

Title Storage life extension at 5 °C of 'Nam Dok Mai See Thong' mango by perforated package exported mango by refrigerated modified atmosphere packing

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Citation Book of abstracts, APS2010 & SEAsia2010 & GMS2010, August 2-4, 2010, Radisson Hotel, Bangkok, Thailand

Keyword Mango; package; chilling injury

Abstract

The export of Thai mango fruit to EU market currently involves the high transportation cost of air freight. Reducing this cost by prolong storage life of Thai mango for 25 days is an interesting issue. The objective of this research was focused on finding a suitable package for mango during cold storage. Individual mango fruit was packed in 3 types of package as polyethylene terephthalate box, polyethylene bag and multilayer nylon bag with 2 levels of perforated holes (1.0 and 1.5 cm²/m²). All fruit were kept at 5 °C for 21, 28 and 35 days and transferred to ripe at room temperature (25±3 °C). Result showed that mango fruit packed in polyethylene terephthalate box with perforated holes 1.5 cm²/m² had the longest storage life 28 day without any chilling injury symptom. Moreover, the fruit was able to ripe when it was transferred to room temperature for 7 days. While fruit packed in polyethylene bag and multilayer nylon bag package with both sizes of perforated hole showed chilling injury symptoms within 28 days after storage. The suitable postharvest handling technique for mango fruit will be presented and discussed through this research.