B. Smith<sup>1</sup>, C.D Jones<sup>1,2</sup> and E.F. Brown<sup>3</sup>

<sup>1</sup>Institute xxx, City, Country; <sup>2</sup>Center xxx, University xxx, City, Country; <sup>3</sup>Department xxx, Faculty xxx, University xxx, City, Country.

### Abstract

Use a **Rank two** heading for **Abstract**. An abstract in English, limited to 200-300 words in a single paragraph, **all boldface**, is **required in all cases**. Indent the first line of the abstract (1 cm). The abstract should contain a concise but comprehensive statement of the problem and results. [Note: blue shading style will be applied by ISHS Secretariat staff during technical editing prior to publication].

*The title and abstract will be freely available on the ISHS website and should be considered an advertisement for the paper as it may be all that most viewers will read. Thus, it should be carefully and accurately written.*

### Keywords

This is a **Rank two** heading followed by colon in **boldface (Keywords: apple, pear)**. List five to seven keywords **not used** in the title. Remember that electronic search engines focus on Title and Keywords. The second line of keywords is a hanging indent (2 cm).

### Introduction

This should include a statement of the problem, a brief survey of previous work, and the scope and purpose of the investigation. References to previous work should be included.

### Materials and methods (experimental procedures)

This section should be included in papers describing experiments but may not be required in review papers. Describe concisely the plant materials, the growing technique, methods used, and lay-out of experiments. Include the name of all chemicals and compounds. An indication of the statistical methods used to analyze data should be included.

### Results and discussion

This is the heart of the paper. The section(s) may either be presented as a single section or divided into separate **Results** and **Discussion** sections. If separate, describe experimental results in the **Results** section and reserve interpretations, speculations, and conclusions for the **Discussion** section.

### Conclusion

At the end of the paper attempt to answer questions formulated in the introduction and conclude with a summary of results and an assessment of future research or prospects.

### Acknowledgements

This is reserved for journal paper numbers, source of funding, and name of the project, if required. Acknowledgement of help from colleagues or professional associates is appropriate but avoid acknowledgement of routine secretarial help or family members.

### Citations and literature cited

Please go to **PubMed** (<https://www.ncbi.nlm.nih.gov/pubmed/citmatch>) and **CrossRef** (<https://apps.crossref.org/simpleTextQuery>) to check your references. If your references are not correct, ISHS will be forced to format them in the final stage of technical editing according to the PubMed and CrossRef databases.

Each reference in the 'Literature cited' section is to be cited in the text of the article. Similarly each reference in the article is to be included in the 'Literature cited' section.

Any reference not mentioned in the text just like any citation in the text not mentioned in the 'Literature cited' will be removed.

### 1. Format.

Citations to references in the text are listed chronologically surrounded by parentheses with the following format: (Peters, 2017; Jones and Smith, 2018; Brown et al., 2019a, b). Note: “et al.” is used for three or more authors; letters a, b, etc. are used if there are two authors with the same name that have published in the same year.

Citations to personal communications include the initials and surname of the person and are only to be included within the text, **not** in the Literature cited section. The date is optional. Thus: (A.B. Peters, pers. commun.) or (A.B. Peters, pers. commun., 2019).

Title **Literature cited** should be **boldface** and “sentence case”. Literature cited should only include references used in the paper. List the authors in alphabetical order, letter by letter, and in chronological order for publications of the same author(s). Do not use an issue number if the journal uses consecutive numbers for each volume. In all cases the initials follow the family name. Initials are followed by a period. If two initials are listed, do not include a space between them. Use “and” after the penultimate author. If there are more than 10 authors in a publication, only list the first 10 and include et al. thereafter. Publication year should be surrounded by parentheses, followed by a period.

References should be formatted according to **Cell journal style**. This style is available on all bibliographic management and formatting software like EndNote™, ProCite™, Papers™, Zotero™, Mendeley™ and others. Use commas and write volume and page numbers as shown in the format that follows:

#### *Journal paper:*

Bergstrand, K.-J., Asp, H., Larsson Jönsson, E.H., and Schüssler, H.K. (2015). Plant developmental consequences of lighting from above or below in the production of poinsettia. *Europ. J. Hort. Sci.* *80* (2), 51–55.

Goodrich, J.K., Waters, J.L., Poole, A.C., Sutter, J.L., Koren, O., Blekman, R., Beaumont, M., Van Treuren, W., Knight, R., Bell, J.T., et al. (2014). Human genetics shape the gut microbiome. *Cell* *159* (4), 789–799.

Guo, Y., Gao, Y., Shi, Y., Ruan, L., and Zhang, Q. (2015). New members of the *Iridaceae* family: interspecific hybridization between *Iris dichotoma* and *I. domestica*. *Acta Hort.* *1087*, 325–331.

Jossen, R., Kodde, V.J., Willems, L.A., Ligterink, W., Van der Plas, L.H., and Hilhorst, H.W. (2010). Germinator: a software package for high-throughput scoring and curve fitting of *Arabidopsis* seed germination. *Plant J.* *62* (1), 148–159.

### Book:

Ekesa, B., Johnson, V., Kennedy, G., Nabuuma, D., Van den Bergh, I., and Ocimati, W. (2017). A Community Resource Persons' Training Guide: Improving Food and Nutrition Security through Banana-based Farming Systems and Foods. *Scripta Horticulturae* 19 (International Society for Horticultural Science), pp.62.

Castilla, N. (2012). *Greenhouse Technology and Management*, 2<sup>nd</sup> edn (Wallingford, Oxfordshire, UK: CABI Publishing), pp.360.

Sansavini, S., Costa, G., Gucci, R., Inglese, P., Ramina, A., and Xiloyannis, C., eds. (2012). *Arboricoltura Generale* (Bologna, Italy: Pàtron Editore), pp.536.

### Chapter in book:

Biggs, A.R., and Stensvand, A. (2014). Apple scab. In *Compendium of Apple and Pear Diseases and Pests*, 2<sup>nd</sup> edn, T.B. Sutton, H.S. Aldwinckle, A.M. Agnello, and J.F. Walgenbach, eds. (St. Paul, MN, USA: APS Press), p.8–11.

### Chapter in conference proceedings:

Padulosi, S., and Dulloo, M.E. (2012). Towards a viable system for monitoring agrobiodiversity on farm: a proposed new approach for red listing of cultivated plant species. Paper presented at: International Conference on On Farm Conservation of Neglected and Underutilized Species (Frankfurt, Germany: Bioversity International).

### Website:

Food and Agricultural Organization. (2019). [www.fao.org](http://www.fao.org).

## 2. Abbreviations.

Abbreviate *Acta Horticulturae* as Acta Hortic. Do not abbreviate single word journals. Do not abbreviate states or provinces of countries. When in doubt do not abbreviate. Commonly used abbreviations are as follows:

Abstract	Abstr.	Magazine	Mag.
Academia	Acad.	Management	Mgmt.
Advances	Adv.	Market	Mark.
Agriculture	Agric.	Marketing	Mktg.
Agronomy	Agron.	Molecular	Mol.
American	Am.	National	Natl.
Annals	Ann.	Physiology	Physiol.
Annual	Annu.	Plantae, -arum	Plant.
Archives	Arch.	Progress	Prog.
Biochemistry	Biochem.	Publication(s)	Publ.
Biology	Biol.	Report	Rep.
Circular	Cir.	Reporter	Report.
Communication	Commun.	Research	Res.
Conference	Conf.	Review (s), Revue(s)	Rev.
Congress	Congr.	Scientia, Scientific	Sci.
Contribution	Contrib.	Series	Ser.
Culture	Cult.	Station	Stn.
Department	Dep.	Statistics, -ical	Stat.
Dissertation	Diss.	Supplement(s)	Suppl.
Economics	Econ.	Technical, -que	Tech.
Gazette	Gaz.	Technology, -ical	Technol.
Genetics	Genet.	United Kingdom	U.K.
Horticulture, -ae, -al	Hortic.	United States of America	U.S.A.
Institute	Inst.	US Department of	U.S. Dep.
International	Int.	Agriculture	Agric.
Japanese	Jpn.	University	Univ.
Journal	J.	Yearbook	Yearb.
Laboratory, -ies	Lab.	Zeitschrift	Z.
Letters	Lett.		

See <https://www.issn.org/services/online-services/access-to-the-ltwa/> for other abbreviations.



## Tables and figures

Tables and figures must be embedded in the article. Captions are provided directly above each table and below each figure. They are numbered consecutively with Arabic numbers, and aligned to the full width of the page. Thus, Table 1, Table 2, etc. and Figure 1, Figure 2, etc. If the table or figure is not original, give the source at the end of the caption, e.g. Source: Jones et al. (2019).

### 1. Tables.

Create tables using the MS Word table editor, **not** by using tab stops or spaces. Do not insert a table as a figure or an Excel file.

Use tables sparingly. Captions of tables go above the table. The size of the table should not exceed the standard page width and length, but tables may be placed portrait or landscape format. Solid lines are used in the heading and in the bottom of the table but are to be avoided in the body. Place all headings to the center of their column, except for the left column that should be aligned left. The units of the data must be indicated in parentheses in the table headings. If table footnotes are needed, use superscript letters a, b, c, etc. The sources of tables should be in the caption. Use font Arial Narrow 11 point for table heading and body and Arial Narrow 9 point for table footnotes.

Proper format for tables in *Acta Horticulturae* should include 4 parts: 1) caption, 2) masthead, 3) body, and 4) footnotes. This can best be demonstrated with the examples listed as Table 1, Table 2, Table 3 and Table 4 in the **sample article** file.

[Note: blue shading style will be applied by ISHS Secretariat staff during technical editing prior to publication].

- 1) **Caption.** The caption should be understandable without recourse to the paper itself. The caption has only the first word capitalized (except for proper names, genus names, etc.) and ends in a period. Text after the table number should be vertically aligned (see sample article). The caption may be more than a single sentence. The source of the table, if necessary to include, is indicated in the caption.
- 2) **Masthead.** In general, tables are best read up and down. Each column of the table must be explained by a masthead heading. The masthead is enclosed top and bottom by two lines extending to the each edge of the table. Horizontal lines within the masthead can be used to separate groups under a common heading. The units of each column need to be clearly indicated, e.g., No. fruit; Fruit wt. (g); Harvest index (%). Masthead headings should be vertically centered in the masthead cell.
- 3) **Body.** Avoid internal lines in the body of the table. Center values under the masthead heading. Use rounding to avoid unwarranted precision. Means may be separated by using lower case letters (5% significance) or upper case letters (1% significance). Indicate statistical tests and significance by footnotes, using superscript letters a, b, c, etc. The body of the table is enclosed in a line.
- 4) **Footnotes.** Footnotes go underneath the body of the table. Put each footnote on a separate line.

### 2. Figures.

Captions of figures go underneath the figure. Text after the figure number should be vertically aligned (see sample article).

Be sure to include clear, sharp pictures of high resolution (at least 300 dpi). Figures, graphs and drawings will all be printed in black and white, not color, in the paper version of *Acta Horticulturae*. For this purpose, make sure colored figures, graphs and drawings are clear when printed in black and white. Figures, graphs and drawings will be available in full color in the PDF version of the on-line paper. Color photographs can only be printed after a special agreement with the conveners and the ISHS Secretariat and there will be a charge to authors. **Do not use** the MS Word feature of text boxes to add captions, arrows, letters, or other text or objects to show in your figures, graphs or images because text boxes may shift around while editing the article. Instead you should embed and hard-code any text or objects directly into the image, figure, graph or picture file before inserting it in your MS Word manuscript.

## ARTICLE SUBMISSION

See the sample article for reference. ISHS recommends the use of the latest **Microsoft Word .docx file format** (instead of the old .doc format) when preparing your article. For accurate reproduction/printing of your figures, graphs or pictures in *Acta Horticulturae*, please insert any graphic object in your MS Word file in jpg or png file format in a resolution of at least 300 dpi. Typically, files of less than 300 dots per inch do not reproduce well when printed (even if they look good on your computer screen!) so please mind the resolution of your figure/graph file.