

**Title** Visual acceptability of 'B74' ('Calypso<sup>TM</sup>') mangoes as influenced by lenticel discolouration and decay development at various storage temperatures.

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#### **Abstract**

Storage characteristic of mangoes vary between cultivar. 'B74' ('Calypso<sup>TM</sup>') mangoes have demonstrated a susceptibility to decay by anthracnose and a propensity to lenticel discolouration. Incidence of either causes reduced visual quality and results in unsaleable fruit. A single harvest of fruit (with no ripening treatments) was stored in a variety of constant and variable temperature treatments from 9°C to 30°C for approximately 60 days. The incidence of both lenticel discolouration and decay was monitored with independent grading scales in 100 fruit per treatment. Assuming that the maximum proportion of a population of fruit being unacceptable was 10%, and ignoring all other quality characteristics (firmness, colour, brix etc.), the results showed that 'B74' mangoes could be stored for approximately 2, 3, 3.5, 4 and 7 weeks at 30°C, 20°C, 17°C, 13°C and 9°C, respectively. Unacceptable fruit were primarily caused by decay in all constant temperature treatments, while lenticel discolouration was an important factor for fruit stored at 13°C and 9°C prior to transfer to a simulated display temperature of 20°C. As a result, storage at cool temperatures (13°C and 9°C) was observed to provide only small increases in saleable life in comparison to fruit stored constantly at 20°C.