Studies on the effect of packaging on quality and shelf life of the kokum (*Garcinia indica* Choisy) fruits during transportation and storage

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**ABSTRACT**

The ripe kokum fruits were packed in different packages and were transported by road (480 km) from Dapoli to Mumbai and back to Dapoli. The fruits packed in CFB boxes + paddy straw were good, while those in other packaging material were considerably disturbed. The fruits packed in CFB box with paddy straw showed lower PLW than those in any other packaging. The fruits packed in wooden crate and bamboo baskets without cushioning materials showed the maximum bruising amongst all the packaging material under study. The fruits showed neither spoilage due to microbial infection nor due to shrivelling during transportation. After transportation all the packages were kept at ambient temperature. During this storage it was noticed that the fruits packed in CFB box with paddy straw showed slower rate of spoilage and had higher shelf life (7 days) than any other packaging materials. It was further observed that the fruits packed in CFB box with paddy straw showed delayed and lower shrivelling with the maximum marketable fruits as compared to other packaging material on 7th day of storage. As far as chemical constituents of kokum fruits are concerned, the fruits packed in CFB box with paddy straw recorded the acidity (3.48%) and ascorbic acid (9.21 mg/100g), T.S.S. (14.02'B), total sugars (14.41%) and reducing sugars (5.69%) after transport while during storage they recorded T.S.S. (14.11%), acidity (3.49%) and ascorbic acid (4.40 mg/100 g) and slightly lower total sugars (10.07%). An initial increase, followed by a decrease in T.S.S. content was observed in the fruits packed in all the packaging material during storage. The acidity and the ascorbic acid decreased continuously towards the end of storage period. Thus, the present investigation indicate that, the CFB box with paddy straw as cushioning appeared to be the best for transport for internal as well as external market and equally good for storage of kokum fruits.

**Key Words** : Kokum, Packaging, Shelf life