

Title Effect of Storage Methods on Quality and Ellagic Acid Content of Dried Longan Fruit

Author Warut Poontawee

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Abstract

Study on storage methods on quality and ellagic acid content of dried longan fruits were separated into two experiments. The first experiment, dried longan fruits were coating with canauba wax by dipped the fruit into 0.0, 0.5, 1.0, 1.5 and 2.0 % w/w of canauba wax solutions for 5 seconds, let them dried in ambient atmosphere then the fruits were put into 12.70 X 17.78 cm polyethylene bags (PE), 10 fruits/bag. After that, the fruits were sealed with and without vacuum condition and stored room temperature (25°C). The results showed that the fruits stored under vacuum condition had yellowish brown exocarp while those stores under normal atmosphere had reddish brown exocarp after 8 months storage. The exocarp and aril of canauba wax coated fruits tended to have higher ellagic acid contents than the uncoated fruits. However, the seeds of uncoated fruits had higher ellagic acid contents than the coated fruits.

In the second experiment, the fruits were coated with the 2.0 % canauba wax and vacuum sealed in the PE bags under the same method as the first experiment but the fruit were stored with and without exposed to light, 482 – 512 lux using fluorescence lamps. It showed that exocarp and aril of the fruits exposed to light had higher ellagic acid contents than the unexposed fruits. However, the seeds of unexposed fruits had higher ellagic acid contents than the exposed fruits.