**Research Article**

**About the Journal/Aims and Scope**

**Cellular and Molecular Biology (Cell. Mol. Biol)** is an open-access, peer-reviewed, interdisciplinary journal that publishes original articles, reviews, short communications, methods, meta-analysis notes, letters to the editor and comments in the interdisciplinary science of Cellular and Molecular Biology linking and integrating molecular biology, biophysics, biochemistry, enzymology, physiology and biotechnology in a dynamic cell and tissue biology environment, applied to human, animals, plants as well to microbial and viral communities. The journal Cellular and Molecular Biology is therefore open to intense interdisciplinary exchanges in medical, dental, veterinary, pharmacological, botanical and biological researches for the demonstration of these multiple links.

- All aspects related to the different structures and functions of the cell and to its components (DNA, RNA, protein) are relevant to the scope of this journal

- DNA replication, transcription, nucleic acid-protein interaction, RNA processing, intracellular transport, and protein biosynthesis are examples of topics within the Cellular, Molecular and Biomedical field

- Nuclear function, cytoskeleton and cell membrane interactions, and transport of cellular products between different organelles fits in the Cellular, Molecular and Biomedical category.

The Journal welcomes the submission of manuscripts that meet the general criteria of significance and scientific excellence in the diverse fields of microbiological processes and developments in the environment. It provides a key forum to bring together state-of-the-art research of interest to scientists, engineers and policymakers in related fields worldwide. Submitted manuscripts will be evaluated by at least two independent reviewers who are either members of the Editorial Board or ad hoc referees. Accepted manuscripts will be available online as PDF files immediately upon their acceptance for publication. The Journal is published 4 issues per year. Authors retain the copyright of their articles and are free to reproduce and disseminate their work.

[**Peer Review Process**](http://ijvr.shirazu.ac.ir/journal/about)

***Cell. Mol. Biol.*** reviews all the submitted manuscripts. The editor selects peer reviewers upon the recommendation of the Editorial Board members. Typically, the scientific review of the manuscript is handled by an Associate Editor who selects at least two investigators in the field as referees according to the recommendation of the Editor or Editorial board. The reviewed manuscripts are returned to the corresponding author with comments and recommended revisions. Though the peer review process may in general take six to eight weeks after submission of the manuscript, more time may be needed to finalize the review process.  Failure to resubmit the revised manuscript within five weeks is regarded as a withdrawal. The corresponding author must indicate clearly what alterations have been made in response to the referee’s comments point by point. Acceptable reasons should be given for noncompliance with any recommendation of the referees. Once accepted, original articles will be published in order.

**🗏 Important note:**

1. All fields should be completed by authors

2. Article similarity (plagiarism) should be less than 15%

3. All references should be written based on the journal guide and also with the EndNote software (the EndNote file of the journal is prepared and can be downloaded from the journal site) and linked to the text

4. Articles should be in the form of an A4 (Width equal to 21 cm and height equal to 29.7 cm), with a margin of 2.5 cm on all four sides

5. Although the main text of journal articles is two columns, authors must submit their articles to the journal from one column in one word file including figures and tables

***Cell. Mol. Biol.*: Instructions for Authors**

***1.* *General***

***1.1* *Conditions of acceptance***

Submission of a manuscript implies that the work has not been published and is not submitted for publication anywhere else. All authors must approve the publication. Authors should accept publication fees.

***1.2* *Conflict of interest***

We request all authors and reviewers to inform us about any kind of “Conflict of Interest” (such as financial, personal, political, or academic) that would potentially affect their judgment. Authors are preferably asked to fill out the uniform disclosure form available through:

(http://www.icmje.org/coi\_disclosure.pdf)

Find out more: [publicationethics.org/competinginterests](https://publicationethics.org/competinginterests)

***1.3 Ethics for animal experiments and medical studies***

Experiments should be carried out in accordance with the guidelines laid down by the International Animal Ethics Committee or institutional ethics committee and in accordance with local laws and regulations. Authors are requested to indicate ethical declarations in the Experimental section.

***1.4 Publication fees***

The publication fee for manuscripts submitted is 450 Euros for normal evaluation and 1000 Euros for fast evaluation per paper.

**🗏 Important Note:**

The authors of the articles should note that before submitting an article to this journal, they should be fully aware of the conditions and if they have submitted an article, they can only request to withdraw the article before the scientific acceptance. If the article is scientifically accepted, the authors do not have the right to cancel or withdraw the article unless they pay a review fee of 450 Euros.

 ***1.5 Open access***

All articles published by ***Cell. Mol. Biol.*** are made freely and permanently accessible online immediately upon publication, without subscription charges or registration barriers. Authors are the copyright holders of their articles.

***2. Types of papers***

***Cell. Mol. Biol.*** Publishes original articles, reviews, short communications, methods, meta-analysis notes, letters to the editor and comments.

***3. Presentation of manuscripts***

Use Times New Roman 12 with 1.5 line spacing throughout the manuscript. Tables and figures should not be included in the main manuscript. Italics should be used in the text for all scientific names and other terms such as genes, mutations, genotypes and alleles. SI units should be used throughout the manuscript.

***3.1 Article structure***

Manuscripts should be prepared according to the following order

* Title
* Highlights
* Abstract and 5–7 keywords
* Introduction
* Material and Methods
* Results
	+ Tables (up to 5)
	+ Figures (up to 5) & Figure Legends
* Discussion
* Conclusions
* References (up to 35)
* Declaration
* Acknowledgements

***3.2 Title page***

**Title:** Concise and informative, avoid abbreviations and formulas where possible

**Running title:** A short title to repeat it on all pages.

**Author names and affiliations:** List of all authors with full given and family names (not capitalized), addresses of all authors, and name of corresponding author with e-mail address.

***3.3 Highlights***

Highlights are three to five short sentences that represents the novel results of your article as well as new methods if you have used during the study. No needs to include all concepts, impressions and conclusions as highlights. It has to be about 80 characters or fewer including spaces.

***3.4 Abstract***

The abstract should be concise and factual and written in a single paragraph. It should state briefly the purpose of the research the principal results and major conclusions. References and abbreviations should be avoided but if essential they must be defined at their first mention in the abstract itself. The maximum number of words in the abstract should be 300 words.

**Keywords:** A maximum of 5 to 7 specific keywords is required

***3.5 Introduction***

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

***3.6 Materials and Methods***

 The materials and methods section should include the design of the study, the type of materials involved, a clear description of all comparisons, and should be concise but sufficient for repetition by other qualified investigators. Methods already published should be indicated by a reference: only relevant modifications should be described.

***3.7 Results***

Results should be clear and concise.

**3.7.1 Tables**

Authors should use tables only to achieve concise presentation or where the information cannot be given satisfactorily in other ways. Tables should be numbered consecutively using Arabic numerals and should be in the text itself at an appropriate place not at the end or as a separate attachment. Each table should have an explanatory caption which should be as concise as possible. Also, tables should be cited upon first appearance in the maintext.

**3.7.2 Figures & Figure Legends**

Authors may use line diagrams and photographs to illustrate these from their text. The figures should be clear, easy to read and of good quality. Styles and fonts should match those in the main body of the article. Lettering and lines should be of uniform density and the lines unbroken. Axis labels should be in bold face. Units should be placed next to variables in parentheses. All figures must be in the text itself appropriate place not at the end or as a separate attachment. Figure legneds must be inserted below the figure. A figure label with Arabic numerals, and “Figure” abbreviated to “Fig” (e.g. Fig. 1, Fig. 2), which must be also inserted in the maintext.

 ***3.8 Discussion***

This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

***3.9 Conclusions***

The main conclusions of the study should be presented in this section.

***3.10 References***

The references section must include all relevant published works and all listed references.

***3.11 Acknowledgements***

All contributors who do not meet the criteria for authorship as defined above should be listed in an acknowledgements section. Examples of those who might be acknowledged include a person who provided purely technical help, or writing assistance, or a department chair who provided only general support.

***At the end, you will see the writing format in detail***

*(Title page)*

**Type of Manuscript: Original Article**

# Title of Manuscript: (Font; Times New Roman 14 Bold)

**Running title:** No more than 50 characters.

**Author names and affiliations**

**Highlights:** three to five short sentences, about 80 characters or fewer including spaces.

*(next page)*

**Abstract (Font; Times New Roman 11 Bold)**

Text for this section of the abstract (Font; Times New Roman 11 Regular).

**Keywords:** 5 to 7 keywords to describe your manuscript subject

Taken from the Mesh and PubMed websites and Sort alphabetically.

*(Main Text)*

**🗏 Before the text of the first line of all paragraphs should be dented by half a centimeter**

**🗏 All main and sub-titles of the main text of the article should be numbered.**

# 1. Introduction (Font; Times New Roman 11 Bold)

Text for this section (Font; Times New Roman 11 Regular)

# 2. Material and Methods (Font; Times New Roman 11 Bold)

**2.1. Sub-heading for this section(Font; Times New Roman 11 Bold)**

Text for this sub-section. (Font; Times New Roman 11 Regular)

## 2.2. Sub-heading for this section(Font; Times New Roman 11, Bold)

Text for this sub-section. (Font; Times New Roman 11 Regular)

**2.3. Sub-heading for this section** **(Font; Times New Roman 11 Bold)**

Text for this sub-section. (Font; Times New Roman 11 Regular)

# 3. Results (Font; Times New Roman 11 Bold)

**3.1. Sub-heading for this section****(Font; Times New Roman 11 Bold)**

 Text for this sub-section. (Font; Times New Roman 11 Regular)

**3.2. Sub-heading for this section****(Font; Times New Roman 11 Bold)**

Text for this sub-section. (Font; Times New Roman 11 Regular)

**3.3. Sub-heading for this section****(Font; Times New Roman 11 Bold)**

Text for this sub-section. (Font; Times New Roman 11 Regular)

# Figures & Figure Legends

All Figures/images should be inserted within the text as close as possible to where they are referenced (Fig. 1). Authors should not upload them as separate files.



**Fig. 1.** The protein structure (Font; Times New Roman 12)(reference)

Picture resolution= 200 dpi

**🗏 The bottom titles of the figures should be in the middle.**

**🗏 If your pictures are not based on your research you have to cite the reference that you used.**

**🗏 Note: The number of figures in each article should not exceed 5.**

# Tables

All Tables should be inserted within the text as close as possible to where they are referenced (Table 1). Authors should not upload them as separate files.

**Table 1.** Effect of temperature on pupation of *S. littoralis* (Font; Times New Roman 10)

|  |  |  |
| --- | --- | --- |
| **S.O.V** | **DF** | **Mean Squares** |
| **Health plantlet** | **Survive plantlet** |
| Culture Method | 1 | 3.6 ns | 160.9\* |
| Explant Type | 3 | 94.6\*\* | 3275\*\* |
| Culture Method× Explant Type | 11 | 3.03\* | 173.5\* |
| Error | 60 | 1.9 | 74.3 |
| CV (%) | - | 15.1 | 19.6 |

\*, \*\* significant and 5 and 1 percent, respectively, ns; non-significant. The data in the table are the means ± SE. Different letters in the same column indicate significant differences at P < 0.05

**🗏 Tables should not have lines between their rows.**

**🗏 The top and bottom titles of the tables should be in the middle.**

**🗏 Note: The number of tables in each article should not exceed 5.**

# 4. Discussion

Text for this section (Font; Times New Roman 11 Regular)

# 5. Conclusions

Text for this section (Font; Times New Roman 11 Regular)

**Abbreviation**

Authors should write full words or phrases, abbreviated in the article text, in this section.

**Conflict of interest**

All authors have to declare their conflict of interest.

**Consent for publications**

All authors have to write this sentence that they read and approved the final manuscript for publication.

**Ethics approval and consent to participate**

The authors have to declare that they do not use humans or animals in their research but if they do, they have to write the name of the ethics committee that has approved the study of enter the code of research ethics (provided by the institution or university where the research was conducted) in the article.

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(Prepared Based on ICMJE's Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals).

In ***Cell. Mol. Biol***, when reporting experiments on human subjects, authors should indicate whether the procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2013. If doubt exists whether the research was conducted in accordance with the Helsinki Declaration, the authors must explain the rationale for their approach and demonstrate that the institutional review body explicitly approved the doubtful aspects of the study. When reporting experiments on animals, authors should indicate whether the institutional and national guide for the care and use of laboratory animals was followed.

**🗏 Informed Consent in Patients and Study Participants**

(Prepared Based on ICMJE's Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals)

In ***Cell. Mol. Biol***, patients have a right to privacy that should not be violated without informed consent. Identifying information, including names, initials, or hospital numbers, should not be published in written descriptions, photographs, or pedigrees unless the information is essential for scientific purposes and the patient (or parent or guardian) gives written informed consent for publication. Informed consent for this purpose requires that an identifiable patient be shown the manuscript to be published. Authors should disclose to these patients whether any potential identifiable material might be available via the Internet as well as in print after publication. Patient consent should be written and archived either with the journal, the authors, or both, as dictated by local regulations or laws.

Nonessential identifying details should be omitted. Informed consent should be obtained if there is any doubt that anonymity can be maintained. For example, masking the eye region in photographs of patients is inadequate protection of anonymity. If identifying characteristics are altered to protect anonymity, such as in genetic pedigrees, authors should provide assurance, and editors should so note that such alterations do not distort scientific meaning. When informed consent has been obtained, it should be indicated in the published article.

**Informed Consent**

All patients and participants in a research project should be thoroughly informed about the aims of the study and any possible side effects of the drugs and interventions. Written informed consent from the participants or their legal guardians is necessary for any such studies. The Journal reserves the right to request the related documents. Articles that require informed consent should contain related statements in the “Methods” section.

**Availability of data and material**

The authors have to declare that they embedded all data in the manuscript.

**Authors' contributions**

In "Authors’ Contribution", the authors’ first and last names must be written only by the first letter. Please write meaningful and complete sentences and do not use ambiguous phrases such as "No" or "None Declared".

All authors should write their part in designing the idea, doing, analyzing and writing the article**.**

**Funding**

Authors should mention the company, institution or organization that paid for the research

**Acknowledgement:**

If necessary, the authors can thank people or institutions that have provided them with scientific or material assistance in doing and writing the article.

# References

The maximum number of references should be 35 titles.

All references should have doi.

Arrange references as a simple list here by using the EndNote.

All references have to be hanging with 0.5 cm (The first line of each reference entry is aligned flush with the left margin and each subsequent line has a hanging indent of 0.5 cm) (Font; Times New Roman 12 Regular)

**🗏 Reference validity**

**Based on the Journal Policy (Crossref Reference Validation), at least 80% of the references must be included from valid sources and have DOI (or PubMed, PMID or PMC IDs). Please write the references and try to use more valid references.**

**Note: The number of references must be a maximum of “35”, and on the other hand, all references must have a “doi”. No reference without “doi” in the article will be accepted.**

**Note: Authors are not allowed to cite their previous articles for more than 5 references**

**Examples:**

**References** - In the text, number references in order of appearance using Arabic numerals [e.g. 1, 2, 3] in parentheses for citations. Multiple citations within a single set of brackets should be separated by commas. Where there are three or more sequential citations, they should be given as a range [2,3-7,15]. List the references at the end of the paper in numbered order. The list should contain at least fifteen references and should be arranged in the order of citation in the text. References to articles must include: 1. name(s) and initials of author(s), if more than six (6) authors add an *et al.* after the sixth author.; 2. title of the paper; 3. title of the journal abbreviated in the standard manner (see Index Medicus/Pubmed); 4. publication year; 5. volume number; 6. first and last page numbers of the article (references to online articles should have the same structure and additionally the appropriate web address following page numbers).

Important: Reference numbers should be linked to the reference list. Journal names are abbreviated according to ***Cell. Mol. Biol.***. Authors are fully responsible for the accuracy of the references.

**Journal**

1. Hakimian H, Rezaei-Zarchi S, Javid A (2021) The Toxicological effect of Cuscuta epithymum and Artemisia absinthium species on CP70 ovarian cancer cells. Int J Adv Biol Biomed Res:-. doi:10.22034/ijabbr.2021.526486.1355

2. Abbas G, Murtaza B, Bibi I, Shahid M, Niazi NK, Khan MI, Amjad M, Hussain M (2018) Arsenic uptake, toxicity, detoxification, and speciation in plants: physiological, biochemical, and molecular aspects. Int J Environ Res Public Health 15: 59. doi:https://doi.org/10.3390/ijerph15010059

3. Hall J, Soole K, Bentham R (2011) Hydrocarbon phytoremediation in the family Fabaceae--a review. Int J Phytoremediation 13:317-332. doi:10.1080/15226514.2010.495143

**Conference**

4. Abbasi-Moghadam J, Shahriari A, Fazeli-Nasab B (2017) Investigation of bacteria and fungi populations associated with airborne dust during ‘’wind of 120 days’’ blowing in the urban areas of Sistan plain. Paper presented at the 15th Iranian Soil Science Congress, Isfahan University of Technology, Isfahan, Iran, Congress COI: SSCI15, Article COI: SSCI15\_687,

5. Ali-Soufi M, Shahriari A, Shirmohammadi E, Fazeli-Nasab B (2017) Investigation of biological properties and microorganism identification in susceptible areas to wind erosion in Hamoun wetlands. Paper presented at the Congress on restoration policies and approaches of Hamoun International Wetland Zabol

**Book (book Chapter and book section)**

6. Fazeli-Nasab B, Sayyed RZ (2019) Plant Growth-Promoting Rhizobacteria and Salinity Stress: A Journey into the Soil. In: Sayyed RZ, Arora NK, Reddy MS (eds) Plant Growth Promoting Rhizobacteria for Sustainable Stress Management: Volume 1: Rhizobacteria in Abiotic Stress Management. Springer Singapore, Singapore, pp 21-34. doi:https://doi.org/10.1007/978-981-13-6536-2\_2

7. Rasouli H, Popović-Djordjević J, Sayyed RZ, Zarayneh S, Jafari M, Fazeli-Nasab B (2020) Nanoparticles: A New Threat to Crop Plants and Soil Rhizobia? In: Hayat S, Pichtel J, Faizan M, Fariduddin Q (eds) Sustainable Agriculture Reviews 41: Nanotechnology for Plant Growth and Development. Springer International Publishing, Cham, pp 201-214. doi:https://doi.org/10.1007/978-3-030-33996-8\_11

**Web**

8. AMFEP (2015) Association of manufacturers and formulators of enzyme products. List of commercial enzymes. <http://www.amfep.org/content/list-enzymes>.

# Appendix

# *Appendix 1 – Sample title*

Descriptions text

# *Appendix 2 – Sample title*

Descriptions text

**🗏 Please insert the type of your manuscript on top of the Title Page and Main Manuscript.**

**1 Review Article**

These articles consist of Systematic Review, Meta-analysis, Systematic Reviews and Meta-analysis, Meta-Synthesis, Scoping Review, Literature Review, and Narrative Review. These articles may be up to 7000 words excluding abstracts, tables, and references. Inclusion and exclusion criteria for studies should be described in a flow diagram. The specific type of study or analysis, intervention, population, exposure, outcomes or tests should be described for each data source or article. Authors are to clearly cover the following topics in the method section: search strategy and selection criteria, data extraction, quality assessment, and data analysis. A single paragraph abstract is required that should include: Background; Methods and Analysis; Discussion; Registry and number (if the protocol of these articles had been registered in a registry system).

For these articles, authors need to complete and include a PRISMA-P checklist (please find it at <http://prisma-statement.org/prismastatement/Checklist.aspx>) and upload it as a supplementary file. Authors MUST ensure that all points are included and state page numbers where each item can be found.

**2. Study Protocol**

***Cell. Mol. Biol.*** welcomes study protocols for any study design. We will not consider the manuscript if the data collection is complete. Protocols for studies that will require ethical approval, such as trials, will not be considered without receiving the approval. By publishing your study protocol at the ***Cell. Mol. Biol.***, you are not committed to submitting subsequent reports of the study to ***Cell. Mol. Biol.***,although we do welcome such submissions.

Study protocols should be a maximum of 5000 words (excluding abstract, figures, tables, and references) and cover the following components:

* Title: this should include the specific study type, e.g. randomised controlled trial.
* Abstract: this should be a single paragraph including Background; Methods and Analysis; Discussion; Registry and number (if the protocol had been registered in a registry system).
* Background: explain the rationale for the study and the gap in the literature it may fill.
* Methods and Analysis: provide a thorough description of the study design, including sample selection; interventions to be measured; the sample size calculation; procedures, measurements and analytical techniques; a data analysis plan.
* Discussion: discuss how the methods and statistics will meet the study aims.

We recommend registering the protocol in [PROSPERO](https://www.crd.york.ac.uk/PROSPERO/) (https://www.crd.york.ac.uk/PROSPERO). This makes the review process for these articles faster as they have already passed a review process.

**3. Original Article**

These articles must be of primary research, methodologically accurate, and relevant to international health policy and management. They should contain no more than 7000 words excluding structured abstracts, tables, and references. Each manuscript should clearly state an objective or hypothesis; the design of the study and methodology (including study setting, patients or participants, inclusion and exclusion criteria, sampling and data source); data analysis and interpretations; the main results of the study, discussing the results; addressing study limitations and the conclusion. The abstract should be concise and factual and written in a single paragraph. It should state briefly the purpose of the research the principal results and major conclusions. References and abbreviations should be avoided but if essential they must be defined at their first mention in the abstract itself. The maximum number of words in the abstract should be 300 words. Highlights are required. Highlights are three to five short sentences that represents the novel results of your article as well as new methods if you have used during the study. No needs to include all concepts, impressions and conclusions as highlights. It has to be about 80 characters or fewer including spaces. You can submit your manuscript using the **Sample Word Template**.

**4. Short Communication**

Short communications are short articles (mini original articles) that present original and important preliminary findings that do not warrant publication as full-length articles but are still worthy of publication. Short communications should have an un-structured abstract and should not be more than 4000 words including references and up to three tables or figures. The main text should be sub-divided into background, methods, results, and discussion, but should be written as concisely as possible. To maintain brevity, these articles do not need key messages.

**5. Commentary**

These articles are invited to selected ***Cell. Mol. Biol.*** publications mainly from leading scholars in the field. Authors of the lead article and editors decide whom to invite. These types of articles should not be more than 2000 words including maximum 2 figures or tables with an unstructured abstract.

**6. Correspondence**

These articles are mainly written in response to published commentaries by authors whose articles have been subject to commentaries. These types of articles should not exceed 1000 words including maximum 1 table or figure, references and the main text. No abstract is required for these articles.

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