

Postharvest treatment of salicylic acid and antioxidants on physico-chemical properties and visual appearance of litchi cv. Rose Scented

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ABSTRACT : Some antioxidants and salicylic acid at different concentrations were evaluated for their suitability to extend the storage life and improve the overall quality of litchi cv. Rose Scented. The fruits were treated with isoascorbic acid (1.0 % and 0.5 %), *N*-acetyl cystine (1.0 % and 0.5 %), salicylic acid (1.0 % and 0.5 %), SO₂ fumigation and stored at ambient condition (25±2°C ; RH = 85±5 %) for one week. The fruits were analyzed for changes in various physical, biochemical and sensory parameters and compared with different treatments against control and commercial SO₂-fumigation. The results showed that during end of the storage period, the fruits treated with different antioxidants and salicylic acid retained better with respect to the above parameters than that of control and also SO₂-fumigation. The fruits treated with 1.0% isoascorbic acid resulted least changes in physical quality parameters. The maximum TSS, acidity and ascorbic acid content of litchi were recorded with the application of 1.0% isoascorbic acid. Application of 1.0% salicylic acid resulted most balanced TSS : acid ratio in the fruits. The best maintenance of sensory parameters in litchi was also achieved with the application of 1.0% isoascorbic acid.

Key Words: Litchi, antioxidants, salicylic acid, biochemical parameters, sensory parameters.