

Effect of accelerated ageing on physical properties of BPT 5204

SHAIK HANEEFA BEGUM AND B. ASHWIN KUMAR

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See end of the Paper for authors' affiliation

Correspondence to :

SHAIK HANEEFA BEGUM
Department of Agricultural
Engineering, Agriculture
Research Institute, Acharya
N.G. Ranga Agriculture
University, HYDERABAD (A.P.)
INDIA
Email : honey.sk020@gmail.
com

■ **ABSTRACT :** The cooking quality of rice is an important factor influencing the acceptability of consumers. The desirable properties are generally obtained by storing rice, this process known as ageing, Experiments were conducted to investigate the effect of accelerated ageing on physical characteristics of BPT 5204 variety. The samples were prepared by incubating at different temperatures *i.e.*, 90, 100, 110 and 120° C and at different times *i.e.*, 1, 3, 6, 9 hours combinations. Later, samples were stored for 6 months at room temperature. Based on the experimental studies, it was observed that the elongation, elongation ratio and hardness followed the similar trend to that of natural ageing. The temperature, time combinations with storage time significantly effected the properties of rice. The maximum elongation, elongation ratio in artificial ageing of rice was 4.73 mm and 1.655 mm obtained at 100° C temperature for 1 hour time in six month of storage period, respectively. Similarly the maximum elongation, elongation ratio was observed as 2.471mm and 1.456 mm after six month storage in normal room temperature, respectively.

■ **KEY WORDS :** Accelerated ageing, BPT 5204, Elongation, Elongation ratio, Hardness

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