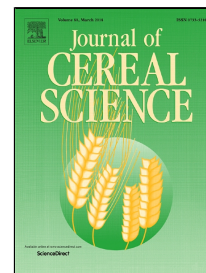


Accepted Manuscript

Ageing of rice: A review

Aruva Saikrishna, Dutta Sayantani, Subramanian Vijayalakshmi, J.A. Moses, C. Anandharamakrishnan



PII: S0733-5210(18)30194-2

DOI: 10.1016/j.jcs.2018.04.009

Reference: YJCRS 2561

To appear in: *Journal of Cereal Science*

Received Date: 05 March 2018

Revised Date: 26 April 2018

Accepted Date: 27 April 2018

Please cite this article as: Aruva Saikrishna, Dutta Sayantani, Subramanian Vijayalakshmi, J.A. Moses, C. Anandharamakrishnan, Ageing of rice: A review, *Journal of Cereal Science* (2018), doi: 10.1016/j.jcs.2018.04.009

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Ageing of rice: A review

Saikrishna Aruva, Sayantani Dutta, Vijayalakshmi Subramanian, Moses JA* and Anandharamakrishnan C

*Computational Modeling and Nano Scale Processing Unit,
Indian Institute of Food Processing Technology (IIFPT), Ministry of Food Processing Industries,
Government of India, Pudukkottai Road, Thanjavur - 613005*

ABSTRACT

Ageing is an intricate phenomenon that starts pre-harvest and lasts until consumption; though incompletely understood till date. During ageing, significant changes occur in the physicochemical, sensory, cooking and pasting properties of rice. Most changes are time and temperature dependent and their effects on grain quality are irreversible; mostly being beneficial. Aged rice has better commercial value, owing particularly to improved milling yield, higher consumer preferences in terms of cooked rice texture, flavor and associated parameters. Natural ageing through conventional processes requires undesirably long storage duration, in addition to associated higher operational and maintenance costs. Alternatively, artificial ageing of rice has been investigated by researchers to achieve similar results in lesser time and lower cost. This review discusses the changes that occur during ageing of rice, and the methods for artificial ageing. The exposition attempts to highlight the comparative evaluation of various techniques and their scopes. Important attributes to identify quality aged rice have also been included to provide an in-depth idea about the topic.

Keywords: ageing of rice; accelerated ageing; physicochemical properties; sensory.

* Corresponding author.

E-mail address: moses.ja@iifpt.edu.in (Moses JA)

Download English Version:

<https://daneshyari.com/en/article/8881298>

Download Persian Version:

<https://daneshyari.com/article/8881298>

[Daneshyari.com](https://daneshyari.com)