

Author guidelines

Aims and scope

The *Irish Journal of Agricultural and Food Research* is a peer reviewed open access scientific journal published by Teagasc (Agriculture and Food Development Authority, Ireland). Manuscripts on any aspect of research of direct relevance to Irish agriculture and food production, including plant and animal sciences, food science, agri-environmental science, soils, engineering, buildings, economics and sociology, will be considered for publication. The work must demonstrate novelty and relevance to the field of research.

Papers published or offered for publication elsewhere will not be considered, but the publication of an abstract does not preclude the publication of the full paper in this journal.

Types of papers

The IJAFR publishes a number of types of papers:

Original research papers - These are original articles reporting cutting-edge research of international relevance that has clear implications for the agri-food sector. The IJAFR recognises the importance of original and high-quality research that is of particular relevance to Ireland, and encourages papers that report such research. Papers should not exceed 8,000 words (introduction, materials and methods, results and discussion, but excluding references).

Research notes - these are original articles reporting original research from limited investigations which will not be included in a full length paper. Research notes should not exceed 2,500 words (including introduction, materials and methods, results and discussion, tables and illustrations, but excluding references).

Review papers - Relevant and appropriate critical review papers will be considered. It is recommended to contact the Editor in advance of preparing a review, giving the author(s) name(s), and an outline and justification for the review. These should be no longer than 10,000 to 12,000 words.

Perspective papers – Contributions up to 8,000 words in length that present research based work that informs policy. Submissions are welcomed on a wide range of subjects relating to policy directions, decision-making and implementation of policies relevant to the agri-food sector. We welcome papers that develop dialogue between the research community and, for example, decision-makers in agri-business, government and NGOs. Contributors should avoid articles that focus on methodology. The focus of these articles should be on informing and improving policy, rather than simply critiques of policy decisions, and any opinions should be supported by a clear evidence base. Articles should be set within a broad policy context and relate to the wider issues around constrained decision making. Authors are advised to discuss the proposed topic with the editor in advance of submitting a perspective paper.

Special issues – Occasionally special issues are published which have a central theme. The senior editor should be approached at least six months before an event to allow time for the peer review process.

Upon submission, all manuscripts will be processed through plagiarism detection software in which the manuscript will be screened against previously published literature. Plagiarised manuscripts will be rejected immediately. After plagiarism screening all submissions will be viewed by the senior editor, suitable submissions will be sent to a subject editor who has the responsibility of having it reviewed by peers. This review process is confidential. All papers are subject to single-blind peer review.

Submission of manuscripts

Submission of a manuscript is understood to imply that the article is original and is not being considered for publication elsewhere. All submissions must be accompanied by a cover letter to the editor, justifying why their paper should be considered for publication. The main body of the text is submitted in a Microsoft Word document. Tables and Figures should be submitted as separate documents.

All submissions to the IJAfr must be made through our online submission system. Our online submission system (<http://www.editorialmanager.com/ijafr/>) can be accessed through the journal website (<http://www.degruyter.com/view/j/ijafr>).

The journal does not have article processing charges (APCs) nor article submission charges.

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Conflicts of interest

All authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations within three years of beginning the submitted work that could inappropriately influence, or be perceived to influence, their work.

For more information see DeGruyter Open's publication ethics statement: http://www.degruyter.com/staticfiles/pdfs/AUTH_140117_De%20Gruyter_Publication_Ethics_and_Publication_Malpractice_State.pdf

See also DeGruyter Open's editorial policy: <http://degruyteropen.com/you/journal-author/editorial-policies/other-stm/>

Preparation of manuscripts

The responsibility for the preparation of a manuscript in a form suitable for publication lies with the authors. Papers must be in English and it is the responsibility of the authors to ensure that the English is of a standard which is suitable for publication. Authors should consult the most recent issue of the journal in order to make themselves familiar with the layout and style required.

Both full research papers and notes should follow the following format:

- Title, author(s) name(s), abstract, key words
- Introduction
- Materials and methods
- Results
- Discussion
- Acknowledgements
- References
- Tables
- Figures
- Photographs
- Captions for figures and photographs

Title, authors' names etc.: These should be on a separate page. The title should be concise but provide sufficient information to allow the reader to judge the relevance of the paper to their interests. The short title (that runs on page headings) gives a short overview of the paper and should not include more than 50 characters (including spaces).

Abstract: This should not exceed 250 words for papers and 150 words for notes. It should concisely outline the purpose of the work, the methods and the most important results and conclusions. It should be intelligible without reference to the main paper.

Keywords: Authors should include up to a maximum of 5 keywords or two- to three-word phrases, given in alphabetical order. These should be placed after the abstract.

Introduction: This should succinctly introduce the topic and cite previously published material which is of relevance to the objectives of the work. Long unfocussed introductions should be avoided. The final paragraph of the introduction should state the objectives of the work described in the paper.

Materials and methods: This section should describe in detail the materials and methods used or refer to a previously published paper where the materials and methods were described in detail. Methods of chemical analysis should be stated and referenced and it is essential that the experimental design and statistical analysis are described in detail.

Statistical Analysis

The experimental design used in the study should be stated, e.g., randomised block, Latin square, split plot, etc. and the statistical model used to analyse the data should be described. It is not adequate to simply state the computer software used to analyse the numerical data. The test used to compare differences between treatments for statistical significance should be stated. In the text the level of significance can be stated using the conventional approach, i.e., at the 5% level ($P < 0.05$), the 1% level ($P < 0.01$) and the 0.1% level ($P < 0.001$) or the actual P value can be given.

Results: These should be presented in a concise way keeping the numbers of tables and figures to a minimum. Data should not be presented in both tabular and graphical form. It is not necessary to state the numerical data in the text of the results, where it is already given in the tables.

Discussion: The discussion should be focused but should adequately relate the results to those of other similar studies previously published. Results should not be restated in the discussion.

Acknowledgements: The assistance of colleagues and funders should be concisely acknowledged.

Tables and Figures

Tables and Figures should be submitted as separate documents. Graphs should be submitted as Excel or graphic files (JPG, TIF or GIF) and Tables should be submitted as separate Word documents.

Tables: Each table should be presented on a separate page (see example). The title should be brief and self-explanatory. Vertical lines should not be used to separate columns. Group similar items in the left column (as shown in the example table). Horizontal lines are only used for column headings. Tables should be numbered according to their sequence in the text. Numerous small tables or unduly large and complex tables should not be used. Reversing columns and rows may reduce the dimensions of a table. Avoid the overuse of significant digits which may suggest false or unwarranted precision. Use zeros to the left of decimals in numbers less than 1. The level of experimental error and the statistical significance of results should be given. Levels of statistical significance should be indicated as follows without explanation: * = $P < 0.05$, ** = $P < 0.01$, *** = $P < 0.001$. Alternatively, the actual P-value can be given. Where there is no significant difference leave space blank. Where no data is available leave blank. Note that only the first word of each column is capitalised. Footnotes to tables should be numerals.

Tables should be self-explanatory and easy to comprehend without reference to the text. The details of the methods used in the experiments should preferably be described in the legend instead of in the text. The same data should not be presented in both table and graph form or repeated in the text. Where a series of Tables have the same footnotes, these can be referred back to the previous tables (e.g., See footnote(s) to Table 1).

Example table

Table 4: Effect of supplementary concentrate feeding level with grass silage on live weight and carcass traits in Experiment 1

| | Concentrate level | | s.e. | Significance |
|--------------------------------|-------------------|------|------|--------------|
| | Low | High | | |
| Live weight (kg) | | | | |
| Initial weight | 330 | 328 | 2.4 | |
| Turnout to pasture | 393 | 416 | 4.0 | *** |
| Housing | 552 | 556 | 6.1 | |
| Slaughter | 624 | 621 | 6.6 | |
| Live weight gain (kg) | | | | |
| Indoor winter period | 63 | 87 | 3.3 | *** |
| Grazing season | 158 | 141 | 5.1 | * |
| Indoor winter + grazing season | 221 | 228 | 5.8 | |
| Housing to slaughter | 73 | 67 | 4.0 | |
| Total to slaughter | 294 | 295 | 6.3 | |
| Live weight gain (g/day) | | | | |
| Indoor winter period | 570 | 794 | 29.6 | *** |
| Grazing season | 897 | 790 | 32.2 | * |
| Carcass traits | | | | |
| Carcass weight (kg) | 351 | 351 | 4.3 | |
| Kill-out proportion (g/kg) | 562 | 566 | 3.5 | |
| Carcass conformation 1 | 3.6 | 3.5 | 0.09 | |
| Carcass fat 2 | 4.2 | 4.2 | 0.09 | |

¹Scale 1 to 5 (best conformation).

²Scale 1 to 5 (fattest).

Figures: Figures should be presented with captions on separate pages. Avoid use of heavy-weight lines. There should be consistent, scale, boldness and font. Avoid the use of unnecessary background or gridlines or 3D display. Avoid 'busy' figures and rescale if there is a lot of white space. Solid symbols should be used before open ones and continuous lines should be used before dotted or dashed ones. All titles and legend text should be legible when the figure is reduced in size. A specimen figure indicating desirable symbols and thickness of lines is shown in the example.

Begin each legend with a title (do not include legend(s) within the Figure) and include sufficient description so that the figure is understandable without reading the text of the manuscript. Information given in legends should not be repeated in the text.

The x and y axes must be labelled and units must be given in parentheses. Do not repeat a table using a figure.

Figures should be numbered according to their sequence in the text. Each figure has to be referred to in the text.

Example Figure

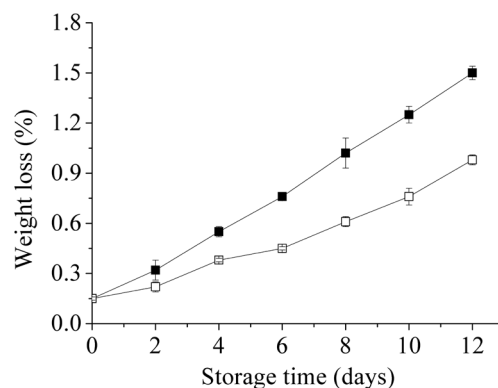


Figure 3. Changes in weight loss of coated (□) and uncoated (■) fresh-cut carrots during storage. Each value is the mean of two duplicates (each duplicate with triplicate measurements) and error bars represent standard errors of means.

Graphic files: Photos, drawings and diagrams can be submitted in any of the following formats: EPS, BMP, JPG, TIFF, GIF.

IJAfr house style

Follow internationally accepted rules and conventions: use the international system of units (SI). If other units are mentioned, please give their equivalent in SI.

Symbols and Abbreviations: Abbreviations should be explained on first use. The following are the more common symbols and abbreviations which may be used without prior explanation:

| | | | |
|------------------------------|----------|----------------------------|----------|
| smaller than | < | gravitational force | <i>g</i> |
| larger than | > | hour(s) | h |
| smaller than or equal to | ≤ | International Unit(s) | IU |
| larger than or equal to | ≥ | Joule(s) | J |
| equal to | = | kilogramme(s) | kg |
| standard deviation | s.d. | litre(s) | L |
| standard error of difference | s.e.d. | metre(s) | m |
| standard error of mean | s.e. | micron(s) | μm |
| least significant difference | LSD | minute | min |
| variance ratio | F | month | mo |
| degrees of freedom | d.f. | millilitre(s) | mL |
| coefficient of variation | CV | millimolar (concentration) | mM |
| correlation coefficient | <i>r</i> | millimole (mass) | mmol |
| Celsius (with number) | °C | parts per billion | ppb |
| Centimetre(s) | cm | parts per million | ppm |
| colony forming units | cfu | Pascal | Pa |
| day | d | Probability | <i>P</i> |
| Dry matter | DM | revolutions per minute | rpm |
| etcetera | etc. | second | s |
| equivalents | eq | tonne | t |
| for example | e.g. | week | wk |
| gram(s) | g | year | yr |

Use of slant line, per

Use the slant line (/) only when it means “per” with numbered units of measure or “divided by” in equations. Use only one slant line in a given expression (e.g., 6 kg/cow per day).

Elements and compounds may be represented by their chemical symbols.

Italics: Use Italics for species and genus and book or report titles.

Nomenclature of organisms: Names of organisms are given in italics. They should be given in full at first mention e.g., *Escherichia coli* and abbreviated thereafter, *E. coli*. If only the genus is referred to, it is italicised and capitalised e.g., *Brucella*. When used adjectively, do not italicise or capitalise, e.g., staphylococcus toxin.

Capitalisation: Proper nouns, breed and variety names and trademarks or registered names are capitalised.

Numerals in text: Spell out numbers one through nine. Use numerals for numbers 10 or larger. However, when describing different treatments use numerals, e.g., Treatment 1 vs. Treatment 2.

When writing numbers use a comma for numbers over one thousand, i.e., 1,000.23 not 1 000.23 or 1. 000.23

Percent: Use per cent symbol (%) and percentage.

Dates: 2 October 2015. Don't abbreviate days or months in text. Days/months can be abbreviated in Tables using three letter abbreviations.

Time: Use 24 hour clock, e.g., 21:30. However, express units of time in hours and minutes, e.g., 4h 30 min.

Special cases: Live weight (without hyphen) but when qualified by a verb hyphenate: live-weight gain.

Disclaimer

The editors have used their best endeavours to ensure that the results and conclusions are consistent with the data but no responsibility is accepted for fraud or inaccuracy on the part of contributors. The use of trade names in this publication does not imply endorsement by the publisher nor criticism of similar products not mentioned. The publisher accepts no responsibility for any loss or damage arising from any use of methods, products, instructions or ideas contained in the material herein.

Welfare and publication ethics

Researchers must have proper regard for conservation ethics and animal welfare. Any possible adverse consequences of the work for ecosystems, populations, individual organisms or local human communities must be weighed against the possible gains in knowledge and its practical applications. Attention is drawn to the 'Guidelines for the treatment of animals in behavioural research and teaching' published in the journal *Animal Behaviour*, 2006, **71**, 245-253 and available at http://www.elsevier.com/framework_products/promis_misc/ASAB2006.pdf.

Social research should follow the highest standards of research ethics and we ask authors to ensure their research conforms to guidelines set by reputable sources such as the British Sociological Association and the Association of Social Anthropologists of the UK and Commonwealth.

Editors may seek advice from referees on ethical matters and the final decision will rest with the editors.

During submission, authors are required to agree to the Author's Declaration confirming that the work as submitted has not been published or accepted for publication, nor is being considered for publication elsewhere, either in whole or substantial part; the work is original and all necessary acknowledgements have been made; all authors and relevant institutions have read the submitted version of the manuscript and approve its submission; all persons entitled to authorship have been so included; all work conforms to the legal requirements of the country in which it was carried out, including those relating to conservation and welfare, and to the Journal's policy on these matters. Papers published in another journal or manuscripts offered for publication elsewhere will not be accepted, but the publication of an abstract or conference paper does not preclude publication of the full paper in this journal. Opinions expressed in papers are those of the contributors.

Data archiving

Data are important products of the scientific enterprise, and they should be preserved and usable for decades in the future. IJAfr encourages authors to make the data supporting the results in published papers available in an appropriate public archive, and many funding agencies require this. Teagasc authors are encouraged to use T-Stór as an open access data archive <http://t-stor.teagasc.ie/>. Authors may use, for example, Dryad, TreeBASE, GenBank, figshare or another archive of the author's choice that provides comparable access and guarantee of preservation. Authors may elect to have the data made publicly available at time of publication or, if the technology of the archive allows, may opt to embargo access to the data for a period after publication.

References

The parenthetical style of referencing is used by the journal. In the text a reference should be quoted by the author's name (without initials) and year of publication. Examples: "As observed by Kelleher (2011) the effect...". "This confirms earlier findings (O'Keefe, 2015)". Where the reference contains two authors, both authors names should be given followed by the year of publication (e.g., Christian & Riche, 2014). Where there are two or more authors, the first name followed by *et al.* should be used. References cited together in the text should be arranged chronologically. Publications by the same author(s) in the same year should be listed as 2010a, 2010b, etc.

The list of references in the reference section should be in alphabetical order and set out as in the following examples:

Book

Alexander, S. 2011. "Approved Pesticides for use on Vegetable Crops 2011". Teagasc, Kinsealy, Dublin 17, 116 pages.

Proceedings

Gould, N., Kenny, D.A., Lawrence, P., Minchin, W. and McGee, M. 2011. Effect of initial grazing date in spring on intake and performance of yearling beef heifers and on yield and nutritive value of swards designated for silage production. *Proceedings of the Agricultural Research Forum, Tullamore, Ireland*, page 153.

Chapter in book

Sheehan, J.J. 2011. Cheese: avoidance of gas blowing. In: "Encyclopaedia of Dairy Sciences", 2nd Edition, Volume 1 (eds. J.W. Fuquay, P.F. Fox and P.L.H. McSweeney), Academic Press, San Diego, USA, pages 661–666.

Journal paper

Ashfield, A., Wallace, M., Prendiville, R. and Crosson, P. 2014. Bioeconomic modelling of male Holstein-Friesian dairy calf-to-beef production systems on Irish farms. *Irish Journal of Agricultural and Food Research* **53**: 133–147.

(Note: please include volume numbers only, do not include issue numbers)

Online publication

Clancy, M. and Scheer, J. 2012. "The Case for Sustainable Energy. A Review and Analysis of the Economic and Enterprise Benefits". Sustainable Energy Authority of Ireland. Available online: http://www.seai.ie/Publications/Statistics_Publications/Energy_Modelling_Group_Publications/The_Case_for_Sustainable_Energy.pdf [Accessed 20 August 2012], 23 pages.

Thesis

Butler, A.M. 2006. Development and use of the Irish dairy systems optimising model for two contrasting production environments under a range of policy and development scenarios. PhD thesis, National University of Ireland, University College Dublin.

Statistical references

SAS. 2003. Version 9.3.1, SAS Institute Inc., Cary, NC, USA.

A paper accepted for publication but not yet published should be referred to as "in press". References concerning unpublished data or "personal communications" should not be cited in the reference section but may be mentioned in the text.

Authors must ensure that all references in the text appear in the references section of the paper and *vice versa*, and that names and dates correspond in both places.