

Review Form 1.7

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| Journal Name: | Asian Journal of Research in Biochemistry |
| Manuscript Number: | Ms_AJRB_111406 |
| Title of the Manuscript: | Anti-arthritic, anti-inflammatory, thrombolytic, membrane stabilizing, antifungal and cytotoxic activity of Polyscias scutellaria leaf extract: An in-vitro analysis |
| Type of the Article | Research Article |

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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) |
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| <p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</p> | <p>yes</p> <p>yes</p> <p>yes</p> <p>yes</p> <p>yes</p> <p>yes</p> | |
| <p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p> | <p>Slight language improvement is required</p> | |
| <p>Optional/General comments</p> | <p>This article presents a thorough investigation of the methanolic leaf extract of Polyscias scutellaria, highlighting its potential as a multi-functional therapeutic agent. The study covers a broad spectrum of activities, including anti-arthritic, anti-inflammatory, thrombolytic, membrane stabilizing, antifungal, and cytotoxic actions. The methodology is well-described, providing clarity on the extraction process, phytochemical screening, and various in vitro tests.</p> <p>The phytochemical screening indicates the presence of alkaloids, flavonoids, saponins, glycosides, carbohydrates, and reducing sugars in the leaf extract. The identification of these compounds contributes to understanding the potential pharmacological actions of Polyscias scutellaria. The presence of alkaloids suggests anti-inflammatory and analgesic properties, aligning with traditional uses for conditions like skin diseases, asthma, and snake bites.</p> <p>The anti-arthritic and anti-inflammatory activities of the leaf extract are notable, demonstrating significant inhibition percentages comparable to standard drugs (diclofenac sodium and acetylsalicylic acid). These findings support the traditional uses of Polyscias scutellaria in treating conditions related to inflammation, and the study's thoroughness adds credibility to the potential pharmacological applications of this plant.</p> <p>The thrombolytic activity results are impressive, with the leaf extract showing higher clot lysis compared to the standard streptokinase. This observation is particularly promising, suggesting a potential role in cardiovascular health and the development of novel thrombolytic agents. The membrane stabilizing activity and antifungal effects further enhance the pharmacological profile of</p> | |

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| | <p>Polyscias scutellaria.</p> <p>The cytotoxic activity against Artemia salina, evaluated through the brine shrimp lethality assay, indicates significant cytotoxicity, positioning Polyscias scutellaria as a potential candidate for further research in antitumor and pesticide applications.</p> <p>The article is well-organized, providing clear subsections for materials and methods, results, discussions, and ethical considerations. The inclusion of relevant references supports the scientific validity of the study. However, it would be beneficial to include information on the limitations of the study and suggestions for future research directions.</p> <p>In conclusion, this article contributes valuable insights into the pharmacological potential of Polyscias scutellaria, supporting its traditional uses and paving the way for further exploration in drug discovery. The comprehensive approach, coupled with promising results, makes this study a significant addition to the scientific literature on medicinal plants.</p> | |
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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) |
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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> | |

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