

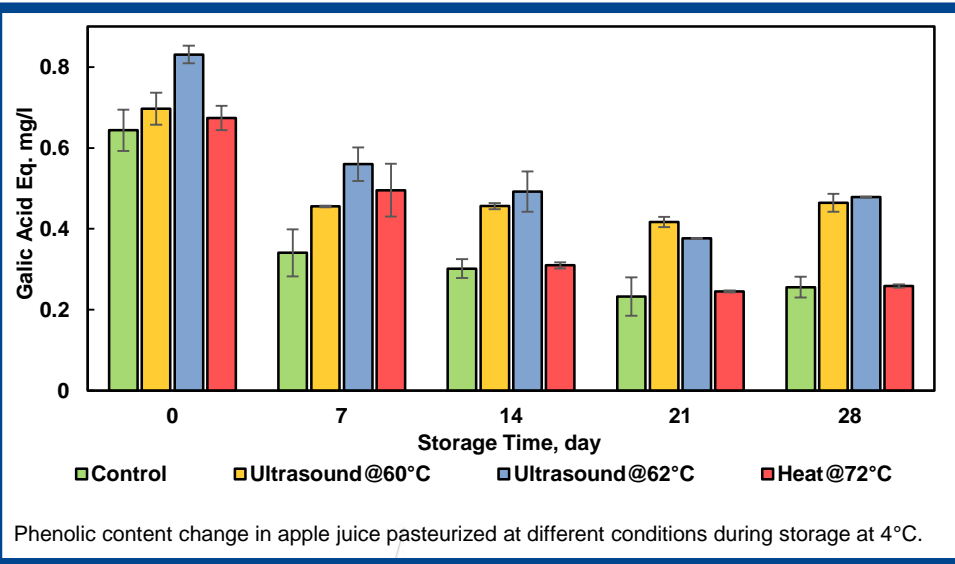


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Applied Science and Technology

*“Design and Experimental Validation of an Ultrasonic
Reactor for Rapid Pasteurization of Fruit Juices”*

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RESEARCH QUESTIONS / PROBLEMS:

Thermally pasteurized fruit juices causes considerable loss in nutritional quality and sensory attributes of juices.

METHODS:

- Designing a device for rapid sonication

RESULTS / FINDINGS:

- Rapid sonication can remarkably provide safe and stable fruit juice with higher antioxidant retention.

SIGNIFICANCE / IMPLICATIONS:

- Pasteurizing fruit juices by rapid sonication can not only sufficiently decontaminate the products but also extend their shelf life.