**Advances and opportunities in Pulsed electric field technology for preservation of fruit juices and beverages: A comprehensive review**

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**Authors’ contribution**

C Nithya: Conceptualization, Literature collection, Data organization, Investigation, Methodology, Software, Visualization, Writing –original draft

**Cover letter**

**To**  
The Editor  
Madras Agricultural Journal

**Subject:** Submission of Review Article – Advances and Opportunities in Pulsed Electric Field Technology for Preservation of Fruit Juices and Beverages: A Comprehensive Review

Dear Editor,

I am pleased to submit my review article entitled “Advances and Opportunities in Pulsed Electric Field Technology for Preservation of Fruit Juices and Beverages: A Comprehensive Review” for consideration for publication in the Madras Agricultural Journal.

This review comprehensively examines the recent advances in Pulsed Electric Field (PEF) technology as a non-thermal processing method for preserving fruit juices and beverages. With the growing demand for minimally processed, nutrient-rich, and shelf-stable beverages, PEF presents a sustainable and efficient alternative to traditional thermal pasteurization methods.

The review highlights the mechanism of microbial and enzymatic inactivation, recent technological improvements in PEF systems, and its application to a wide variety of fruit juices and beverages, including emerging products like cactus juice and milk-date beverages. The reiew also address the economic and environmental benefits of PEF, alongside current limitations and potential strategies for future optimization.

I believe this article provides valuable insights into an emerging food processing technology with significant implications for the agro-food industry, particularly in the context of environmental sustainability and value addition in horticultural produce. I trust that this work will be of interest to your readership, especially those focused on post-harvest technology, food engineering, and sustainable agricultural practices.

I confirm that the manuscript has not been published previously and is not under consideration elsewhere.

Thank you for considering my submission. I look forward to your positive response.

Sincerely,  
Nithya C  
PhD scholar ,Kerala Agricultural University, nithyac01@gmail.com