

INSTRUCTIONS TO AUTHORS

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The **Chilean Journal of Agricultural Research (formerly Agricultura Técnica)** is edited by the Institute of Agricultural Research (INIA), and is published every quarter. At the same time, it appears in electronic format in three websites: (<http://www.chileanjar.cl>; <http://www.scielo.cl>; <http://www.biolione.org.br/at/>) giving free access to the full text, for a greater international visibility of the authors and the journal.

The **Chilean Journal of Agricultural Research** publishes contributions from Chilean and foreign research institutions and universities; these contributions are anonymously peer-reviewed. The Editorial Committee and referees are all outstanding national and foreign researchers. The Editorial Board decides on the acceptance or rejection of a paper, and appeals are not accepted.

Original articles should represent a true contribution to scientific knowledge and should not be submitted simultaneously to other journals. Writing style should be clear, concise, and precise. The length must not exceed 18 pages for the RESEARCH ARTICLE and REVIEW sections, 10 pages for SCIENTIFIC NOTE, and 2 pages for BOOK REVIEW. We accept articles that have appeared in abridged form in congresses, symposia, etc., stating them as a footnote on the first page.

Manuscripts can be electronically submitted, however, we strongly suggest authors to read a printed final version in order to evaluate the format and style. Use letter size paper, 11 point Times New Roman, 1.5 spacing, 2.5 cm margins, page numbers at the bottom right-hand corner and continuous line numbers. Use Microsoft Word for text and tables and figure format is JPG, 300 dpi or maximum quality. The Journal is printed in black and white and at no cost to the contributors, except for color photographs and figures which entail an extra printing cost to the author of US\$260 per page.

Submit contributions to: Editor, Chilean Journal of Agricultural Research, Casilla 426, Chillán, Chile. E-mails: pundurra@inia.cl and/or chileanjar@inia.cl. The electronic submission of manuscripts will be accepted from www.chileanjar.cl.

MANUSCRIPT ORGANIZATION

Research article

Significant contribution to the advancement of scientific knowledge, following standard experimental designs, statistical analysis, and discussion of results supported by an up-to-date literature review, it should include the following sections:

1. Title. Title should not exceed 18 words. It should identify the subject, study objectives or major findings. Use the common name of crops, pests, and diseases, except where names are internationally unknown. Avoid abbreviations.

2. Author(s). Include name and last name of every author, affiliation as a footnote, indicating institution, faculty or experimental center, postal and e-mail address of the “Corresponding author” identified by an asterisk. Every co-author must approve the final version.

Authorship concept: According to international and ethical norms, the author has participated in the design, execution, and analysis of the experiments, as well as writing the paper, and being able to answer any questions about the study. Persons who contributed to the research, by obtaining resources, in field work, laboratory analyses, etc., can be mentioned in the Acknowledgements.

3. Abstract. The most widely-read section of an article. Maximum length: 250 words. It includes values and quantities, and not only describes results. Clearly states: the importance of the research subject, objectives, treatments, results expressed in numbers and statistical significance, and conclusions. All abbreviations are defined at first mention, although they are explained in the text; use common name of crops, diseases, pests, etc., but at the first mention, add the scientific names with authorship. Do not cite figures, tables, and references; and avoid equations.

Key words: used to build databases and content indexes; do not repeat title words.

4. Resumen. It should be the exact Spanish translation of the Abstract and key words, and vice versa; with no more than 250 words.

5. Introduction. Emphasizes the importance of the research, places it in a context, presents related literature, and gives enough information to understand the authors’ hypothesis. It ends with a paragraph stating the objectives of the research. An extensive analysis of relevant literature should be included in Results and Discussion, not in the Introduction.

6. Materials and Methods. There should be sufficient information to allow other researchers to repeat the experiment by clearly defining the experimental design. A clear description or a specific reference to all biological, analytical, and statistical procedures is required. All procedure modifications must be explained. Field experiments that are sensitive to interactions and where the crop environment cannot be rigorously controlled, such as crop production and yield component assays,

should usually be repeated for time and/or space, in order to ensure representative results.

7. Results and Discussion. Results and analyses should be clear and concise, supported by tables and figures, statistical analyses, and reports from other researchers. Results should be analyzed in the text without repeating table or figure values. Data should be presented, including some variation indexes, allowing the reader to interpret experimental results. The terms “significant” and “highly significant” are reserved for $P \leq 0.05$ and $P \leq 0.01$, which can be indicated as * or ** respectively in tables or figures. Do not indicate more than two decimal places.

The Discussion should clearly and precisely interpret results supported by statistical analyses, in terms of biological mechanisms, integrating them with those of other researchers, providing a broad base for the reader to accept or reject the tested hypothesis.

8. Conclusions. In accordance with research objectives, the conclusions should clearly state the main experimental results without using abbreviations, acronyms, or references. If the results have no implications, this fact should be mentioned.

9. Acknowledgements. This section appears before Literature Cited and allows thanking institutions, organizations, laboratories, and persons that have contributed to all or part of the research.

10. Literature Cited. Single references are shown as name-year in the text, and chronologically for various references. When there are three or more authors, cite the main author followed by the expression “*et al.*” If there is more than one reference from the same author(s) in the same year, they should be differentiated by adding a letter (a, b, c, d, etc.) to the year in both text and Literature Cited.

11. Tables. Tables should be self-explanatory without having to refer back to the text. The title must be brief and illustrative. Tables are numbered in sequence as they are mentioned in the text, and must be included at the end of the manuscript after the Acknowledgements. A footnote to the table should explain every abbreviation used, even if it was defined in the text or Abstract. Two decimals are generally used. If there is no data for an individual entry, insert a hyphen or an abbreviation, define it or explain it in a footnote (NS: non significant), using uppercase for the abbreviation and lowercase for the definition.

The style for tables and figures should be uniform, especially for units, dates, and abbreviations. Footnotes are specified with superscript numbers, the preferred order is 1) title, 2) column heading, 3) row heading, and 4) table body.

12. Figures. Graphs, photographs, diagrams, drawings, and maps, should illustrate important data, not found in the text or tables, and numbered in the order they are

cited. Titles must be brief, clear, and self-explanatory. JPG with 300 dpi must be used for figures and in black and white, avoid using color or gray tones. Use different lines or fillings in bar graphs and very well differentiated lines for curves. Color photographs must be paid for the author(s). The figures must be included at the end of the manuscript after the Acknowledgements.

These instructions are based on the Publication Handbook & Style Manual (2006), published by the American Society of Agronomy, Crop Science Society of America and the Soil Science Society of America (ASA, CSSA and SSSA) (<http://www.agronomy.org/publications/style/>); as well as instructions from the Journal of Animal Science Style and Form (reviewed 2006).

Review

This section includes papers developing a relevant topic, strongly supported by relevant and updated bibliography. They are reviewed according to the same norms as research articles.

Scientific note

These are brief presentations on various subjects, such as new cultivar reports, current research, species determination, method descriptions, etc. Title, footnotes, tables, and figures are presented according to the same norms as research article.

Book review

Brief summary of the contents of recent scientific books. Indicate name, institution, and postal address of the author of the review.

LITERATURE CITED

One indicator of research quality is cited literature and current references must not exceed 10 years from publication. Authors must correctly note full references verifying that all text references are included in Literature Cited and vice versa. References are cited in the language of the original publication, listed alphabetically, and presented according to these instructions.

Literature Cited mainly includes papers recently published in prestigious mainstream scientific journals. It can include, but restrictively books about classic methods, postgraduate theses, and proceedings of congresses or scientific events available in the bibliographic research system. Restricted circulation publications cannot be cited and should be avoided, but if necessary, must be cited in the text as “personal communication”. It is not recommended to cite magazines in a scientific paper.

List references alphabetically. For the first author, cite last name and initial of given name, and for co-authors, initial of given name followed by the last name, separating

authors with a comma. Pay attention to the use of commas and periods.

Page numbers should always be included when you cite some part of a publication. For journal and periodical publications use volume and pages; whereas for books, bulletins, or proceedings, write “p.” and then the page numbers.

Cite **scientific journal** papers by including: author(s), year, full title of article, abbreviated journal title, volume, and pages. Do not put a comma after the full or abbreviated journal name. Any abbreviated word is followed by a period. Only the first word and proper names in the article title use uppercase. Abbreviated titles must be those accepted by the journal cited, e.g., Chilean J. Agric. Res. 60:243-249. Manuscripts accepted for publication but still not published can be included in Literature Cited indicating “In press” after journal title. Cite only accepted articles.

In **books** cited, include author(s) or editor(s), year, title, translator if any, page numbers, edition number (except the first), publisher, institution, or organization, city, state, and country. For book chapters include: author(s), year, chapter title, pages, after the Latin word *In* indicate book author(s) or editor(s), full title of book, edition number (except the first), publisher, city, state, and country.

Proceedings such as congresses, symposia, workshops, etc., are cited as follows: author(s), year, title of article or chapter, pages, after the Latin word “*In*”, editor(s), event or name of publication, city, state, and country, date of the event, and publisher, city, state, and country.

Theses should be cited as follows: author, year, title, page numbers, degree, university, faculty, city, state, and country.

Electronic references should contain the same elements as printed publications, plus the uniform resource locator (URL) address, preceded by “Available at” or “Disponibile en”, and the date preceded by “Accessed” or “Leído”, according to the language of the quotation. Journals published electronically are cited in the same way as printed versions, with volume and pages, but also including the URL and the date it was accessed or read.

EXAMPLES OF REFERENCES

Journal papers

Serna, L., and F. Cuesta. 2008. Use of laccase-producing microorganisms in membrane systems for polluting agents removal: consideration and perspectives. Chilean J. Agric. Res. 68:401-411.

Aguilera, S.M., G. Borie, M. Mora, P. Peirano, and H. Zunino. 2002. Balance and distribution of sulphur in volcanic ash-derived soils in Chile. Soil Biol. Biochem 34:1355-1362.

Brown, L., D. Scholefield, E.C. Jewkes, N. Preedy, K. Wadge, and M.R. Butler. 2000. The effect of sulphur application on the efficiency of nitrogen use in two contrasting grassland soils. J. Agric. Sci. (Cambridge) 135:131-138.

Bulletins, special publications

CIREN. 2003. Descripciones de suelos, materiales y símbolos. Estudio agrológico X Región, Tomo II. Publicación N° 123. 412 p. Centro de Información de Recursos Naturales (CIREN), Santiago, Chile.

Soil Survey Staff. 1994. Keys to soil taxonomy. Agric. Handb. 436. 306 p. 6th ed. United States Department of Agriculture, Soil Conservation Service, Washington, D.C., USA.

Books

Haney, H.L., Jr., W.L. Hoover, W.C. Siegel, and J.L. Greene. 2001. Forest landowners guide to the federal income tax. Agric. Handb. 718. 157 p. US Department of Agriculture, Washington, DC, USA.

SAS Institute. 1992. STAT Guide for personal computers. 704 p. 8th ed. SAS Institute, Cary, North Carolina, USA.

Chapter in a book

Johnson, D.W., and D.E. Todd. 1998. Effects of harvesting intensity on forest productivity and soil carbon storage. p. 351-363. *In* R. Lal *et al.* (eds.) Management of carbon sequestration in soils. Advances in Soil Science. CRC Press, Boca Raton, Florida, USA.

Chapter in a proceedings volume

Reginato, G., C. Córdova, e I. Giavelli. 2005 Diagnóstico del problema de replantación en duraznero y manzano, mediante ensayos en maceta. p. 41. *In* 56° Congreso Agronómico de Chile-6° Congreso de la Sociedad Chilena de Fruticultura-2° Congreso de la Sociedad Chilena de Horticultura, Chillán. 11-14 de octubre de 2005. Sociedad Agronómica de Chile, Chillán, Chile.

Tobar, S.P., P.E. Vélez, y E.C. Montoya. 1996. Selección de aislamientos patogénicos de *Beauveria bassiana* y *Metarhizium anisopliae* por resistencia a la luz ultravioleta. p. 76. Congreso de la Sociedad Colombiana de Entomología (SOCOLEN), Cartagena, Colombia. 17-19 de julio de 1996. SOCOLEN, Cartagena, Colombia.

Thesis

Serri, H. 2003. Eficiencia de uso del nitrógeno por fertirriego en arándano empleando la técnica de dilución isotópica con ¹⁵N. Tesis Mg. Sc. Universidad de Concepción, Facultad de Agronomía, Chillán, Chile.

Electronic references

Edward, A.Y., M.A. Ewing, and C.K. Revell. 2001. Fate of serradela, medic and biserrula seeds in pods ingested by sheep. Aust. Agron. Conference-Papers. Available at

<http://me.csv.edu.au/agronomy/papers> (Accessed October 2003).

ODEPA. 1999. Estadísticas agropecuarias. Disponible en <http://www.odepa.minagri.gob.cl> (Leído 15 agosto 1999).

OTHER NORMS

Scientific names. At first mention of plants, insects, and pathogens, give the common name and the scientific name (in italics) and the authorship in brackets in the abstract and text. Afterward, use the common or scientific name, with the initial of the genus and species, but when two or more genus names share the same initial, write them out to avoid confusion. Check nomenclature in a reliable source, such as the Germplasm Resources Information Network (GRIN) database (http://www.ars-grin.gov/~sbmljw/cgi-bin/tax_search.pl).

Chemical products. At the first mention of herbicides, insecticides, fertilizers, give the technical or generic name and dosage used, include commercial name, dosage, manufacturer, city, state, and country between parentheses; thereafter, use only the technical name.

Soils. At first mention, identify soils at the series and family level including Soil Taxonomy classification of USDA.

Equipment and instruments. Equipment and instruments used in experimental work must be mentioned by their common name; with trademark, model, manufacturer city, state, and country between parentheses.

Numbers. One to nine are written out, except when they include a unit or several numbers are mentioned. Example: “six irrigations”, “6, 9, and 12 irrigations”, “8 kg”). Use a zero before the decimal point.

To separate numbers in intervals of one or more years, use the word “to”; and a hyphen for growing seasons (e.g., Period 2002 to 2005; 1999-2000, 2000-2001 growing seasons).

Measurement units. Results should be expressed in International System of Units (SI); if other units are used, they should be in parentheses after the SI unit. It is suggested to use an exponential form instead of a slash, e.g., kg ha⁻¹.

Abbreviations and symbols save space and time, but excessive use impedes understanding the text. Some widely-used and well-known abbreviations such as SI units or chemical elements need not be defined. All abbreviations should be written out at their first mention, in abstracts, texts, tables, and figures; afterwards use the abbreviation consistently. Avoid redefining widely-known

variables, such as N for nitrogen, or DM for dry matter and define only abbreviations specific to the article.

Use subscripts for modifications, reserving superscripts for power or table and figure footnotes, e.g., to name variables such as leaf area, A_{leaf} instead of ALEAF.

Use the 24-hour **time** system, with two digits for hours and two digits for minutes (e.g., 14:30 h instead of 2:30 pm).

Avoid redundancy when indicating the statistical significance of differences (do not use “significance” in addition to probability). e.g., write “stearic acid concentration was higher (P < 0.05) in... than...”

Do not start a sentence with a number; spell it out and add the SI unit. Abbreviate SI units preceded by numbers (e.g., 7 kg, 32 d), except at the beginning of sentences.

Ordinal numbers from first to ninth are spelled out in the text, but can be abbreviated in tables. Abbreviate higher ordinal numbers (e.g., 12th, 32nd).

Do not use hyphens to indicate inclusion (use 12 to 14 mg or week 3 and 4).

Place a space before and after most mathematical operators (the main exception is the solid sign for division). Plus and minus signs have no space between sign and number when used to indicate positive or negative.

Formulae for simple compounds (NaCl) are acceptable. The first letter of trademarks should be uppercased, without TM symbols.

Citing references in the text. When a reference has one or two authors, cite the last name(s) and the year. When the same author(s) has two references in different years; write them in chronological order (e.g., Huntington *et al.*, 1988; 1990). When the reference has three or more authors, use the Latin expression “*et al.*” and include the year. For two or more articles using the same within-text citation, add a distinguishing letter (a, b, c, etc.) to the year in both text and Literature Cited. When two or more references are included as a group in the text, they should be in chronological order. Several references in the same year are in alphabetical order.

Unpublished data, personal communications, and reports not available to the public in the bibliographic system are not recommended for inclusion. Cite it as “Personal communication” between parentheses. If unpublished data belongs to the author, indicate it as “unpublished data”.

Within-text citation of statistical software must include the reference between parentheses and in Literature Cited.

See Journal website at <http://www.chileanjar.cl> for more extensive instructions.