ABSTRACT
An experiment was undertaken at Department of Horticulture, Dr. P.D.K.V., Akola (M.S.) during 2006-07. The custard apple fruits packed in different packaging materials were stored at room temperature and zero energy cool chamber. It was found that the physiological loss in weight (PLW), blackening and decaying of fruits increased with increase in storage period regardless of packaging material and storage conditions. There was an increase followed by subsequent decrease in TSS, total sugar, reducing sugar, acidity, ascorbic acid content with corresponding decrease in tannin upon prolonged storage under both the storage conditions irrespective of packaging materials. The rate of change of physico-chemical constituents was found to be slower in fruits stored in ZECC than those stored at ambient storage. The fruits could be stored upto 6 days under ambient storage, when wrapped with tissue papers and kept in cardboard boxes. However, the shelf life of custard apple fruits was 9 days when wrapped with tissue papers and kept in cardboard boxes when stored in zero energy cool chamber. Moreover zero energy cool chamber has the added advantage of easy construction, low cost and less maintenance.

Key words: Packaging materials, Shelf life, Storage conditions, Custard apple