**UNIVERSITY OF CAUCA**

**FACULTY OF AGRICULTURAL SCIENCES**

**JOURNAL OF BIOTECHNOLOGY IN THE AGRICULTURAL AND AGROINDUSTRIAL SECTOR**

**1 REACH**

The Journal of Biotechnology in the Agricultural and Agroindustrial Sector is a semi-annual, arbitrated publication belonging to the Faculty of Agrarian Sciences of the University of Cauca, which accepts original and unpublished works resulting from research in the field of science, engineering and technology, that have an impact on the regional, national and international agricultural sector on issues such as food and non-food agribusiness, agricultural and livestock sciences, forestry, energy and environment, biotechnology, equipment and processes, and industrial administration, in Spanish and English language (if you apply in English, a translation certificate from a recognized institution must be attached).

**2 EDITORIAL POLICIES**

**Formal commitment**

By submitting the nominated manuscript for evaluation and publication, the author (s) accept all the conditions stipulated in the publication guidelines.

**Ethical commitment**

The authors must establish, in writing (see format), an ethical commitment regarding the originality and unpublished character of the submitted manuscript, including the personal data of each of the authors: nationality, schooling, institutional email, telephone, postal address and institutional affiliation or, filiation that, the web address where they can be consulted, links to databases such as CvLac, Google scholar, Researchgate, etc. The journal will refrain from accepting and publishing manuscripts that present known conflicts of interest that may affect its credibility; If these conflicts are not declared, the manuscript will be rejected.

**Copyright**

With the submission of the works, the author (s) grant "Copyrights" to the journal, so the works cannot have rights granted to third parties, on the date of submission. The granting of Copyright means the authorization for the journal to make use of the manuscript, or part of it, for the purpose of releasing and disseminating scientific-technological activity: in no case will these rights affect the intellectual property that is its own of the author (s). If a modification in the authorship of a manuscript is required after its application (and before its publication), the proponents must inform it in writing, attaching the reasons for such decision: the editorial committee will be the body that will make the final decision.

**3 GENERAL PROCESS**

**Manuscript submission**

The full text of the papers in Word format, plus the cover letter and the information of the suggested reviewers (two national or international pairs), must be submitted through the Open Journal System (OJS) platform (<http://journals.unicauca.edu.co/index.php/biotecnologia/index>), after registering as a user or, in exceptional cases, by email (biotecnofaca@unicauca.edu.co or biotecnofaca2009@gmail.com)

**Evaluation**

The Editorial Committee will submit the manuscripts to anti-plagiarism software and will be in charge of the initial review. It will reserve the right to reject a manuscript (final and unappealable decision) that presents deficiencies in structure and writing and that does not comply with the thematic areas, the publication standards and pertinent references or suggest modifications in order to achieve better quality (<https://revistas.unicauca.edu.co/index.php/biotecnologia/about/submissions>). Accepted papers will be evaluated double-blind, by expert referees in the area of ​​knowledge, who will issue a detailed concept on the relevance and scientific and technological appeal, the rigorous treatment of the subject, the adjustment to the journal's standards and its contribution to the development of science, engineering and technology. For no reason will the simultaneous evaluation of more than two manuscripts by a proposing author be allowed; if two manuscripts are accepted, they will be published in different editions.

If the concept of the two referees is negative, the manuscript is rejected. If a positive and a negative concept is presented, a third referee is consulted who will determine the condition of the document under evaluation: if it is rejected, the manuscript and the comments of the referees are sent to the authors so that they consider their submission to another publication. If the manuscript is accepted with minor or major modifications, it and the comments of the referees are sent to the authors so that they can send a revised and corrected version within 20 days, accompanied by a letter addressed to the Editor-in-Chief (see format) listing in detail the changes made based on the observations of the referees: it will be the Editor-in-Chief who decides on the acceptance of the corrected version. After 20 days, the editor, at his discretion, will treat the manuscript as expired, so it must be submitted again following the indicated process.

Referees must have a master's degree at least, national referees must be registered in the COLCIENCIAS peer reviewer base, have updated CvLAC, ORCID, Google Scholar, and accredit publications in the specific area during the last two years prior to the evaluation process.

**4 TYPES OF MANUSCRIPTS**

**Scientific Research Articles**

Document that presents, in detail, the results of original scientific research that represent an original contribution to knowledge in the areas of action of the journal. A maximum of 5,500 words and 8 figures and / or tables are accepted, between 25 and 40 references, and its structure is: 1. INTRODUCTION, 2. METHOD, 3. RESULTS, 4. CONCLUSIONS and 5. REFERENCES.

**Short article**

Brief document that presents preliminary or partial original results of a scientific or technological investigation, which generally require an early release. A maximum of 4,000 words and 5 figures and / or tables are accepted, minimum 15 references, and its structure is: 1. INTRODUCTION, 2. METHOD, 3. RESULTS, 4. CONCLUSIONS and 5. REFERENCES.

**Case report article**

Document that presents the results of a study on a particular situation in the sector, in order to publicize the technical and methodological experiences that constitute a contribution to development, which includes a commented systematic review of the literature on similar cases. A maximum of 5,500 words and 8 figures and / or tables are accepted, a minimum of 20 references and it is made up of: 1. INTRODUCTION, 2. METHOD, 3. RESULTS, 4. CONCLUSIONS and 5. REFERENCES.

**Reflection articles**

Document that presents research results on a specific topic from an analytical, interpretative and critical perspective of the author (s) based on original sources, a maximum of 4,000 words and 6 figures and / or tables are accepted, minimum 30 references. The structure is: 1. SUMMARY, 2. INTRODUCTION, 3. DEVELOPMENT OF THE TOPIC, 4. CONCLUSIONS and 5. REFERENCES.

**Review article**

Its publication will be the product of the invitation to recognized researchers in areas of the journal's field of action. It corresponds to an analytical and critical review of literature on a field in science or technology in which the results of published research are analyzed, systematized and integrated to show scientific advances and development trends, plus the contributions of the proponents. A maximum of 8,000 words and 6 figures and / or tables are accepted, minimum 50 references and it is composed of: 1. ABSTRACT, 2. INTRODUCTION, 3. DEVELOPMENT OF THE TOPIC, 4. CONCLUSIONS and 5. REFERENCES.

**Letters to the editor**

They are short communications, with critical, analytical or interpretive positions on the manuscripts previously published in the journal, topics or matters of professional interest to readers, which in the opinion of the Editorial Committee constitute an important contribution to the discussion of the topic by the community reference scientist.

**Editorial**

Document written by the editor, a member of the editorial committee or an invited researcher on orientations in the thematic domain of the journal, on contributions to researchers in matters of presentation and structure of their articles, with reflections on the presentation of written documents, their regulations, its importance and others.

In either case, the number of words allowed includes abstracts in Spanish and English, figures, tables, acknowledgments, references, etc.

**5 SECTIONS OF THE MANUSCRIPT**

The parts that make up the document are (see article example):

The **INTRODUCTION** should highlight the importance of the research, present the related literature, and provide the necessary background to understand the authors' hypothesis. In the end, allusion should be made to the research question or hypothesis, culminating in the objectives of the proposed work.

The **METHOD** must have enough information to allow another researcher to replicate the trial and achieve the same results, in addition to containing the location and conditions of the place where the experiment was carried out, the experimental design, the statistical analysis and the references of the methods already published.

The **RESULTS** must present in a clear, objective and impartial way the findings and new knowledge that the research produced in response to the proposed objective, supported by tables and figures, with the statistical analysis and the scope of other researchers that feed the discussion.

**CONCLUSIONS** are described clearly and precisely, derived from the analysis of the results and based on the objectives set.

**ACKNOWLEDGMENTS** are included if the author (s) wishes (they), written in a sober way and not exceeding 4 lines.

The **REFERENCES** must contain all the documents used. All citations presented in the manuscript must coincide with the reference list at the end, an author who has not been cited in the text must never be referenced and vice versa. At least 70% of them must be recent (from the last three years) and correspond to mainstream scientific research articles that can support what is written, minimizing the use of gray literature (maximum 10% of them, if considered necessary) and the self-citation that cannot exceed 15%.

**6 GENERAL FORMAT**

In letter size (21,59 cm wide and 27,94 cm high) with single line spacing to one column, written in straight Arial (except for scientific names that are in italics) of 11 points, 3 cm margins on the border superior, 2 cm in the inferior and 2,5 cm in the lateral margins. The use of text boxes is not allowed

Decimal figures are separated by commas. If acronyms are used, the first mention in the document must consider the full meaning, after that, the acronym is used as such. Do not use points after the units of measure (g, mm, m, km, ha, l, etc.). If numbers followed by a symbol are used, separate with a space between one and the other, eg: 100 m, 250 km. For statistical significance values, use lower case letter p. If geographic coordinates are required use 6°18 'N, and 53°33' W.

**Tables and Figures**

They should be located after their respective citation in the text and processed in the original format, with good contrast and resolution (minimum quality of 300 dpi) to avoid polychrome and facilitate diagramming. In case of requiring a table / figure footer or reference source, it must be written in normal 8 point Arial. The title of the tables goes in the upper part (**Table 1.** Descriptive title.) And that of the Figures in the lower part (**Figure 1.** Descriptive title.), Should not exceed two lines, in Arial straight line 9. They must use horizontal lines to separate the information in the table and each column must have a heading (in bold, with initial capital letters). The font size inside a box is Arial 9 points normal.

There are two options for your citation:

Example 1:

… In figure 1 a behavior….;

Example 2:

Significant differences were found between treatments (Table 1)… ..

**Manuscript title**

It must be in Spanish and English and refer to the content in a clear and concise way, written in Arial 24 points, bold and centered. It can be as long as is considered and consist of two parts, separated from each other by two points. In a footnote, before the institutional affiliations and, preceded by an asterisk, indicate the title of the project that originated the manuscript, the funding entity and the completion date (day, month, year), if applicable.

**Author (s) Information**

The authors are named according to their importance and contribution to the research and / or the preparation of the manuscript, separated from each other by semicolons and numbered with a superscript. Include surnames and full names (if you have them), separated from each other by a hyphen. In a footnote (Arial 8 points, at the bottom of the first page and justified) the affiliation of each author will be indicated, the word **Correspondence** (in bold) and two points, in which the institutional mail of the author chosen to send correspondence.

Examples:

For authors:

MORAN-ZEMANATE, JUAN-PATRICIO1; GOBERT-ALAIS, MARC-ANDREW2; REYES P., CARLOS A.3

For institutional affiliation:

\* Title of the original project: "Evaluation of the agroindustrial processes developed in rural areas of the Department of Cauca". Financing: Contributing entity. Completion: January 26, 2019.

1 Universidad del Cauca, Faculty of Agrarian Sciences, Research Group Science and Technology of Biomolecules of Agroindustrial Interest (CYTBIA). Maximum professional title achieved. City Country. <https://orcid.org/0000-0003-1154-6765>

**Correspondence:** gfvssp@unicauca.edu.co

**Summary**

The word ABSTRACT must be justified on the left margin, in capital letters and bold, starting the writing after two interlines in a single justified paragraph, between 250 and 300 words and will include Introduction, justification, objectives, methodology, results and conclusions of the investigation emphasizing in the achievements. It must be concise, written in Spanish and English (**ABSTRACT**).

**Keywords**

They are located after each summary. The title in capital letters, bold, in Spanish (**PALABRAS CLAVE**) and English (**KEYWORDS**) followed by a colon. Include at least ten (10) words separated from each other by semicolons, each of which begins with a capital letter. They can be taken from the body of the text and the references used, words found in the title can be repeated, acronyms can be used and several versions of a term in different languages ​​can be used.

Example:

KEY WORDS: *Bactris gasipaes*; Maturation; Post harvest; Rheology; Senescence.

**Titles**

Those of first level for main parts of the manuscript in Arial 11 points, capital letter sharp and bold); those of the second level with initial capital letters, bold and without a final period, separated from the text by two interlines. The third level with initial capital letter, bold and a period followed, continuing the text in the same line after a space.

Example:

**METHOD**

**Materials**

**Vegetal material.** The plant material used ………….

**Mathematical expressions**

They must be written leaving two spaces above, below and between each of them and the MS Word equation editor must be used. They must follow a uniform format, justify to the left margin and use the expression (Eq. 1) with consecutive Arabic numbers justified to the right margin (for greater ease, insert them in a table with two columns, without borders), citing them in the indicated place. The meaning of the variables and their respective units should appear after they are used for the first time, using the International System of Units (SI).

Example:

β-caroten = (A x MW x DF x 10 ^ 3 x VH) / (ε x l x SM) (Eq. 1)

Where:

A is the absorbance at 452 nm, MW is the molecular weight of β-carotene (536,8 g/mol), DF is the dilution factor, VH is the volume of hexane (0,003 L), ε is the molar extinction coefficient of β-carotene in hexane (145.300 L/mol cm, Rodríguez-Amaya, 2001), l is the path length (1 cm) and SM is the weight of starchy matrix in dry basis (0,04902 g).

**Citations**

**In-text citations** follow the format (author/s, year). Works accepted, but not yet published, may be included, specifying the name of the journal followed by the expression “en prensa / in press” or with its corresponding DOI.

Depending on the number of authors that the cited publication has, the following format will be used:

Examples:

An author:

Gómez (2020) found significant differences in ………. or

Cell structure was affected by the application of ……. (Gomez, 2020)

Two authors:

Rawlings and Betece (2020) or (Rawlings and Betece, 2020)

Three or more authors:

Malone *et al*., (2020) or (Malone *et al*., 2020)

If multiple references are used to support a particular topic, they are considered in chronological order.

Example:

Biodegradable materials have benefits …… (Arboleda, 2018; Atkins and Fred, 2019; Martínez *et al*. 2020).

**For corporate author**, the name of the organization is entered. The first time an organization is used, it is considered with the full name and the acronym in parentheses. Hereinafter, it is only cited with the acronym.

Example:

The first time:

… According to the FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO, 2016)….

For the second and other times:

… .The consolidation of food culture (FAO, 2016) allows….

**The citation of a citation** is used when accessing one source of information through another. For example, if you are consulting a book by Stephen Hawking and it quotes an opinion or statement by Roger Penrose, then:

Example:

Penrose (cited by Hawking, 2010) thinks that mathematics (...)

**List of references**

The consulted references are presented in alphabetical order including the full name and surname (if the consulted manuscript allows it) of ALL the authors (omitting the use of et al, in capital letters), with French indentation of 1,25 cm from of the second line of each of them. If more than one reference to the same author (s) is used, they must be in chronological order and, if they correspond to the same year, they must be differentiated with lower case letters, which will also be applied in citations.

For the referencing of numbers or volumes of any publication, it is necessary to use Arabic and non-Roman numerals. The names of the journals should not be abbreviated. The DOI (Digital Object Identifier) ​​of all the references that have it must be included, in link format (<https://doi.org/10.6036/7171>) that allows direct access to the document with one click. Do not put a period at the end of a DOI or URL. The start and end (full) page numbers of a resource must be indicated (for example p. 238-250 and not p. 238-50). In magazines that publish a porovisional online version without pagination (online first) or magazines with joint publication, it is sufficient to indicate “online first” or a number assigned by the publisher (for example e196234 or art. 14) or not put anything, : in both cases, the volume and number of the edition may suffice. When using electronic references, do not use the expressions "Retrieved from", "Internet", "Online", "Available at".

**Scientific article without DOI**

DE BARROS-FERNANDES, REGIANE-VICTÓRIA; COSTA-GUIMARÃES, ISABELA; RODRIGUES-FERREIRA, CHRISTIANE L .; ALVARENGA B., DIEGO; VILELA-BORGES, SORAIA; DE SOUZA, AMANDA-UMBELINA. Microencapsulated Rosemary (Rosmarinus officinalis) essential oil as a biopreservative in minas frescal cheese. Journal of Food Processing and Preservation, v. 41, n. 1, 2019, p. 127-145.

**Scientific article with DOI**

DE BARROS-FERNANDES, REGIANE-VICTÓRIA; COSTA-GUIMARÃES, ISABELA; RODRIGUES-FERREIRA, CHRISTIANE L .; ALVARENGA B., DIEGO; VILELA-BORGES, SORAIA; DE SOUZA, AMANDA-UMBELINA. Microencapsulated Rosemary (Rosmarinus officinalis) essential oil as a biopreservative in minas frescal cheese. Journal of Food Processing and Preservation, v. 41, n. 1, 2019, e12759.

<https://doi.org/10.1111/jfpp.12759>

**Book with author**

PASTOR-SIMSON, SHARON; STRAUS, MARTHA C. Post-harvest technology of horticultural crops. 1 ed. Jaipur (India): Oxford Book Company, 2010, 306 p, ISBN XXXXXX.

**Book in electronic version**

PASTOR-SIMSON, SHARON; STRAUS, MARTHA C. Post-harvest technology of horticultural crops. 1 ed. Jaipur (India): Oxford Book Company, 2010, 306 p.

<https://doi.org/10.1111/jfpp.12759>

**Chapter of the book**

KOPER, OLGA B.; RAJAGOPALAN, SHYAMALA; WINECKI, SLAWOMIR; KLABUNDE, KENNETH J. Nanoparticle metal oxides for chlorocarbon and organophosphonate remediation. In FRYXELL, GLEN E.; CAO, GUOZHONG; Environmental applications of nanomaterials. London (United Kingdom): Imperial College Press, 2007, 520 p.

**Report from an agency or government**

COLOMBIA. MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT. The food supply situation in a modern world. Bogotá (Colombia): 1997, 20 p.

**Seminars and conferences**

ROMERO, FERNANDO. Sensation, thought and method. International Seminar on Quality Management and Productivity as a development strategy (Cartagena, Colombia, 1990). Memories, Bogotá (Colombia): 1990. p. 65-87.

**Technical standards**

UNITED STATES OF AMERICA. AMERICAN SOCIETY FOR TESTING AND MATERIALS (AOAC). ASTM D1434–82: Standard test method for determining gas permeability characteristics of plastic film and sheeting. Pennsylvania (USA): 2009, 22 p.

**Thesis and degree works**

LÓPEZ-VALENCIA, YVETH. Study of osmotic dehydration kinetics for the conservation of mullet (*Mugil cephalus*) [Fisheries Engineering Thesis]. Arequipa (Peru): National University of San Agustín de Arequipa, Faculty of Biological Sciences, 2017, 154 p.

**Patents**

MOREIRA, G.; MATOS, T. Inhame amido biodegradable packaging. US 6,444,567, Classes 343, 356. Sao Paulo (Brazil): 2001.

**Electric material**

INTERNET ENGINEERING TASK FORCE (IETF). RFC: 3979: Intellectual property rights in IETF Technology. March 2005. <http://www.ietf.org/rfc/rfc3979.txt> [accessed July 4, 2009].

WORLD HEALTH ORGANIZATION (WHO). Food safety. 2019. <https://www.who.int/es/news-room/fact-sheets/detail/food-safety> [accessed September 2, 2019].

ASHWELL, M. ILSI Europe Concise Series. Concepts of functional foods. 2002. <http://www.ilsi.org/Europe/Publications/C2002Con_Food.pdf> [accessed May 13, 2009].