

Effects of Packaging Systems on Eggplant Quality during Transport

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Abstract

Eggplants (Solanum melongena) are extremely predisposed to injury during haulage, which considerably diminishes fruit value. The study aimed to develop packaging systems to maintain the market quality of 'Morena' eggplant during transport along the market continuum. A 6 × 2 factorial in completely randomized design was laid out using freshly harvested eggplant. Fruits with uniform maturity and size and were damage free were procured from Brgy. Butigan, Baybay, Leyte. Fruits were packed using six types of containers, namely, rattan basket, plastic crate, polyethylene plastic bag, and styrofoam cooler in which both rattan basket and plastic crates were with and without banana leaves as liners. Fruits were arranged together following the conventional practice of product loading by the traders. After transport, fruits from the different containers were stored in ambient (25-30 °C) or refrigerated (8-10 °C) conditions at a postharvest technology laboratory wherein storage behavior was monitored and evaluated. The results revealed that chemical quality attributes were not significantly affected by the kind of packing materials used. Quantitative physico-chemical attributes were affected by the type of storage condition. Storing the fruits at refrigerated condition prolonged the shelf life up to 8–10 days. The results provide valuable information for establishing a better transport scheme that could be utilized in both domestic and export markets.