REVIEWER'S REPORT

Manuscript No.: IJAR-53729   **Date: 08/09/2025**

Title: Veg Collagen from Kalonji Extract by Unique Enzymatic Hydrolysis

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: Sakshi Jaju   **Date:** 08/09/2025

Reviewer's Comment for Publication.

This study focuses on extracting plant-based collagen from Kalonji (Nigella sativa) seeds using a unique enzymatic hydrolysis method. The article explains the nutritional composition of Kalonji, including its protein, vitamins, and minerals. The process involves enzymatic hydrolysis, filtration, spray drying, granulation, and protein analysis using the Kjeldahl method. Results showed that the hydrolyzed Kalonji protein content was 71.08%, suggesting that Kalonji is a rich plant-based protein source suitable for vegetarian collagen alternatives.

Strengths:

1. Using Kalonji seeds for plant-based collagen extraction is innovative.
2. Step-by-step details of enzymatic hydrolysis and protein estimation were provided.
3. The study gives comprehensive nutritional data for Kalonji seeds.
4. Promotes vegetarian collagen sources over animal-derived collagen.

Weaknesses:

1. The article does not assess the bioavailability or collagen functionality in biological systems.
2. Results would be stronger with a comparative study.
3. Limited experimental repetitions or statistical data were reported.

Overall Assessment:

The article provides useful preliminary insights into Kalonji-based collagen but needs further research on functional properties, scalability, and clinical applications. It is suitable for publication after addressing these points. The reference and data mentioned should be revised for better understanding.

Recommendation:

Manuscript accepted for the publication after minor revision.