



REVIEWER'S REPORT

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Title: Analgesic & Antipyretic activity profile on *Gymnostachyum febrifugum* Benth A folk herb used in fever

Recommendation:	Rating	Excel.	Good	Fair	Poor
Accept as it	Originality		√		
	Techn. Quality		√		
	Clarity			√	
	Significance		√		

Reviewer Name: Dr. Manju M

Date: 04-03-2025

Reviewer's Comment for Publication.

1. The study provides strong evidence supporting the traditional use of *Gymnostachyum febrifugum* for treating fever and pain, demonstrating its promising therapeutic potential.
2. The observed variation in analgesic activity between single and double doses suggests that careful dose optimization is critical for maximizing the plant's therapeutic effects.
3. While the study shows positive results, further research is needed to explore the underlying mechanisms of action, long-term safety, and efficacy of *Gymnostachyum febrifugum* in humans.
4. Given its demonstrated effects and natural origin, *Gymnostachyum febrifugum* has the potential to be integrated into modern pharmaceutical practices, offering an alternative to synthetic drugs.

Detailed Reviewer's Report

1. Objective of the Study:

The study aimed to validate the antipyretic and analgesic effects of *Gymnostachyum febrifugum* (Jwarahara soppu), a plant traditionally used for treating fever and pain in local communities of the Western Ghats and coastal Karnataka, using animal models.

2. Experimental Design:

The study tested the plant's effects through two key models: Brewer's yeast-induced pyrexia (fever) in Wistar albino rats for antipyretic activity, and the Eddy's hot plate method for analgesic (pain-relieving) activity.

Rats were divided into four groups, with doses of either a standard drug (Paracetamol and Diclofenac) or the test drug (extract of the plant) administered in single or double doses.

3. Results on Antipyretic Activity:

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Both the single and double doses of the plant extract significantly reduced fever in rats compared to the control group, showing that *Gymnostachyum febrifugum* has strong antipyretic effects similar to the standard drug (Paracetamol).

4. Results on Analgesic Activity:

The plant extract exhibited a stronger analgesic effect at the single dose compared to the double dose, suggesting a dose-dependent effect where lower doses may be more effective for pain relief.

5. Conclusions and Implications:

The study confirms that *Gymnostachyum febrifugum* possesses antipyretic and analgesic properties, supporting its traditional therapeutic use. However, the varying response to analgesic activity based on dosage warrants further research to understand optimal dosing and mechanisms of action.

Applications:

1. The study supports the use of *Gymnostachyum febrifugum* in traditional medicine as an effective remedy for fever and pain, providing scientific backing for its continued use in local communities.
2. The plant's demonstrated antipyretic and analgesic properties suggest it could serve as a natural alternative to synthetic drugs like Paracetamol and Diclofenac, offering a potential for less side effects in treating fever and pain.
3. The study lays the foundation for further pharmacological research on *Gymnostachyum febrifugum*, with potential for developing new, plant-based therapeutic formulations for pain and fever management.