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REVIEWER'SREPORT

Manuscript No.: IJAR-56315

Title: In Vitro Ovicidal Activity of Tabernaemontana pandacaqui (Pandakaki) Leaf Ethanolic Extract Against Ascaris lumbricoides in Varying Concentrations

Recommendation:

Accept as it is.....

✓ Accept after minor revision.....

Accept after major revision .....

Do not accept (*Reasons below*).....

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

Detailed Reviewer's Report

Strengths of the Study

- The study addresses a pertinent public health issue, particularly in resource-limited settings, byexploring a natural alternative to conventional anthelmintic drugs.
- ItdemonstratesoriginalitythroughtheinvestigationofTabernaemontanapandacaquiasanovicidal agent, which has limited prior data regarding its anti-helminthic properties.
- Themethodologyincorporatesstandardizedtechniquesforovaisolation,morphological assessment, and bioactivity evaluation, enhancing reliability.
- Resultssuggestthattheextract'sovicidalefficacyisconcentration-dependentandcomparabletoa standard drug at higher concentrations, contributing valuable insights.
- Theresearchincludesappropriatestatisticalanalyses(ANOVAandt-tests)tosupportconclusions on efficacy differences.

Weaknesses of the Study

- Thestudyislimitedtoinvitroassessmentsanddoesnotexploreinvivoefficacyorsafetyprofiles.
- The sample size for ova assessments and replicates per treatment group is not explicitly specified, which could impact statistical robustness.
- Theextractionprocessusesonlyethanolicsolvent;alternativesolventsortechniquesmightyielda higher concentration of bioactive compounds.
- Nodetailsprovidedoncontrolsfortheexperiments,suchasnegativecontrolstoaccountfornatural ova deterioration.
- Themorphologicalgradingcriteria,althoughvalidatedbyexperts,mayintroducesubjectivity; inter-rater reliability measures are not reported.
- Ethicalconsiderationsrelatedtothehandlingofbiologicalwasteandcollectionofsamplesare addressed but lack detailed documentation of ethical approval or consent protocols.
- Minortypographicalissuesandinconsistencies(e.g.,formatting,punctuation)arepresent throughout the manuscript.

ReviewerComments

- **Title and Abstract:** The title is clear and descriptive, accurately reflecting the study scope.The abstractsummarizesobjectives,methods,keyfindings,andsignificanceeffectively.However,

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includingdetailsonthesamplesizeandspecificstatisticalsignificancethresholdswouldstrengthen its clarity.

- **Introduction and Objectives:** The introduction provides sufficient background regarding soil-transmitted helminths and the rationale for exploring plant-based ovicidal agents. The objectives are clearly stated, focusing on the effects of concentration and exposure duration on ova morphology.
- **Methodology and Statistical Analysis:** The methodology involves appropriate techniques; however, specifics such as the number of ova per group, number of replicates, and detailed extractionprotocolsshouldbeincludedforreproducibility. Thecriteriaformorphologicalgrading are well-structured; validation or inter-rater reliability measures should be reported to address subjectivityconcerns. Thestatisticalanalysis(ANOVA,t-tests)issuitable;butdetailsonposthoc tests and correction for multiple comparisons are missing.
- **Results and Discussion:** The results are presented systematically with clear linkages between concentration, exposure time, and ovicidal activity.The discussion rightly highlights the significance of findings, comparing efficacy with standard drugs, and emphasizing potential for naturalalternatives. Somediscussionpointscouldbenefitfromdeeperexplorationofmechanisms of action and potential in vivo implications.
- **Conclusion and Implications:** The conclusions are consistent with the results and suggest promising avenues for future research, including optimization of extracts and in vivo trials. The practical relevance for resource-limited settings is appropriately emphasized.
- **Ethical Clearance:** Ethical considerations are discussed, including waste disposal and participant consent procedures, yet specific ethical approval numbers or institutional review board (IRB) details are absent. Clarify whether ethical clearance was obtained from an accredited ethics committee, along with approval number and date.
- **Language, Grammar, and Formatting:** The manuscript generally reads well but contains minor typographical errors and inconsistent formatting in sections and citations. Some sections (e.g., figures and tables) are not fully clear or are missing consistent references; ensuring all diagrams and data are properly labeled and formatted is necessary.
- **ReferencesandCitations:**Thereferencelistiscomprehensive,thoughsomecitationsfavorrecent and relevant literature. Ensure consistent citation formatting and verify all in-text references correspond to the reference list.

Note: Based on the content, there is no indication that ithas been previously published on the internet or in other academic sources. However, to definitively confirm originality and prevent potential plagiarism issues, I recommend running the manuscript through a dedicated plagiarism detection tool or cross-referencing with established medical databases.