



# ANIMAL FEED SCIENCE AND TECHNOLOGY

An International Scientific Journal Covering Research on Animal Nutrition, Feeding and Technology

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### DESCRIPTION

*Animal Feed Science and Technology* is a unique journal publishing scientific papers of international interest focusing on **animal feeds** and their **feeding**.

Papers describing research on feed for ruminants and non-ruminants, including **poultry, horses, companion animals** and **aquatic animals**, are welcome.

The journal covers the following areas:

**Nutritive value** of feeds (e.g., assessment, improvement) Methods of **conserving** and **processing** feeds that affect their nutritional value **Agronomic** and **climatic** factors influencing the nutritive value of feeds **Utilization** of feeds and the improvement of such Metabolic, production, reproduction and **health responses**, as well as potential environmental impacts, of diet inputs and feed technologies (e.g., feeds, feed additives, feed components, mycotoxins) Mathematical models relating directly to **animal-feed interactions** Analytical and experimental methods for **feed evaluation** Environmental impacts of feed technologies in animal production

The journal does not encourage papers with emphasis on animal products, molecular biology, genetics or management, or the regulatory or legal aspects of feeds as well as animal production studies with a focus on animal nutrition that do not have a direct link to a feed or feed technology.

Manuscripts must be prepared in accordance with the journal's Guide for Authors.

Before preparing their manuscript, it is suggested that authors examine the following editorials by the Editors-in-Chief:

Editorial on terminology and analytical methods ([Anim. Feed Sci. Technol. 118 \(2005\) 181-186](#))

Editorial on experimental design and statistical criteria ([Anim. Feed Sci. Technol. 129 \(2006\) 1-11](#))

Editorial on general suggestions and guidelines ([Anim. Feed Sci. Technol. 134 \(2007\) 181-188](#))

Editors comments on plagiarism ([Anim. Feed Sci. Technol. 154 \(2009\) 292-293](#))

Editorial on review techniques and responding on editorial comments ([Anim. Feed Sci. Technol. 155 \(2010\) 81-85](#))

Editorial on use of replicates in statistical analyses in papers submitted for publication in *Animal Feed Science and Technology* ([Anim. Feed Sci. Technol. 171 \(2012\) 1-5](#))

For an example of a sample manuscript [click here](#).

## AUDIENCE

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Animal Scientists, Crop Scientists, Feed Manufacturers, Feed Additive Producers.

## IMPACT FACTOR

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2016: 1.755 © Clarivate Analytics Journal Citation Reports 2017

## ABSTRACTING AND INDEXING

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Biological Abstracts  
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## GUIDE FOR AUTHORS

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### INTRODUCTION

#### *Types of article*

1. Original Research Papers (Regular Papers)
2. Review Articles
3. Short Communications
4. Book Reviews

*Original Research Papers* should report the results of original research. The material should not have been previously published elsewhere, except in a preliminary form.

*Review Articles* should cover subjects falling within the scope of the journal which are of active current interest.

A *Short Communication* is a concise but complete description of a limited investigation, which will not be included in a later paper. Short Communications should be as completely documented, both by reference to the literature and description of the experimental procedures employed, as a regular paper. They should not occupy more than six printed pages (about 12 manuscript pages, including figures, tables and references).

*Book Reviews* will be included in the journal on a range of relevant books which are not more than two years old. Book reviews will be solicited by the Book Review Editor. Unsolicited reviews will not usually be accepted, but suggestions for appropriate books for review may be sent to the Book Review Editor:

Professor G. Flachowsky  
Federal Research Centre of Agriculture  
Institute of Animal Nutrition  
Bundesallee 50  
D-38116 Braunschweig  
Germany

Manuscripts describing the use of commercial feed products are welcome, but should include the following information: major components, contents of active ingredients (for example enzyme activities). Independent verification, as opposed to a manufacturers guarantee, is always desirable and often avoids difficulties in the review process, especially where there are no, or few, treatment impacts. The Editors reserve the right to reject any manuscript employing such products, wherein this information is not disclosed.

Submissions concerning feedstuff composition are welcome when published and/or accepted analytical procedures have been employed. However, unusual feedstuffs and/or a wide range of data are pre-requisites.

Submissions concerning NIRS may be suitable when more accurate, precise or robust equations are presented. Mathematical, technical and statistical advancement, may constitute the foundation for acceptance. For more details see the editorial in Vol. 118/3-4.

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- E-mail address
- Full postal address

All necessary files have been uploaded:

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- All figures (include relevant captions)
- All tables (including titles, description, footnotes)
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*Graphical Abstracts / Highlights files* (where applicable)

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Further considerations

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Poorly written and/or presented manuscripts (relative to the journal's guidelines) may be returned to authors for upgrading by the editorial office, prior to a review for scientific merit.

Before preparing their manuscript, it is suggested that authors examine the editorial by the Editors-in-Chief in Vol. 134/3-4, which outlines several practices and strategies of manuscript preparation that the Editors-in-Chief have found to be successful. This editorial also outlines practices that can lead to difficulties with reviewers and/or rejection of the manuscript for publication. There is also an example of an Animal Feed Science and Technology manuscript available on the journal website at <http://www.elsevier.com/locate/anifeedsci>.

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## **PREPARATION**

### **Peer review**

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Use past tense for current findings, and the present tense for "truths" and hypotheses.

### **Article Structure**

Manuscripts should have **numbered lines**, with wide margins and **double spacing** throughout, i.e. also for abstracts, footnotes and references. **Every page of the manuscript, including the title page, references, tables, etc., should be numbered continuously.** However, in the text no reference should be made to page numbers; if necessary, one may refer to sections. Avoid excessive usage of italics to emphasize part of the text.

### *Introduction*

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

### *Material and methods*

Provide sufficient details to allow the work to be reproduced by an independent researcher. Methods that are already published should be summarized, and indicated by a reference. If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also be described.

If reference is made to AOAC, ISO or similar analytical procedure(s), the specific procedure identification number(s) must be cited. A number of references for neutral and acid detergent fibre (NDF, ADF) assays exist, and an alternative reference to the now out-of-print USDA Agriculture Handbook 379 must be used. There are many options for NDF and ADF assays (e.g. sodium sulfite, alpha amylase, residual ash), which must be specified in the text. For more details see the editorial in Vol. 118/3-4.

The following definitions should be used, as appropriate:

- a. aNDFom-NDF assayed with a heat stable amylase and expressed exclusive of residual ash.
- b. NDFom-NDF not assayed with a heat stable amylase and expressed exclusive of residual ash.
- c. aNDF-NDF assayed with a heat stable amylase and expressed inclusive of residual ash.
- d. NDF-NDF assayed without a heat stable amylase and expressed inclusive of residual ash.
- e. ADFom-ADF expressed exclusive of residual ash.
- f. ADF-ADF expressed inclusive of residual ash.
- g. Lignin (sa)-Lignin determined by solubilization of cellulose with sulphuric acid.
- h. Lignin (pm)-Lignin determined by oxidation of lignin with permanganate.

While expressions of NDF and ADF inclusive of residual ash will continue to be acceptable (i.e., the terms aNDF, NDF and ADF above), the Editors-in-Chief highly recommend reporting all fibre values, including digestibilities, on an OM basis. Silica is partially soluble in ND, is quantitatively recovered in AD, and so may contribute to the 'fibre' values and to subsequent digestibility coefficients.

Reporting 'hemicellulose' values as the difference between NDF and ADF is generally only acceptable if the analyses have been sequential on the same sample. Crude fibre (CF), nitrogen-free extract (NFE) and total digestible nutrients (TDN) are not acceptable terms for describing feeds and should only be referred to in a historical context.

### *Results*

Results should be clear and concise.



## Discussion

This should explore the significance of the results of the work, not repeat them. Avoid extensive citations and discussion of published literature. Combined 'Results and Discussion' sections are only acceptable for 'Short Communications', except under compelling circumstances.

### Conclusions

The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

## Essential title page information

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## Abstract

The abstract should be clear, descriptive and not longer than 400 words. It should contain the following specific information: purpose of study; experimental treatments used; results obtained, preferably with quantitative data; significance of findings; conclusions; implications of results if appropriate.

### Graphical abstract

Although a graphical abstract is optional, its use is encouraged as it draws more attention to the online article. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: Please provide an image with a minimum of 531 × 1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5 × 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. You can view [Example Graphical Abstracts](#) on our information site.

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Highlights are mandatory for this journal. They consist of a short collection of bullet points that convey the core findings of the article and should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point). You can view [example Highlights](#) on our information site.

## Keywords

Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

### Abbreviations

Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

### *Acknowledgements*

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

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If no funding has been provided for the research, please include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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Follow internationally accepted rules and conventions: use the international system of units (SI). If other quantities are mentioned, give their equivalent in SI. You are urged to consult [IUB: Biochemical Nomenclature and Related Documents](#) for further information.

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SI or SI-derived units should be used throughout (e.g. MJ and not Kcal for energy concentrations). Concentrations should be expressed on a 'per kg' basis (w/w); however, w/v, v/v, mol/mol or M may be accepted depending on the circumstances. In addition, 'units' and 'equivalents' are acceptable. Normality should be avoided, as it may be ambiguous for certain acids. If analytical standards have been used, they should be specified by name (e.g. yeast RNA) and form (e.g. lactose monohydrate). Percents should only be used when describing a relative increase or decrease in a response. Proportions should be maximum 1.0 or  $\leq 1.0$ . For more details see the editorial in Vol. 118/3-4.

Percent is *only* used to indicate relative changes. For composition, both w/w (often solids composition g/kg) and w/v (e.g. g/L), v/v (e.g. mL/L), mol/mol or M can be accepted depending on the circumstances. Specify units (e.g. g/L) and never as percent.

Digestibility/metabolisability and degradability should always be expressed as a coefficient (not %), and the content of, for example, the digestible component should be expressed as g/kg: thus, the coefficient of digestibility of dry matter is 0.8, while the content of digestible dry matter is 800g/kg. A distinction between true and apparent digestibility should be made, as well as between faecal and ileal (e.g. coefficient of total tract apparent digestibility - CTTAD). The terms 'availability' and 'bioavailability' should be avoided without definition in context.

In chemical formulae, valence of ions should be given as, e.g.  $\text{Ca}^{2+}$ , not as  $\text{Ca}^{++}$ . Isotope numbers should precede the symbols e.g.  $^{18}\text{O}$ . The repeated use of chemical formulae in the text is to be avoided where reasonably possible; instead, the name of the compound should be given in full. Exceptions may be made in the case of a very long name occurring very frequently or in the case of a compound being described as the end product of a gravimetric determination (e.g. phosphate as  $\text{P}_2\text{O}_5$ ).

### *Math formulae*

Please submit math equations as editable text and not as images. Present simple formulae in line with normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

If differences between treatments are statistically significant, this should be indicated by adding the actual 'P' value obtained. If  $0.10 > P > 0.05$ , then differences can be considered to suggest a trend, or tendency, to a difference, but the actual 'P' value should be stated. Further information on this issue can be found in *Animal Feed Science and Technology* Vol. 129/1-2.

Spaces should be used between all values and units, except for the following: Between the value and degrees or percent. In equations around \* and /. In probability expressions ( $P < 0.05$ ). When probability values are given, the 'P' should be a capital letter.

### **Artwork**

#### *Electronic artwork*

##### *General points*

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- Number the illustrations according to their sequence in the text.
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