Predicting storage life of sapodilla (Manilkara zapota L.) by non-destructive technique

ABSTRACT

Non-destructive technique using Kiwifirm device was useful in detecting the maturity stage of sapodilla fruit, predicting the quality at ripening stage and also days of the fruits to ripen. The power line (Y = 0.02x3.6026) which was derived from the relationship of score resultant from the impact response of Kiwifirm device and duration for the fruit to ripen at 12 °C can be used as a chart to predict and separate the fruit according to the predicted storage duration. Thus the technique could be used to group the fruit into either storage-marketing and utilization purposes, or only suitable group for certain market. This strategy can be used to promote sapodilla fruit for distance market or export. Post-harvest losses, which occurred during storage and transportation can be minimized.

Keyword: Non-destructive technique; Sapodilla; Kiwifirm device; Storage life; Firmness