Title MA storage and transportation of 'Eksotika' papaya

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Abstract

Extending the storage life of 'Eksotika' papaya enables them to be exported by sea to Jeddah. The storage life of 'Eksotika' papaya can be extended to 4 weeks when stored at 10-12°C under modified atmosphere (MA) condition. The MA condition can be easily created by wrapping 9 to 10 'Eksotika' papaya fruit in low density polyethylene (LDPE) bags measuring 72 x 66 cm with 0.04 mm thick. Under these conditions a modification in the composition of the air surrounding the fruit occurred through respiration. The gas composition changed within 24 hours with an increase in CO₂ to about 4-5% and a reduction of O₂ to about 2-3%. Using this packaging technique, the fruit can be transported to distant markets in refrigerated sea containers with the temperature set at 10-12°C. Four weeks storage life allows the fruit to be successfully exported to Jeddah. The preparation time and the journey from Port Kelang to Jeddah takes 14 days and on arrival the fruit were still fresh with little change in the skin colour and minimal disease development. The fruit ripen normally within 3-4 days after arrival when placed at ambient temperature.