

**Title** Effect of storage temperatures on the quality and shelf life of papaya  
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#### **Abstract**

Papaya, being a tropical climacteric fruit, is highly sensitive to chilling injury when stored at low temperatures. Hence an experiment was carried out to study the effect of different storage temperatures on the quality and shelf life of papaya. Fruits of the local cultivar available in the market were used for the study. Fully matured fruits were stored at different temperature regimes like 5, 10, 15, 25°C and at ambient temperature. Observations on development of chilling injury, post cold storage, ripening behaviour and quality changes were recorded. Chilling injury was observed in fruits stored at 5 and 10°C after 10 and 15 days of storage respectively, whereas fruits stored at 15°C recorded chilling injury symptoms only after 20 days of storage. It was observed that fruits subjected to storage temperatures of 5 and 10°C failed to ripen, while fruits stored at 15°C ripened normally. The fruits stored at 25°C and at ambient temperatures ripened on 7<sup>th</sup> and 5<sup>th</sup> day after storage respectively. Assessment of quality parameters like TSS, reducing and non-reducing sugars, total sugars and ascorbic acid revealed that fruits stored at 15°C and ripened thereafter registered the highest values for all the quality parameters.