

Storage life extension at 5°C of 'Nam Dok Mai See Thong' mango by perforated package

W. Kumpoun, J. Uthaibutra

Acta Horticulturae 989: 143-148. 2013.

Abstract

The export of Thai mango fruit to EU market currently entails high cost of air freight. Reducing cost by prolonging storage life for 25 d is an interesting issue to allow sea freight. The objective of this research was to find 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 d and transferred to ripen 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 of 28 d without any chilling injury symptom. Moreover, the fruit was able to ripe when it was transferred to room temperature for 7 d. Fruit packed in polyethylene bag and multilayer nylon bag package with both sizes of perforations showed chilling injury symptoms within 28 d of storage.