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Effect of Post Harvest Treatments on Quality of Pomegranate in Zero Energy Cool Chamber and Ambient Conditions

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Abstract: Freshly harvested pomegranate 'Bhagwa' fruits were subjected to treatments of three types of lac based wax (SH-01, SH-02 & SH-03), five concentrations of lac based wax (0%,6%,12%,18%,20%) were kept at room temperature (19.7 to 26.9°C and 41.0 to 70.2 % RH) and zero energy cool chamber (14.60 to 20.30°C and 83.59 to 91.90 % RH). There was an increase **in** total soluble solids, pH, sugars, physiological loss in weight, rotting percentage with corresponding decrease in aril percentage, rind percentage, juice percentage, acidity, anthocyanin and firmness irrespective of post harvest treatments. The physico-chemical changes were slower in zero energy cool chamber as compared to room temperature storage. The shelf life of pomegranate fruits Cv. Bhagwa treated with SH-03 (20%) lac based wax could be extended upto 32 days in zero energy cool chamber as compared to 12 days at room temperature storage with high overall acceptability and organoleptic score of 8.30 and 7.86 in zero energy cool chamber and ambient condition, respectively.

Keywords: Ambient storage, Pomegranate, Quality, shelf life, Wax, Zero energy cool chamber