

Development of edible wax formulation to enhance the storage quality of Citrus fruits

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Comparative effects of different concentrations of coatings bee wax, cassava starch, corn oil, coconut oil and sodium bicarbonate on improving the keeping quality of orange and its storage performance was evaluated. Orange after harvesting were washed with 200ppm chlorine solution and kept for air drying in shade at room temperature (25-30⁰C). The fruits were coated with different coating solutions ; Bee wax 0.5%,cassava starch 2%, corn oil 1% and sodium bicarbonate 1% (T₁); Bee wax 0.5%,cassava starch 2%, coconut oil 1% and sodium bicarbonate 1% (T₂) ; Bee wax 0.5%,cassava starch 2% and sodium bicarbonate 1% (T₃); Control(without coating) stored under ambient condition (29-32⁰C and 65%- 70%RH).The physicochemical and physiological characters of fruits were evaluated for 10 days storage and the fruits treated with Bee wax 0.5%,cassava starch 2%, corn oil 1% and sodium bicarbonate 1% (T₁) exhibited better performances significantly (P<0.05) than other coating solutions tested. It extends storage life up to 10 days with appreciable retention of all quality parameters.