B-19: Effect of low temperatures during simulated sea shipment on quality of *Cocos nucifera typica*

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Young coconut (*Cocos nucifera typica*) packed in wooden crates with vents lined with kraft paper and polyethylene separately were stored at 5°C, 10°C, 14°C, 16°C and 29°C (ambient temperature) for 21 days. Chilling injury was observed on nuts stored at 5°C and 10°C as 100% and 50% respectively. The best colour and cosmetic appearance was observed at 16°C. Weight loss of nuts increased with the increase of storage temperature. However a reduction in weight loss was observed in nuts packed in polyethylene. Total soluble solids, total sugar content and pH values of young coconut water decreased on storage for 21 days at temperatures of 16°C and above, with an increase in titratable acidity. Organoleptic observation indicated that the quality of coconut water was not acceptable for nuts stored at ambient temperature, while no deterioration in quality of coconut water was observed in nuts stored at 16°C and below.

This study revealed that the storage quality of young coconuts could be maintained for a period of 21 days at 16°C, when a polyethylene lining was used within wooden crates with vents. Fungal infestation was controlled completely under respective storage temperatures with the application of 0.6 g benlate/l water fungicidal dip treatment.