

**POSTHARVEST QUALITY AND SENSORY EVALUATION OF VIETNAMESE LYCHEE cv. U HONG (*Litchi chinensis* Sonn.)**

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**Abstract**

The aim of this research was to evaluate the postharvest and sensory quality of Vietnamese lychee cv. 'U Hong' (*Litchi chinensis* Sonn.) at different ripening stages. Fruit samples were harvested from farmer orchard, carried to the VIAEP lab and classified into four ripening stages based on pericarp coloration, ranging from 0–25% (R1), 25–50% (R2), 50–75% (R3), to 75–100% (R4) red surface. Lychee fruit quality parameters, weight loss, peel color, total soluble solids (TSS) and titratable acidity (TA) were analyzed including the sensory evaluation and TSS/TA calculation were done after all samples were stored at 25 °C for 6 days. The results showed that the ripening stages affected postharvest and sensory quality of lychee fruit during storage. The weight loss of all samples decreased. Color values changed significantly, with decreasing in lightness ( $L^*$ ) and yellowness ( $b^*$ ), accompanied by an increase in redness ( $a^*$ ). TSS and TSS/TA ratio increased after storage, while only TA showed slightly changed. Sensory evaluation revealed that peel color, pulp texture, taste, aroma, and overall acceptability improved from early to mid-ripening stages (R1-R2). However, no significant differences were observed between R3 and R4 in most sensory attributes. It can be concluded that postharvest and sensory quality changes with ripening stages after storage.

**Keywords:** lychee, ripening stage, postharvest quality, sensory evaluation