

# Style Guides JAS Format

Note: The following document should only be used as a quick reference guide. For more information, see the *Journal of Animal Science*. [https://academic.oup.com/jas/pages/General\\_Instructions](https://academic.oup.com/jas/pages/General_Instructions).

## ABSTRACT & 1<sup>ST</sup> PAGE

### GUIDELINES

Summary of study. A single paragraph of no more than 2,500 keystrokes (characters plus spaces) that summarizes the results in an understandable form using statistical evidence (*P*-values). Abbreviations are defined at first use in the ABSTRACT and again in the body of the manuscript.

### AUTHOR

### INFORMATION

The first page should state your full name (given name, middle initial, last name), class, and date.

### MARGINS

Margins should be 1 inch all around and on all pages of the paper.

Luis O Tedeschi  
AGRI 200  
August 31, 2023

Forages and Pastures Symposium: Revisiting Mechanisms, Methods, and Models for Altering Forage Cell Wall Utilization for Ruminants

#### ABSTRACT

Several ruminant animals rely almost exclusively on the complex polysaccharide matrix from the plant cell wall (CW) as their primary energy source via volatile fatty acids produced through ruminal and some hindgut fermentation processes. The CW contains different types and proportions of polysaccharides, proteins, phenolic compounds, and minerals in their macromolecular structure that influence the rate and extent of fiber digestion and selective retention of particulate matter due to its physical characteristics (buoyancy and comminuting)...

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### PAGE NUMBER

Page numbers should appear in the top right corner of every page.

### FULL TITLE

A title with the first word and proper nouns capitalized. Species of subject is encouraged. The title should be unique. The Journal does NOT support multipart series.

### STANDARD FORMAT

For general style and form, authors should follow that recommended in *Scientific Style and Format: The CSE Manual for Authors, Editors, and Publishers*. 8th ed.

Double space, and use Times New Roman 12-point font size on all pages of the paper.

## INTRODUCTION

### GUIDELINES

The Introduction directly follows the Abstract. This is the literature review section that introduces the subject and provides background information on previous work in the area. The introduction will require the use of library resources to locate related research. In this section you should also clearly state the hypothesis of the study.

A clear justification for conducting the research with a stated hypothesis and objective(s) is required. The rationale for the experiments should place the work into the context of existing literature. There is NO word limit on the section but brevity is encouraged.

#### INTRODUCTION

The underlying principles of improving forage cell wall (CW) utilization by ruminants using genetic and environmental mechanisms ([Buxton and Casler, 1993](#); [Iiyama et al., 1993](#)) or postharvest treatments ([Fahey et al., 1993](#)) and the development of methods to understand and assess their effectiveness on fiber digestibility ([Chesson, 1993](#); [Kennedy and Doyle, 1993](#); [Mertens, 1993](#); [Van Soest, 1993](#)) were discussed in a symposium in 1991 and documented subsequently ([Jung et al., 1993](#)). Dietary fiber has been and continues to be an essential component in any ruminant production system, and it is typically assessed via neutral...

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### IN-TEXT CITATIONS

The basic format for an in-text citation is (Last name of author year of publication). The page number is only necessary when quoting a specific passage (Smith, 2023, p. 26). If the author's name appears in text, only include year and page number if relevant, i.e., Smith (2023, p. 26) says,... . When citing two authors, use both last names separated by "and" each time. If a work has three authors, use et al. If citing more than three authors, use et al (Jiyama et al., 1993). If there is more than one work in the same parentheses, list authors chronologically, separating each citation with a semicolon.

## METHODS AND MATERIALS

[Fahey et al., \(1993\)](#) discussed many postharvest methods to alter CW digestibility, including physical, chemical, and microbial/enzymatic approaches. Within the physical treatments, the authors discussed 1) grinding and pelleting to alter particle size, 2) irradiation with high-velocity electrons to increase ruminal fermentation, 3) steam treatment to disrupt the CW structure through hydrolysis, 4) mechanical separation of plant parts (stems versus leaves), and 5) ammonia freeze-explosion (known as AFEX treatment) by treating the cellulosic material with volatile liquid ammonia under pressure with...

## METHODS AND MATERIALS

### GUIDELINES

Explain how the trial was conducted to achieve the objective. A clear description of all biological, analytical and statistical procedures is required. Materials used must include the product name and vendor at first mention. Sex, breed, age, species are included in the animal descriptions. Appropriate statistical methods should be used with experimental unit defined. Numbers of biological and experimental replicates should be stated. State the threshold for significance ( $P < 0.05$ ) and definition of tendency if used.

## RESULTS

### GUIDELINES

Report the data in a manner that is easy to understand. Graphs, charts or table formats are best. Experimental results are presented in tables and figures. The results should contain sufficient detail to allow the reader to interpret the data. Quantitative measures of significance ( $P$ -values) should be presented.

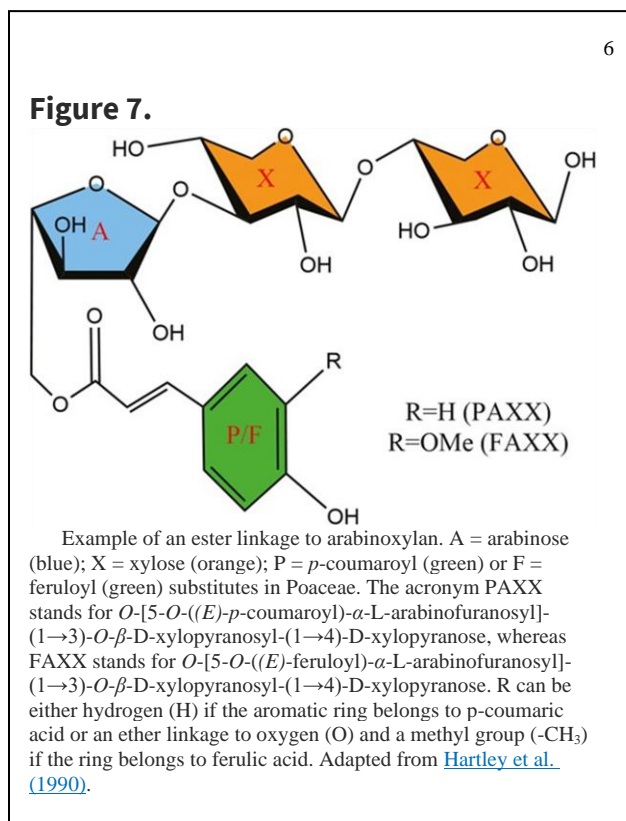
## RESULTS

The underlying principles of forage CW utilization by ruminants have been sketched for over 50 years. However, in the last 30 years, we have gained tremendous knowledge of the structure and synthesis of critical components of the plant CW, mechanisms and methods to alter CW digestibility, and assessment techniques to quantify CW components as well as their fermentability. Such knowledge has even allowed us to make recommendations about the importance (requirement perhaps) of fiber in the diet to improve not only animal performance but also welfare.

## TABLES AND FIGURES

### GUIDELINES

Tables and figures should be placed at the end of the manuscript, following the references. Tables and figures should be numbered consecutively, in the order in which they are cited in the manuscript. Tables and figures must be prepared so they can be understood without referring to information in the body of the manuscript.



## LITERATURE CITED

### GUIDELINES

The Literature Cited page will directly follow the Learner Outcomes & Participation section of the assignment. The title is centered, but not underlined, italicized or bolded. Each entry is single spaced with one blank line between entries.

### HANGING INDENT

Use a hanging indent for the entries longer than one line. Indent 1/2" from the set margins, after the first line of each entry.

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LITERATURE CITED

Blehert DS, CU Meteyer, BM Berlowski-Zier, EL Buckles, JTH Coleman, SR Darling, A Gargas, R Niver, JC Okoniewski, RJ Rudd, et al., 2009. Bat white-nose syndrome: an emerging fungal pathogen? *Science*. 323(5911): 227.

Boyles JG, K Craig, R Willis. 2010. Could localized warm areas inside cold caves reduce mortality of hibernating bats affected by white-nose syndrome? *Front Ecol Environ*. 8(2): 92-98.

[CBD]. Center for Biological Diversity. [date unknown]. Tucson: CBD. Emergency petitions filed to close caves and save bats from extinction; 2010 21 Jan. [accessed 2010 May 1]; [7 paragraphs]. [http://www.biologicaldiversity.org/news/press\\_releases/2010/bats-01-21-2010.html](http://www.biologicaldiversity.org/news/press_releases/2010/bats-01-21-2010.html).

## ALPHABETICAL ORDER

Arrange entries in alphabetical order by author's last name. Use the author's initials for the first and middle names.

## REFERENCES

Refer to the CSE Manual of Style, 8<sup>th</sup> edition. The Sierra College Term Paper Handbook for CSE is available on Writing Center webpage on the Sierra College website: <https://www.sierracollege.edu/wp-content/uploads/2022/09/cse-literature-cited.pdf>

## GUIDELINES FOR THE LITERATURE CITED SECTION

In addition to citing sources within a text, JAS requires a *Literature Cited* section. The following guidelines will help you correctly format some of the most commonly used sources. For further information and examples, refer to the Sierra College Term Paper Handbook for CSE available on Writing Center webpage on the Sierra College website:

<https://www.sierracollege.edu/wp-content/uploads/2022/09/cse-literature-cited.pdf>

### BOOK BY A SINGLE AUTHOR

#### Literature Cited Format:

Author's Last Name Initials. Year. Title. Edition. Place of Publication: Publisher.

#### Example:

McMillan VE. 2006. Writing papers in the biological sciences. 6th ed. Boston (MA): Bedford/St. Martin's.

### BOOK BY TWO OR MORE AUTHORS

#### Literature Cited Format:

Author's Last Name Initials, author's Initials Last Name. Year. Title: subtitle. Edition. Place of Publication: Publisher.

Note: If there are three or more authors, use the first author's name and et al.

#### Example:

Saudek CD, et al. 2001. John Hopkins guide to diabetes: for today and tomorrow. Large print ed. Baltimore (MD): John Hopkins University Press.

### ARTICLE IN AN ONLINE SCHOLARLY JOURNAL

#### Literature Cited Format:

Authors' Last Name Initials, Initials Last Name. Year. Article title. Abbreviated Title of Journal (unless one word). [Access Date]; Volume (Issue Number): [Inclusive Page Numbers or Length of Article]. URL: DOI

#### Example:

North MG, SE Patterson. 2018. Lasting impacts in a rural community through horticultural activities. J Hortic. [accessed 2018 Aug 8];5(2):[20 paragraphs]. <https://www.omicsonline.org/open-access/lasting-impacts-in-a-rural-community-through-horticultural-activities-2376-0354-1000231-100469.html>. doi: 10.4172/2376-0354.1000231

### INTERNET SITE

For a website, give as much of the following information as is available. Use square brackets for any information that you add to the citation that is not written by the author, such as an access date or length. If information is unknown, write the word *unknown*, not italicized, as in [date unknown]. If no title is available, add the first few words of the page in square brackets.

#### Literature Cited Format:

Homepage Title. Date of Publication. Place of Publication: Publisher; [date updated; date accessed]. [length]. URL and DOI optional.

#### Literature Cited Example:

WWF. 2017. Washington, DC: World Wildlife Fund; [accessed 2017 May 18]. [about 14 paragraphs]. <http://www.worldwildlife.org/home-full.html>.