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Journal Name:	**Journal of Advances in Biology & Biotechnology**
Manuscript Number:	**Ms_JABB_119298**
Title of the Manuscript:	**Classical and Molecular Methods of Identification as well as Estimating Nematodes: A Comparative Review**
Type of the Article	**Comparative review article**

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty'**, provided the manuscript is scientifically robust and technically sound.
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PART 1: Review Comments

	Reviewer's comment	**Author's comment** *(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)*
Compulsory REVISION comments **1. Is the manuscript important for scientific community?** (Please write few sentences on this manuscript) **2. Is the title of the article suitable?** (If not please suggest an alternative title) **3. Is the abstract of the article comprehensive?** **4. Are subsections and structure of the manuscript appropriate?** **5. Do you think the manuscript is scientifically correct?** **6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.** **(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)**	1.The article "Classical and Molecular Methods of Identification as well as Estimating Nematodes: A Comparative Review" addresses the critical issue of nematode identification, a vital aspect in agriculture due to the economic losses these pest's cause. The abstract effectively sets the stage by highlighting the increasing prevalence of nematodes under changing climatic conditions and the need for accurate identification to manage these pests effectively. The authors argue convincingly for the integration of both conventional and molecular techniques to enhance nematode identification and classification. Introduction The introduction provides a comprehensive overview of nematodes, their historical context, and their significance in various ecosystems, particularly agriculture. It underscores the importance of nematode identification and the challenges posed by their diversity and adaptability. The historical references to Vedic texts and the wide range of habitats nematodes occupy are particularly engaging, providing a rich context for the discussion. Extraction Methods The detailed enumeration of extraction methods is a strong point of this review. The authors present a clear and structured comparison of various techniques for isolating nematodes from soil, plant material, and cysts. The inclusion of historical methods alongside modern approaches offers a valuable perspective on the evolution of nematode extraction techniques. However, while the tabular presentation is informative, a more critical evaluation of the relative effectiveness and practical applications of these methods would enhance the review. Conventional and Molecular Methods The article excels in comparing classical and molecular methods of nematode identification. The authors list several conventional morphological criteria and molecular techniques, such as PCR, DNA microarrays, and barcoding. They provide a balanced view of the advantages and disadvantages of each method, emphasizing the importance of integrating both approaches for more accurate identification. The review could benefit from more specific examples of how these methods have been successfully applied in recent studies, potentially offering a more practical guide for researchers in the field. Comparative Analysis The comparative tables and figures are well-constructed, providing a clear visual summary of the techniques and their applications. The comprehensive list of nematode species identified using various molecular techniques is particularly useful. However, the review would be strengthened by a deeper discussion of the limitations of these techniques, such as issues related to geographic variation, environmental factors, and the potential for misidentification. Conclusion The conclusion effectively summarizes the key points and reinforces the necessity of using both conventional and molecular methods for nematode identification. The authors highlight the dynamic nature of taxonomy and the ongoing need for integrating new technologies to address the challenges posed by nematode diversity. The discussion on the importance of molecular approaches in overcoming the limitations of phenotypic traits is particularly insightful. 2. title of article The current title "Classical and Molecular Methods of Identification as well as Estimating Nematodes: A Comparative Review" is clear but somewhat lengthy. Here are a few alternate titles that may be more concise and engaging:	

	"Comparative Review of Classical and Molecular Techniques for Nematode Identification" "Nematode Identification and Estimation: Classical vs. Molecular Methods" "Advances in Nematode Identification: Classical and Molecular Approaches" "Classical and Molecular Methods in Nematode Taxonomy: A Review" "Integrating Classical and Molecular Techniques for Nematode Identification" Each of these titles maintains the essence of the original but aims for a more succinct and compelling presentation. 3. The abstract of the article "Classical and Molecular Methods of Identification as well as Estimating Nematodes: A Comparative Review" is fairly comprehensive but could be enhanced for clarity and completeness. Here's a breakdown: Strengths: Contextual Background: The abstract clearly outlines the impact of changing climatic conditions on the evolution and emergence of new nematode species, particularly in agriculture. Problem Statement: It highlights the economic losses caused by nematodes, emphasizing the need for proper management practices. Focus: The abstract mentions the necessity of identifying nematodes through conventional and molecular approaches. Keywords: The inclusion of keywords helps in indexing and discovering the article. Areas for Improvement: Specificity: The abstract could benefit from specific examples or findings from the review. Mentioning key molecular methods that have proven useful could provide more insight. Objectives: Clearly stating the main objectives or questions the review aims to address would add clarity. Comparative Analysis: It would be helpful to briefly mention the outcomes of the comparative analysis between conventional and molecular techniques. Results and Conclusions: Summarizing key findings or conclusions drawn from the review would provide a more comprehensive understanding of the article’s contributions. 4. Manuscript is well-structured with clear sections covering various aspects of nematode identification and estimation. 5. manuscript provides a comprehensive overview of classical and molecular methods for identifying and estimating nematodes. Overall, it appears to be scientifically correct, but there are a few areas where clarification or additional information could enhance its precision and readability. Here are some suggestions: Abstract First Sentence: Consider rephrasing for clarity, such as "Changing climatic scenarios and harsh ecological conditions are driving various organisms to evolve and adapt in different ways." Nematode Impact: Specify the types of economic losses caused by nematodes (e.g., crop yield reduction, quality degradation). Introduction Historical Context: The mention of nematodes in Vedas and ancient texts is interesting, but ensure it is accurately referenced and relevant to the scientific context. Diversity and Adaptation: Highlight specific examples of nematode adaptability to various extreme environments, as this underscores their resilience and significance. Extraction Methods Tables: Ensure tables are clearly formatted and correctly referenced in the text. Isolation Techniques: Briefly explain the principles behind some of the methods for readers unfamiliar with them.	

	Conventional and Molecular Methods Detailed Descriptions: While the section is comprehensive, ensure that each method's description includes its applicability and limitations. For instance, how certain methods are better suited for specific nematode species. Comparative Analysis: Strengthen the comparative analysis by adding more recent examples and case studies where molecular methods significantly advanced nematode identification. Conclusion Taxonomy and Identification: Emphasize the importance of integrating molecular techniques with traditional taxonomy to improve nematode identification accuracy. Future Directions: Suggest future research directions, such as advancements in genomic techniques or integrating AI with molecular methods for better identification and classification. References Consistency: Ensure all references are consistently formatted according to the journal's guidelines. Completeness: Double-check that all references cited in the text are included in the reference list and vice versa. Additional Considerations Language and Style: Simplify complex sentences for better readability. Avoid using jargon without explanation. Figures and Diagrams: Include figures or diagrams where applicable, such as depicting the phylogenetic tree construction process or showing differences between nematode species. Overall, the manuscript is a valuable contribution to the field, and with some refinements, it can provide clear and precise information to readers. 6. References The references are extensive and well-curated, covering a wide range of studies relevant to nematode identification. However, the review could be improved by including more recent studies to reflect the latest advancements in molecular techniques. Overall Assessment This review provides a thorough and well-organized overview of nematode identification methods. It successfully argues for the integration of classical and molecular techniques to improve the accuracy and efficiency of nematode identification. While the review is comprehensive, it would benefit from a more critical analysis of the practical applications and limitations of the discussed methods. Additionally, incorporating more recent research findings could enhance the relevance and impact of the review. In conclusion, this article is a valuable resource for researchers in nematology and related fields, offering a detailed comparative analysis of identification techniques that is both informative and thought-provoking	

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Minor REVISION comments **1. Is language/English quality of the article suitable for scholarly communications?**	The language and English quality of the article "Classical and Molecular Methods of Identification as well as Estimating Nematodes: A Comparative Review" are generally clear and comprehensible. However, there are some areas that could be improved for better readability and scholarly communication: Consistency and Grammar: Ensure consistent usage of terms and correct grammatical structures. For example, "nematode is one of the unnoticed categories" should be "nematodes are one of the unnoticed categories." Also, ensure consistent capitalization (e.g., "Nematode" vs. "nematode"). Clarity and Precision: Some sentences are long and complex, which can obscure the meaning. Breaking them into shorter, clearer sentences can help. For instance, "Due to monotonous crop protection practices in some of the areas as well as drastic changes in the environmental factors..." could be simplified. Formal Tone: Maintain a formal tone throughout the article. Avoid conversational phrases like "burn a hole in our pockets." References and Citations: Ensure that all references are cited correctly and consistently according to the required citation style (e.g., APA, MLA). Technical Terminology: Make sure all technical terms are defined or explained, especially if they are not commonly known. Formatting: Consistently format tables, figures, and headings. Ensure all tables and figures are clearly labeled and referenced in the text.	
Optional/General comments		

PART 2:

	Reviewer's comment	**Author's comment** *(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)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

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