EFFECT OF POLYVINYL CHLORIDE FILM AND TEMPERATURE ON QUALITY AND
STORAGE LIFE OF MANGOSTEEN FRUIT

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Mangosteen fruits harvested at the turning stage were packed on 145x145x20 mm foam trays (4
fruits/tray) with or without polyvinyl chloride (PVC) film wrap and stored at 10, 13 and 29 °C. Weight
loss decreased with decreasing storage temperature. PVC wrap further reduced weight loss. Changes in
peel color measured as lightness (L*) and a* values were also retarded by low temperature while PVC
wrap had no significant influence. However, storage life increased with PVC wrapping and with
decreasing storage temperature except at 10 °C in which chilling injury developed.

Storage life was longest at 13 °C, 21 days for film-wrapped fruits and 12 days for unwrapped
fruits. At 10 °C, storage life decreased to 18 and 9 days for wrapped and unwrapped fruits, respectively.
At ambient (29 °C), the fruits lasted for only 8 and 6 days with and without film wrap, respectively.