

Review Form 3

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| Journal Name: | Asian Journal of Biotechnology and Genetic Engineering |
| Manuscript Number: | Ms_AJBGE_123439 |
| Title of the Manuscript: | Impact of <i>Thymus vulgaris</i> on the embryonic development of chicken eggs |
| Type of the Article | Original Research Article |

Review Form 3

PART 1: Review Comments

| Compulsory REVISION comments | Reviewer's comment | Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i> |
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| <p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p> | <p>The manuscript holds significance for the scientific community by contributing to the growing body of research on the potential benefits of natural additives in poultry production. The study's focus on <i>Thymus vulgaris</i>, a widely available herb with known medicinal properties, adds to its relevance. The findings offer insights into the positive effects of thyme extract on embryonic development, which could have practical implications for improving poultry breeding practices and promoting sustainable agriculture.</p> <p>I appreciate this manuscript for its clear and concise presentation of the research. The study design is well-structured, and the methodology is described in sufficient detail. The results are presented systematically, and the conclusions are supported by the data. The manuscript also highlights the potential applications of the findings, which adds to its overall value. The discussion could be enhanced by exploring the possible mechanisms underlying the observed effects of thyme extract on embryonic development.</p> | |
| <p>Is the title of the article suitable? (If not please suggest an alternative title)</p> | <p>The title is suitable for the article. It accurately reflects the core focus of the research, which is to investigate the effects of thyme extract on the developmental process in chicken embryos. The title is also concise and informative, effectively conveying the key subject matter of the study.</p> | |
| <p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p> | <p>The abstract of the article provides a reasonably comprehensive overview of the study's key points. It effectively summarizes the aims, study design, methodology, results, and conclusions. The abstract accurately reflects the focus on the effects of <i>Thymus vulgaris</i> extract on embryonic development in chicken eggs, highlighting the positive influence on survival, growth, and development. The mention of specific assessment points (days 8, 14, and 21) and the observation of enhanced organ differentiation and activity further contribute to the comprehensiveness of the abstract.</p> | |
| <p>Are subsections and structure of the manuscript appropriate?</p> | <p>The subsections and structure of the manuscript are generally appropriate for an original research article. The manuscript follows a standard format that includes an Abstract, Introduction, Material and Methods, Results and Discussion, and Conclusion. This structure allows for a clear and organized presentation of the research. The subsections within each section are also logical and facilitate easy navigation through the content. There is room for improvement in the organization of the Results and Discussion section. The results are currently categorized based on the specific days of embryonic development (Days 1, 8, 14, and 21). While this approach provides a chronological overview, it might be beneficial to also organize the results based on specific developmental parameters (e.g., organ differentiation, vascularization, activity levels). This would allow for a more focused discussion of the effects of thyme extract on different aspects of embryonic development. The Material and Methods section could benefit from a clearer separation between the description of plant material and extraction procedures and the preparation and incubation of eggs. This would enhance the readability and clarity of this section. The manuscript's structure is sound, and the subsections are generally appropriate. However, minor adjustments in the organization of the Results and Discussion section and the Material and Methods section could further improve the clarity and flow of the manuscript.</p> | |
| <p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p> | <p>The manuscript demonstrates scientific robustness and technical soundness in several ways. The study design is experimental, involving a control group and an experimental group, which allows for a direct comparison of the effects of thyme extract. The methodology is described in detail, including the preparation of the thyme extract, the incubation conditions, and the assessment methods. The results are presented clearly and are supported by references to previous research. The conclusions are drawn directly from the data and are consistent with the study's objectives. The authors also acknowledge the limitations of their study and suggest areas for future research, which further strengthens the scientific validity of the manuscript.</p> | |

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| <p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>-</p> | <p>The references in the manuscript are generally sufficient and relevant to the research topic. The authors have cited a range of studies that support their findings and provide context for their work. The references include both classic and contemporary works, indicating a good understanding of the field. The majority of the references are also relatively recent, which is important in a rapidly evolving field like poultry science. There is room for improvement in terms of the recency and comprehensiveness of the references. Some of the references are relatively old, and there may be more recent studies that could be included to provide a more up-to-date perspective. Additionally, the reference list could be expanded to include more studies on the specific effects of thyme extract on embryonic development in poultry. Suggestions for additional references:</p> <ul style="list-style-type: none">a) Authors could include more recent studies that specifically investigate the impact of thyme extract or its components on embryonic development, hatchability, or chick performance in poultry.b) Authors could include references to studies that explore the potential mechanisms by which thyme extract exerts its beneficial effects on embryonic development. This could include research on the antioxidant, antimicrobial, or anti-inflammatory properties of thyme and their impact on cellular and molecular processes during embryogenesis.c) A authors could include recent reviews that discuss the use of natural additives, including herbal extracts, in poultry production. This would provide a broader context for their research and highlight the potential of thyme extract as a natural alternative to synthetic additives. <p>By incorporating these additional references, the authors could further strengthen the scientific rigor and relevance of their manuscript.</p> | |
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| <p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p> | <p>The language quality of the article are generally suitable for scholarly communication. The authors present their research in a clear and concise manner, using appropriate scientific terminology. The grammar and sentence structure are mostly correct, and the overall flow of the text is smooth. The article adheres to the conventions of scientific writing, making it accessible to the intended audience. However, there is room for improvement in the language quality. There are occasional instances of awkward phrasing or minor grammatical errors that could be corrected to enhance the clarity and professionalism of the writing. Some sentences could be simplified or restructured to improve readability. The English quality of the article are adequate for scholarly communication, but minor revisions could further enhance the clarity and effectiveness of the writing.</p> | |
| <p>Optional/General comments</p> | <p>The manuscript presents an interesting investigation into the potential benefits of Thymus vulgaris extract on the embryonic development of chicken eggs. The study is well-designed and the methodology is sound, providing valuable insights into the positive effects of thyme on embryo survival, growth, and organ differentiation. The findings have practical implications for the poultry industry, suggesting that thyme extract could be a natural and effective way to enhance embryo health and development. The manuscript is generally well-written and the data is presented clearly. However, there is room for improvement in the discussion and conclusion sections, which could be expanded to explore the potential mechanisms underlying the observed effects and to discuss the broader implications of the findings. the manuscript could benefit from a more thorough review of the literature, particularly in relation to the use of natural additives in poultry production. Thus, the manuscript makes a valuable contribution to the field and has the potential to stimulate further research in this area.</p> <p>The manuscript presents a well-structured study with a clear focus and methodology. The research question is relevant, and the findings contribute to the understanding of the potential benefits of natural additives in poultry production. However, there are several areas that require improvement before the manuscript can be considered for publication. The primary areas for revision include:</p> <ol style="list-style-type: none"> 1) The discussion could be expanded to explore the potential mechanisms underlying the observed effects of thyme extract. The conclusion should also discuss the broader implications of the findings and potential future research directions. 2) The literature review could be more comprehensive, particularly in relation to the use of natural additives in poultry production. 3) The manuscript should explicitly address any ethical considerations related to the use of animals in research. 4) While the language is generally clear, there is room for improvement in terms of grammar, sentence structure, and overall clarity. <p>Addressing these issues would significantly strengthen the manuscript and increase its chances of publication. The research itself is valuable, and with appropriate revisions, the manuscript could make a significant contribution to the field.</p> <p>The manuscript does not explicitly mention any ethical considerations or approvals related to the use of animals in research. The study involved the use of fertilized chicken eggs, which, depending on the stage of development and specific regulations, may require ethical oversight. The authors should address the following ethical issues:</p> <ol style="list-style-type: none"> a) The manuscript should state whether the study adhered to any relevant animal welfare guidelines or regulations. It should also describe any measures taken to minimize any potential harm or distress to the embryos. b) Authors should indicate whether the study received ethical approval from an appropriate institutional animal care and use committee or ethics board. If such approval was obtained, the relevant details (e.g., approval number, date) should be provided. c) The manuscript should specify the source of the fertilized eggs used in the study. If the eggs were obtained from a commercial hatchery or farm, the authors should ensure that the supplier adheres to ethical and sustainable practices. <p>Addressing these ethical considerations would strengthen the manuscript and demonstrate the authors' commitment to responsible research conduct.</p> | |

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PART 2:

| | Reviewer's comment | Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i> |
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| Are there ethical issues in this manuscript? | <i>(If yes, Kindly please write down the ethical issues here in details)</i> | |

Reviewer Details:

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