ISSN: 2320-5407

International Journal of Advanced Research

Publisher's Name: Jana Publication and Research LLP

www.journalijar.com

REVIEWER'S REPORT

Manuscript No. : IJAR-51927 Date: May 26 2025

Title: COMPARATIVE ANALYSIS OF SOIL AND POTATO NEMATODE POPULATIONS FROM TWO AGRO-ECOLOGICAL ZONES

Recommendation:
Accept as it is .....
Accept after minor revision.....
Accept after major revision .....
Do not accept (*Reasons below*) .....

Rating	Excel.	Good	Fair	Poor
Originality		X		
Techn. Quality		X		
Clarity			X	
Significance			X	

Reviewer Name: dr Lakhdar Guerine **Date:** May 26 2025

Detailed Reviewer's Report

This study compares the diversity and abundance of nematodes associated with potato crops in two agro-ecological zones of Vaishali district, Bihar (Mahnar and Lalganj). Both plant-parasitic and free-living nematodes were extracted from rhizospheric soil and root samples using Cobb's sieving and decanting method and the Baermann funnel technique. The most frequently identified genera include:

- Plant-parasitic: *Meloidogyne*, *Hoplolaimus*, *Helicotylenchus*, etc.
- Free-living: *Rhabditis*, *Mononchus*, *Dorylaimus*, etc.

Mahnar showed higher diversity and abundance of free-living nematodes, indicating better soil health. Integrated management recommendations were proposed for both regions.

Strengths

1. **Relevant topic**: The impact of nematodes on potato cultivation is under-researched but crucial for agricultural sustainability.
2. **Clear methodology**: Systematic sampling, careful nematode extraction, and solid morphological identification.

ISSN: 2320-5407
International Journal of Advanced Research
Publisher's Name: Jana Publication and Research LLP
www.journalijar.com

REVIEWER'S REPORT

3. **Regional comparison**: Adds value to understanding local ecological dynamics.
4. **Focus on sustainable management**: Emphasizes Integrated Pest Management (IPM) rather than purely chemical approaches.
5. **Practical recommendations for farmers**: Offers concrete pre- and post-planting strategies to mitigate nematode problems.

Weaknesses

1. **Lack of in-depth statistical analysis**: No significance tests (e.g., ANOVA, t-test) were used to support regional differences.
2. **Limited to morphological identification**: No molecular analysis to confirm genera/species, which could improve taxonomic accuracy.
3. **No yield assessment**: The direct agronomic impact (yield loss due to nematodes) was not measured.
4. **Language and scientific style could be improved**: The manuscript would benefit from thorough proofreading and enhanced clarity.
5. **Lack of conceptual innovation**: While regionally useful, the study follows a conventional format with no major methodological innovation.

Recommandations : Minor revisions.
The authors should:

- Include relevant statistical analyses.
- Enrich the discussion with deeper comparisons to international literature.
- Improve the manuscript's language and formatting for clarity and professionalism.