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Effect of Post-Harvest Treatments on Shelf-Life and Fruit Quality Attributes of Different Cultivars of Indian Gooseberry

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ABSTRACT

Aonla (*Emblica officinalis* Gaertn.) is an important underutilize indigenous fruit crop of India. After harvesting, shelf life of Aonla fruits is very short that is up-to 5-6 days only. Objective of the present study was to evaluate the effects of various post-harvest treatments under ambient storage condition on Aonla cultivars grown in North India. cultivars viz. Narendra Aonla-6, NA-7, NA-10, NA-25, NA-26, NA-27 and Francis were used in this experiment. Physiological Loss in Weight (PLW), Decay loss, Soluble Solids Content, Acidity, Ascorbic acid and Sugars were determined from 4 and 12 days of interval. The pooled results revealed that Physiological Loss in Weight, Decay loss, Total Soluble solids, Reducing Sugars, Non-reducing Sugar and Total Sugars exhibited increasing trend whereas Acidity and Ascorbic acid content showed a downswing trend with the progression of storage span among all cultivars. Aloevera gel (100%) and calcium chloride (5%) with acetic acid (1%) were the most effective in decreasing the weight loss, and spoilage loss and in increasing the higher contents of ascorbic acid content compared to Aonla cultivars dipped into potassium permanganate solution and in control. In conclusion postharvest treatment of different cultivars of Aonla with 100 % Aloevera gel and calcium chloride (5%) with acetic acid (1%) extended ambient storage life and maintained quality as well.

Keywords: aonla, acetic acid, aloevera gel, calcium chloride, potassium permanganate, physiological loss in weight, reducing sugar, total soluble solids

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