

POSTHARVEST STANDARD OPERATING PROCEDURES (SOP) FOR EXPORTING FRESH JACKFRUIT TO CHINA

Nor Hanis Aifaa. Y¹, Joanna. C.L.Y¹, Siti Nurathirah. A.B², Roslina. A², Siti Nuraihan.A¹, Mohd Kamal. M.T¹

¹Horticulture Research Centre, MARDI Headquarters, Persiaran MARDI-UPM, 43400 Serdang, Selangor

²Economics Science Social and Agribusiness, MARDI Headquarters, Persiaran MARDI-UPM, 43400 Serdang, Selangor

aifa@mardi.gov.my

A whole jackfruit can be stored in the 12 °C for about 2 weeks only. Fruit rot (*Botryodiplodia theobromae*) is one of the most prevalent diseases that contribute significantly to the post-harvest loss of jackfruit in Malaysia. The development of rot and decay after harvest is a serious problem, particularly on fruit destined for export markets that may be stored and transported over many weeks. Malaysia signed the Fresh Jackfruit Export Agreement with China on April 1, 2023, opening up a new market. Fruit coating (EONature) is proposed for use as it is one of the best techniques to prolong the shelf life of jackfruit. The shipment of fresh J33 varieties by sea from Malaysia to China has been carried out with additional fruit coating treatment in the standard operating procedures (SOP). The objective of this study is to evaluate and improve the standard operating procedures (SOP) of J33 Malaysia for the export market to China, and secondly, to evaluate the postharvest quality of jackfruit and measure the changes in temperature and relative humidity throughout the supply chain during transportation, distribution, and also during marketing in China. In this research, for the lab scale, effect of EONature surface coating on the quality and post-harvest disease control of jackfruit during storage were studied, then for technology verification, standard operating procedure (SOP) for shipping fresh jackfruit using surface coating to China were tested. The cold-chain management during sea shipment and jackfruit quality in China were monitored. This export has proven that the standard operating procedure to export fresh jackfruit to China developed by MARDI managed to maintain the quality of the J33 which is considered premium in China. The quality of the jackfruit was still preserved even after a 2-week shipment to China. This new package technology will help expand the Malaysian jackfruit in China in China.

Keywords: Fruit rot, shelf life, export, freshness