

Spanish Journal of Agricultural Research

Instructions for authors

Paper submission

The SJAR publishes research articles, reviews and short communications. Submission of a manuscript implies:

- that the work described has not been published previously in any language (except in the form of an abstract or as part of a thesis);
- that it is not under consideration for publication elsewhere;
- that its publication has been approved by all coauthors, if any, as well as by the responsible authorities at the institute where the work has been carried out;
- that, if and when the manuscript is accepted for publication, the authors agree to automatic transfer of the copyright to the publisher;
- that the manuscript will not be published elsewhere in any language without the consent of the copyright holders; and
- that written permission of the copyright holder is obtained by the authors for the materials used from other copyrighted sources.

Manuscripts should be written in Microsoft Word 2003, DIN-A4 pages, letter «Times New Roman» size 12, with 1.5 spacing, 25 mm margins on each side, page and line numbers. They should be no longer than 30 pages, tables/figures included.

Manuscripts should be written in concise, legible English, which must be in the final form after careful review by the author to eliminate all possible mistakes in content and/or in grammar.

Manuscripts will be directly emailed to sjar@inia.es. To avoid postal delays, all correspondence is by e-mail. A completed manuscript submission is confirmed by e-mail.

There are no handling or page charges.

Papers will be assigned to a member of the Editorial Board or additional *ad hoc* referees where appropriate.

Potential reviewers. Authors are invited to nominate a list of four potential expert reviewers, providing full contact address and e-mail details. These reviewers must not have a conflict of interest involving the authors or paper, and the editorial board has the right to not use any reviewers suggested by authors.

Papers reporting sequence data. Manuscripts containing primary nucleotide sequence data must be accompanied by (an) accession number(s) from an internationally available nucleotide database.

Papers reporting software. Software should be available for a full two years after publication of the manuscript.

Style

For help in the correct use of symbols, format and style consult the «The CSE Manual for authors, editors, and publishers (<http://www.councilscienceeditors.org/publications/style.cfm>)».

Use SI units in accord with the recommendations of the International Organisation for Standardisation (ISO). Use the form g kg⁻¹ better than g/kg, and L, mL and µL for capacity or volume units. When units are not preceded by a number the term should be written in full without using the symbol (e.g.: «metres», «23 m»). Express decimals using a full stop (e.g. 3.14) and thousands with commas (e.g. 21,314). Spell out numbers one through nine, except when used with units. For decimal quantities <1, place a zero before the decimal point. Report dates with the day first, then the month, and the year last.

Define all abbreviations at first mention in the abstract or text [e.g.: «polymerase chain reaction (PCR)»] and again in the tables and figures. Then use the abbreviation throughout the entire article, except at the beginning of a sentence.

Style must be impersonal: avoid to use “we did...”, “our results...”.

Genus is spelled out completely the first time an organism is mentioned in the abstract, the text, and in every figure and table. If you are discussing several different species within a genus, so that the genus is the same for each species mentioned, spell the genus + species out in full the first time each new species is mentioned, even if it seems redundant. After the first time, use the genus abbreviation with a period. Genus and species are always italicized. Do not italicize “spp.” or “sensu stricto” or “sensu lato” that may follow genus and species. Genus is italicized when it appears alone (i.e., *Phytophthora* infections).

The Latin binomial or trinomial and authority must be shown for all plants, insects and pathogens, at first listing (e.g. *Solanum lycopersicum* L.). Both the common and chemical name of pesticides must be given when first mentioned. For

example: "Atrazine (2-chloro-4-ethylamino-6-isopropylamino-1,3,5-triazine) was most persistent..." Identify soils at the series and family level, or at least the Great Group, at first mention.

The first time that botanical cultivars are mentioned these should be marked in single inverted quotation marks or the term *cultivar* or the abbreviation *cv.* should be used: (e.g.: 'Royesta' tomato or *Lycopersicum esculentum* Mill *cv.* Royesta). After, this can be referred to as Royesta tomato or Royesta cultivar.

Animals (breed, sex, age, body weight), diets, surgical techniques, measurements and statistical models should be written in a clear and detailed way.

Manuscript preparation

The following layout is recommended:

1. First page. The first page must include:

- Title of the work. This must be clear, short and concise, avoiding terms such as «Studies about...», «Observations...», «Contribution to...» The title should preferably not exceed 25 words.
- Name(s) of author(s), being the corresponding author marked with an asterisk (*).
- Name and full postal address of the institution(s).
- E-mail address and telephone number of the corresponding author.
- Number of figures and tables.
- Due to an agreement between SJAR and these societies, authors who are members of *Sociedad Española de Agroingeniería*, *Sociedad Española de Ciencias Hortícolas* or *Asociación Española de Ingeniería de Proyectos* must indicate the affiliation.
- The short title of the work, used in the heading of the pages of the printed article, should not exceed 90 characters (letters plus spaces).
- Topic. As the journal is multidisplinar, authors are invited to select the principal topic of the submitted paper from the following: agricultural chemistry - agricultural economics - agricultural engineering - animal health and welfare - animal nutrition - animal production - animal reproduction - apiculture - aquaculture - biodiversity and genetic resources - biotechnology - breeding and genetics - environment and ecology - food science and technology - forages and pastures - plant health and protection of crops - plant physiology - plant production - postharvest science and technology - rural development - soils, fertilization, irrigation and watering - statistics.

2. Text of the article. This should contain the following sections:

- **Abstract.** With a maximum of 250 words, must be specific, not containing references. It will include the objectives, methods, results, and main conclusions. Crops or organisms involved must be identified, as well as soil type, chemicals, or other details important to interpretation of the results.
- **Additional key words.** A maximum of seven. They should not repeat words appearing in the title.
- **Abstract in Spanish.** This will include translation of the title and the key words.
- **Abbreviations used.** Include a list of all nonstandard abbreviations used in the paper and their meaning.
- **Introduction.** This should contain sufficient information about the background to the work so that this can be placed in context with other research, for the reader to understand the objectives proposed and evaluation of the results. It should not be too generalised or too detailed. It should conclude with one or two sentences that define the objectives and the essence of the article.
- **Material and methods.** Sufficient information will be given to enable the experiments to be repeated. For routine methods, a brief description and a literature reference will be sufficient. New methods must be described in detail and, in the case of little used chemical products or equipment, the manufacturer's name and address should be given.
- **Results.** In general, these should not include literature references but only the results of the experiments. Interpretations of the experimental data should be reserved for the Discussion section. The explanations given in the figure and table captions should not be repeated in the text. Avoid to join Results and Discussion in a single section.
- **Discussion.** This should not be limited to describing the experimental results and drawing conclusions. It should also be constructive, interpretative, analytical, and establish an association between the results obtained and other published works. It can describe conflicting opinions and results of other authors and indicate the value of the results for future works.
- **Acknowledgements.** Acknowledgements should be made to individuals or institutions that have provided technical support for the work and the sources of funding should also be stipulated.
- **References.** The literature references will be cited in alphabetic order of the authors. Articles by the same author should be given in chronological order and if more than one of the articles has been published in the same year, after the year a letter will be added by which the reference can be identified (for example, 1985a,b).

When references are cited in the text, in parentheses the authors surname will be given followed by a coma and the year of publication, for example: «... (Denamour, 2003)...». If there are two authors, the surnames will be followed by «and», for example «(Robertson and Castell, 2007)...». If there are more than three authors, include the surname of the first author followed by *et al.* and a comma, for example «... (Leffort *et al.*, 1999b)...». If in the text reference is made to the author of the cited work, his/her surname will be given, followed only by the year the work was published. For example: «According to the works of Denamour (2003), Leffort *et al.* (1999a,b)...».

Article and book dois (digital object identifier), if available, must be included. CrossRef, e.g., currently provides three ways for you to locate a doi at <http://www.crossref.org/guestquery>.

Examples are given below of literature references.

— **Appendix.** If an appendix is needed, it comes after the references.

— **Figures and Tables.** These will be numbered independently with Arabic numerals and should be self-explanatory. Tables and figures should be submitted on separate sheets, one per page, following the References section.

The tables will be headed by a number and title. Explanatory notes that facilitate their interpretation will be included at the foot of the tables. The Word table feature should be used. That is, the table created should have defined cells. Tables must not be created by using the space bar and/or tab keys.

Figures can correspond to diagrams or photographs. The figure number and legend will be given at the foot of the figure. Send the photographs separately as an image file (jpg, tiff or similar) with at least 300 dpi in the finished size. Only under well justified circumstances colour photographs will be admitted. Figures prepared with program Excel or similar shall be sent separately in their source program (*.xls file), with their source of data.

The figures and tables must be very high quality and must, therefore, be received in a suitable form and condition to be reproduced.

Short communications

These should be no longer than 10 DIN-A4 pages, including a maximum of three tables/figures. Short communications must report completed work, not preliminary findings. They will have an abstract and literature references but the main text will not be divided into sections. The methods will be described briefly.

Reviews

The objective of these is to give an overall view of an issue of great interest or topicality. The reviews will be written after invitation to do so by the Editorial Board.

On the whole, they will follow the same instructions applicable for normal length articles, presenting a front page, abstracts in English and Spanish, key words, tables and figures with the format of the Journal. The Introduction will be based on a general coverage of the issue, followed by a critical assessment of the most important references. Reviews will also be submitted to peer review process.

Correction of proofs

Proofs are e-mailed as a PDF. The PDF should be printed and corrections marked on the paper copy. The corrected proof should be sent to the Editorial Office within **3 days** [by mail or by fax (+34-91-3572293 or +34 91-3478765), or minor corrections may be communicated by e-mail (sjar@inia.es)]. If corrections are not received in due time, the editors reserve the right to perform the corrections that consider most appropriate.

Examples of literature references

Journal articles

Standard article

FLOWERS W.L., ESBENSHADE K.L., 2003. Optimizing management of natural and artificial matings in swine. *J Reprod Fert Supp* 48, 217-228. doi: 10.1038/85664.

Author unknown

ANONYMOUS, 2002. The extraction of soil water by the suction-cup method: a review. *J Soil Sci* 42, 83-93.

Chapters of books

DOREFLING R., TIETZ D., 1993. Methods for the detection and estimation of abscisic acid and related compounds. In: *Abscisic acid* (Addicott F.T., ed). Ed Mundi-Prensa, Madrid, Spain. pp. 23-77.

Books*Individuals as authors*

MILTHORPE F.L., MOORBY J., 1999. An introduction to crop physiology. CAB Intnl, Wallingford, UK. 244 pp.

Editor(s) as author(s)

MADSEN E. (ed), 2007. Effect of CO₂ concentration on morphological, histological and cytological and physiological processes in tomato plants. State Seed Testing Station, Denmark. 246 pp.

Institutional author

MAPA, 1986. Métodos oficiales de análisis. Servicio de Publicaciones. Ministerio de Agricultura, Pesca y Alimentación, Madrid, Spain. 662 pp. [In Spanish].

Doctoral thesis

FLORES M., 2000. Las técnicas biomoleculares en el diagnóstico y tipificación de los patógenos vegetales. Doctoral thesis. Universidad Politécnica, Valencia. [In Spanish].

Master thesis

FERNÁNDEZ J.L., 1998b. Estudio agroecológico del cultivo del maíz y sus potencialidades en la sustentabilidad de pequeñas fincas campesinas en la provincia Granma, Cuba. Master's thesis. International University of Andalucía, Spain. 143 pp. [In Spanish].

Conference proceedings

SANZ P., AYERRA J.C., CALVO F., 2000. Nonpoint sources of water contamination and their impacts on sustainability. Proc. V Intl. Rangeland Congress. Rabat, Morocco, Sept 13-16. pp. 187-192.

Electronic sources

Finding the information needed to reference an electronic source can be difficult. The main thing to remember is to describe the item as clearly and as fully as you possibly can and to be consistent in the way you cite/reference them. The aim is to give the information someone else would need to locate the item. The following should be provided as a minimum when referencing electronic sources:

- *Author's name and initials, or responsible body (if there is more than one, list them).*
- *Year of publication.*
- *Title of the document being cited. The title of a web page will normally be the main heading on the page, or in the blue strip at the top of the screen.*
- *The title is followed by the electronic medium in square brackets e.g. [online] or [CD-ROM].*
- *Place of publication - URL, ftp address, etc – This is the information necessary to locate the document.*
- *Date accessed and date of last update for web pages.*

An example:

GILBERT D.G., 2000. SeqApp, a biological sequence editor and analysis program [on line]. Available in <http://www.iubio.bio.indiana.edu/molbio/seqapp> [3 May, 2002].

Work documents

COMITÉ DE GESTIÓN DE CÍTRICOS, 2001. Report 2000/2001. Work document for internal use.

MIRAVETE E.J., 1995. Aplicación de los modelos de elección discreta al análisis de la adopción de innovaciones tecnológicas. Instituto Valenciano de Investigaciones Económicas. Valencia, Spain. EC work document 90-04. [In Spanish].

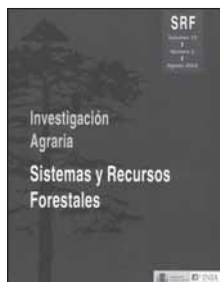
Legal documents

BOE, 1996. Royal decree 2210/1995, of 13 November, that modifies the organic structure of the Health and Safety Board. Boletín Oficial del Estado No. 21, 24/1/1996. [In Spanish].

OJ, 1990. Directive 90/429/CEE of the Council of June 26. Official Journal of the European Union L 224 18/08/1990. p. 62.

Other publications of INIA

Scientific journals



Investigación Agraria: Sistemas y Recursos Forestales publishes peer-reviewed articles, reviews and short communications dealing with all aspects about the existence and management of forestry systems and resources, and the development and transformation of their products. Three annual numbers [in Spanish and English].

Divulgative journal



Investigación, Innovación, Ciencia y Tecnología. This journal was created in the year 2000 with the aim of building a bridge among producers, industries and Research and Development (R+D) organisms in the fields of agriculture, food and environment [in Spanish].

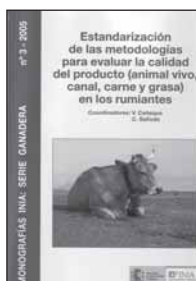
Monographs



Serie Agrícola



Serie Ganadera



Serie Forestal



Peer-reviewed specific studies on food, environment, livestock, agriculture, forestry and related fields, in which an issue is covered in depth bearing in mind all past and current knowledge, and including interesting new contributions [in Spanish].

Other publications



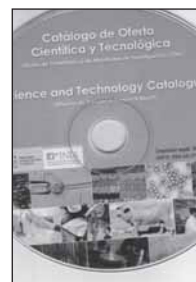
Project outcomes



Specific information on definition, functions, structure, resources and activities of INIA



Articles presented to Scientific Meetings



Science and Technology Catalogue [CD]
[in Spanish and English]



Coeditions INIA/ Mundi-Prensa, S. A.

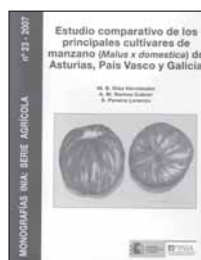


**Monografías INIA. Serie Agrícola
Nº 22, 2006**
Balance de nitrógeno en sistemas de cultivo de cereal de invierno y de maíz en varias regiones españolas

M. Quemada (Ed.)
142 p.
ISBN: 84-7498-516-1
Precio: 17 €

La estrecha relación existente en muchos casos entre la disponibilidad de nitrógeno (N)

y el rendimiento de los cultivos ha ocasionado en muchas zonas agrícolas problemas de contaminación relacionados con la sobrefertilización. Tanto las emisiones gaseosas como la contaminación de agua por nitratos son características de sistemas de cultivo en los que los insumos de N superan la cantidad de N absorbida por el cultivo. El objetivo de esta monografía es presentar los balances de N realizados en cultivos de cereal de invierno y de maíz en varias regiones españolas. Se define la metodología para calcular el balance de N en sistemas de cultivo, y se aplica a ensayos de campo con diferentes niveles de fertilización mineral, orgánica o cultivo precedente. Así mismo se presentan las eficiencias de uso de N y las curvas de respuesta para los distintos ensayos. Los resultados muestran cómo la aplicación del balance es el primer paso para diseñar estrategias de manejo que puedan lograr mantener rendimientos sostenibles y minimizar el impacto ambiental. La utilización de modelos de respuesta segmentados y la consideración del N aportado por el suelo permitió, en general, optimizar el uso del N en el sistema.



**Monografías INIA. Serie Agrícola
Nº 23, 2007**
Estudio comparativo de los principales cultivares de manzano (*Malus x domestica*) de Asturias, País Vasco y Galicia

M.B. Díaz Hernández,
A.M. Ramos Cabrer,
S. Pereira Lorenzo
114 p.
ISBN: 978-84-7498-518-4
Precio: 20 €

El Banco de Germoplasma del Centro de Investigaciones Agrarias de Mabegondo (CIAM), Xunta de Galicia, se estableció entre los años 1978 y 1981 con 408 accesiones de manzano. Entre los años 1992 y 2000, se realizó su caracterización morfológica e isoenzimática con financiación del INIA y la Xunta de Galicia. Se detectaron 55 repeticiones que fueron eliminadas y se preseleccionaron 53 accesiones con características adecuadas para la producción. En esta monografía se compararon estas preselecciones con los cultivares más relevantes de la Cornisa Cantábrica, utilizando técnicas de caracterización morfológica (45 características) y marcadores moleculares (10 microsatélites). Se estudiaron 140 accesiones (51 procedentes de Asturias, 9 del País Vasco, 54 de Galicia, que incluyen las 53 preselecciones del trabajo anterior, y 26 variedades comerciales). De las accesiones genéticamente diferentes se presentan 36 fichas varietales, correspondiendo 28 a Asturias, 7 al País Vasco y 1 a Galicia (se excluyeron aquellas publicadas previamente). Estas accesiones se conservarán en el Banco de Germoplasma del CIAM. La caracterización precisa por microsatélites, y unas fichas varietales detalladas, pueden servir de referencia para la racionalización de los recursos genéticos de manzano en España. Se está estableciendo una «core collection», formada por 31 accesiones que contienen toda la diversidad genética y morfológica encontrada en este estudio, que será de interés para futuros programas de mejora.



**Monografías INIA. Serie Agrícola
Nº 24, 2008**
Descripción de 35 nuevas variedades de níspero japonés del Banco de Germoplasma del IVIA

J. Martínez-Calvo, M. L. Badenes,
G. Llácer
78 p.
ISBN: 978-84-4-7498-522-1
Precio: 24 €

Esta monografía es continuación de la publicada en el año 2006 con la descripción

de 26 variedades de níspero japonés (*Eriobotrya japonica* Lindl) del Banco de Germoplasma del IVIA. Previamente, en el año 2000 se había publicado la descripción de las primeras 34 variedades del Banco. En la presente publicación se presentan las fichas varietales de 35 nuevas accesiones de las que se tienen datos fenológicos, pomológicos y agronómicos de al menos 3 años. En cada ficha varietal se ha incluido una selección de características referentes a vegetación, hojas, flores, frutos y semillas. Asimismo, se ha incluido una valoración general de la variedad en la que se han tenido en cuenta, además, factores agronómicos y de adaptabilidad al medio. En todos los casos, el cv. 'Algerie', el más importante en España, se ha tomado como variedad de referencia. La colección ha mostrado diferencias notables entre accesiones, no sólo en cuanto a fechas de floración y maduración, sino en características del fruto como forma, tamaño, color de la piel y de la pulpa, sabor y facilidad de pelado.



**Monografías INIA. Serie Agrícola
Nº 25, 2008**
**Spanish Barley Core Collection
[In English]**

José Manuel Lasa (Coord.)
224 p.
ISBN: 978-84-7498-526-9
Precio: 30 €

Spanish barleys constitute a germplasm group of particular interest for breeding purposes, as Spain has been proposed as a possible centre of origin of the crop. The Spanish National Phylogenetic Resources Centre (CRF) holds a collection of more than 2000 barley accessions, mostly landraces collected in Spain prior to extensive introduction of modern varieties. From these materials a Core Collection, representative of ancient barley genotypes grown in Spain, was created. The Spanish Barley Core Collection (SBCC) was constituted by three groups of germplasm: successful old varieties (16); and 2-row (11) and 6-row (148) entries from the CRF, for a total of 175 entries. Entries were selected by stratified sampling in agro-ecological uniform zones of barley cultivation in Spain. Classification of agro-ecological regions for barley was based on historical yield records for Spanish provinces. Once the SBCC was constituted, a comprehensive process of evaluation went on for many traits. This task was accomplished by three Spanish Institutions (CSIC, IRTA, ITACyL) in collaboration with two German teams (JKI, LfL). This evaluation has shown a genetic diversity clearly distinctive from other European germplasms, and due to its good adaptation to Mediterranean conditions it is currently been used in the Spanish National Barley Breeding Program. This book summarizes the effort of a large number of scientists during ten years, constituting and characterizing the SBCC, and offers a good representation of the Spanish genetic diversity in barley, thoroughly characterized, providing a material of high interest for scientists and plant breeders.

SPANISH JOURNAL OF AGRICULTURAL RESEARCH

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- Spain: 125 €
- European Union: 140 €
- Rest of the world: 190 €.

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