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Influences of different storage conditions on postharvest quality of mango (Mangifera indica L. cv. Sein Ta Lone)

T. T. Soe[1], P.P. Lei Yi[2] and **Y.Yamamoto[3]**
[1]Yezin Agricultural University, Myanmar
[2]Ministry of Agriculture, Livestock and Irrigation
[3]JICA-TCP, Kochi University, Japan.

Mango (*Mangiferaindica* L) is one of the important exportable fruits in Myanmar. It is a climacteric fruit and the highest postharvest losses due to the most perishable fruit. The objectives of this study are to investigate respiration and ethylene production rates of Sein Ta Lone mango and to assess the postharvest quality and storage life as affected by different storage conditions. The wrapping materials were foam net sac, paper and untreated fruits used as control. The fruits were stored at room temperature and the optimum cold storage temperature of mango fruit at 13˚C. Treatments were laid out by factorial arrangement in randomized complete block design (RCBD) with four replications. The collected data on weight loss (%)), color index, respiration rate, ethylene production and shelf life (days) were analyzed. The fruits stored at 13˚C significantly showed the longer shelf life than those stored at room temperature. There were no significant differences in color development and shelf life of fruits among the wrapping treatments at room temperature. Thus, Sein Ta Lone mango can be stored the shelf life of 7 days at ambient condition (36˚C, 50% RH) and 14 days at 13˚C.The ethylene production and respiration rates of Sein Ta Lone mango under 13˚C were considerably lower than that of room temperature storage. The ethylene production and respiration rates were not significantly different among the wrapping treatments at respective temperatures. The minimum rate of respiration and ethylene production of untreated fruits were 10.37 mg kg^{-1}hr and 0.05 nl kg^{-1}hr, respectively.

thansoesoe@gmail.com