ISSN: 2320-5407
International Journal of Advanced Research
Publisher's Name: Jana Publication and Research LLP
www.journalijar.com
ISSN NO. 2320-5407

REVIEWER'S REPORT

Manuscript No.: IJAR-52396 Date: 21/06/2025

Title: Anti-Angiogenic Effect of Saccostrea Cucullata (Sisi) In Varying Doses to *Anas platyrhynchos domesticus* (Itik)

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	✓			

Reviewer Name: Dr. S. K. Nath Date: 21/06/2025

Reviewer's Comment for Publication:
The research convincingly demonstrates that Saccostrea cucullata extract can inhibit angiogenesis in a dose-dependent manner, especially at 50 mg/mL, with strong statistical support. These findings suggest it has potential as a natural anti-angiogenic agent for therapy, notably in cancer treatment where inhibiting blood vessel formation can restrict tumor growth.

Reviewer's Comment / Report

Strengths

1. **Clear Objective & Relevance:** The study addresses a significant biomedical area—natural anti-angiogenic compounds for cancer therapy.
2. **Methodological Rigor:** Utilizes standardized and well-established assays like CAM to evaluate angiogenesis. Employs statistically sound analysis (ANOVA) to verify dose-dependent effects.
3. **Dose-Response Evaluation:** Investigates multiple doses, establishing dose dependency, which is crucial for therapeutic considerations.
4. **Ethical & Safety Considerations:** Proper laboratory safety protocols and disposal procedures were followed.
5. **Potential for Therapeutic Development:** Demonstrates that marine-derived compounds can effectively inhibit angiogenesis, opening avenues for drug development.

Weaknesses

1. **Limited Mechanistic Insight:** The study does not delve into the biochemical pathways or molecular mechanisms by which Saccostrea cucullata inhibits angiogenesis.
2. **Lack of In Vivo Validation:** Results are confined to embryo models; further studies in mammalian systems are necessary to confirm therapeutic potential.
3. **Sample Size & Replication:** While the design includes groups of five eggs per dose, larger sample sizes could increase reliability.
4. **Standardization & Control Details:** The positive control used was ascorbic acid, but detailed comparative data weren't provided.
5. **Extraction Details:** The specifics about the extraction process, such as purity, standardization, and active constituents, are not detailed.
6. **Limited Scope of Toxicity & Side Effects:** Potential toxicity or side effects of the extract at higher doses are not addressed.
7. **Absence of Long-term Effects:** The study focuses solely on short-term inhibition in embryo models, not on long-term efficacy or safety.